

Source List for Terms

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Using This Resource

The book *Vocabulary for the New Science Standards* (Marzano, Rogers, & Simms, 2015) presents K–12 science vocabulary terms from the Next Generation Science Standards* (NGSS; NGSS Lead States, 2013) and *Building Background Knowledge for Academic Achievement* (Marzano, 2004), which was itself a compilation of science terms from previous standards documents. This document lists the source of each vocabulary term from *Vocabulary for the New Science Standards*.

Teachers and school leaders can think of this list as a menu from which they can select the most appropriate words to teach in their classrooms and schools. For more in-depth information about choosing words to teach and implementing comprehensive vocabulary programs in classrooms, schools, and districts, please consult *Vocabulary for the New Science Standards* (Marzano et al., 2015). Readers who want to learn more about instruction in science vocabulary—including a six-step process for teaching vocabulary, a synthesis of the research supporting direct vocabulary instruction in science, an organizational scheme that clusters related terms on the list into measurement topics, and an explanation of our methodology in selecting and organizing terms—will also find the book useful.

As explained in *Vocabulary for the New Science Standards* (Marzano et al., 2015), we used Beck, McKeown, and Kucan's (2002) three-tiered framework to guide our analysis of vocabulary terms. Our analysis focused primarily on words in Tiers 2 and 3. However, the terms in the book are not organized strictly into Tiers 1, 2, and 3. Instead, they are organized into two broad categories based on their level of content specificity.

1. **General academic words:** Not specific to a particular content area, but necessary for success in school (such as *critique*, *proportion*, and *evidence*). These include terms related to crosscutting practices and concepts in science, as well as cognitive verbs.
2. **Domain-specific words:** Specific to the content area of science (such as *viscosity*, *cytoplasm*, and *germination*).

The general academic category includes mostly Tier 2 terms and the domain-specific category includes mostly Tier 3 terms. However, certain exceptions apply. When a Tier 2 term had a unique or specialized meaning in the context of science (such as *atmosphere*, *magnitude*, and *environment*), we included it in the domain-specific category. When a Tier 1 term pertained directly to science (such as *river* and *human*), we also included it in the domain-specific category. It is also important to note that some of the terms from the standards were not stated in the individual content standards, but rather appeared in clarification statements or in descriptions of the disciplinary core ideas, scientific practices, and crosscutting concepts associated with the standards. As previously mentioned, *Vocabulary for the New Science Standards* provides a more detailed description of these dimensions.

This list designates each term's source using abbreviated notations. We use the letters *BBK* to indicate that a term came from *Building Background Knowledge for Academic Achievement*. We use performance expectation codes from the NGSS's organizational scheme (such as *HS-LS1-1*, *MS-ESS1-3*, or *2-PS2-2*) to indicate that a term came from an individual content standard. We use the letters *SP* followed by a

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number to indicate that a term came from one of the descriptions of the eight scientific practices (SP) found on pages 50–53 of *A Framework for K–12 Science Education* (National Research Council, 2012).

The eight practices are as follows:

1. Asking questions and defining problems
2. Developing and using models
3. Planning and carrying out investigations
4. Analyzing and interpreting data
5. Using mathematics and computational thinking
6. Constructing explanations and designing solutions
7. Engaging in argument from evidence
8. Obtaining, evaluating, and communicating information

The number that follows *SP* indicates the specific practice in the framework where each term is found (for example, SP: 1 indicates that a term is associated with the first practice, Asking questions and defining problems). When the letters *DCI*, *CC*, or *SP* are followed by a performance expectation code (for example, *DCI: MS-LS1-4*, *CC: 4-PS2-2*, or *SP: K-ESS1-1*), it indicates that the term is found in a disciplinary core idea (DCI), crosscutting concept (CC), or scientific practice (SP) statement associated with a specific standard. These statements are shown in blue (DCI), orange (CC), and green (SP) boxes below each standard in the NGSS document (NGSS Lead States, 2013). Finally, we added a number of vocabulary terms that represented important concepts for students to understand, even though they did not appear in the NGSS or in *Building Background Knowledge for Academic Achievement*. For example, the terms *argument* and *latitude* appeared in the NGSS, and so we added the terms *argue* and *longitude*, respectively. We use the words *Marzano Research* to indicate that a term was added by Marzano Research.

The following table presents these source notations for easy reference:

Notation	Meaning
Performance expectation code	Term from an NGSS grade-level standard
BBK	Term from <i>Building Background Knowledge for Academic Achievement</i>
SP: #	Term from scientific practice in the <i>Framework</i>
CC: Performance expectation code	Term from an NGSS crosscutting concept associated with a specific standard
DCI: Performance expectation code	Term from an NGSS disciplinary core idea associated with a specific standard
SP: Performance expectation code	Term from an NGSS scientific practice associated with a specific standard
Marzano Research	Term was added by Marzano Research

References

Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford Press.

Marzano, R. J. (2004). *Building background knowledge for academic achievement: Research on what works in schools*. Alexandria, VA: Association for Supervision and Curriculum Development.

- Marzano, R. J., Rogers, K., & Simms, J. A. (2015). *Vocabulary for the new science standards*. Bloomington, IN: Marzano Research.
- National Research Council. (2012). *A framework for K-12 science education: Practices, crosscutting concepts, and core ideas*. Washington, DC: National Academies Press.
- NGSS Lead States. (2013). *Next Generation Science Standards: For states, by states*. Washington, DC: National Academies Press.

General Academic Vocabulary Terms

Crosscutting Practices and Concepts

Term	Source		
abstract	SP: 4-PS4-1 SP: MS-ESS1-1 SP: MS-ESS1-2 SP: MS-ESS2-1 SP: MS-ESS2-4 SP: MS-ESS2-6 SP: MS-ETS1-4 SP: MS-LS1-2 SP: MS-LS1-7 SP: MS-LS2-3 SP: MS-LS3-1 SP: MS-LS3-2 SP: MS-PS1-1 SP: MS-PS1-4 SP: MS-PS1-5 SP: MS-PS3-2 SP: MS-PS4-2	activity	4-ESS3-2 MS-ESS3-1 MS-ESS3-5 HS-ESS2-4 HS-ESS3-1 HS-ESS3-4 HS-ESS3-6 HS-LS2-7 HS-LS4-6 CC: MS-ESS3-1 CC: MS-ESS3-4 CC: MS-ETS1-1 DCI: 5-ESS3-1 DCI: MS-ESS3-3 DCI: MS-ESS3-4 DCI: MS-ESS3-5 DCI: HS-ESS2-4 DCI: HS-ESS2-6 DCI: HS-ESS3-6 DCI: HS-LS2-7 DCI: HS-LS4-6
accurate	DCI: HS-LS3-2	algebraic	CC: HS-ESS1-4 CC: HS-LS3-3 SP: HS-ESS1-4 SP: HS-ESS3-3 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS4-6 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1

analysis	MS-ESS1-3 MS-ESS1-4 HS-LS2-1 SP: 3 SP: 4 SP: 5 CC: HS-ESS2-2 CC: HS-ESS3-2 CC: HS-ETS1-1 CC: HS-ETS1-3 DCI: MS-ESS1-4 SP: MS-ESS1-3 SP: MS-ESS2-3 SP: MS-ESS3-2 SP: MS-ETS1-3 SP: MS-LS2-1 SP: MS-LS4-1 SP: MS-LS4-3 SP: MS-PS1-2 SP: MS-PS3-1 SP: HS-ESS1-4 SP: HS-ESS2-2 SP: HS-ESS3-3 SP: HS-ESS3-5 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS3-3 SP: HS-LS4-3 SP: HS-LS4-6 SP: HS-PS1-7 SP: HS-PS2-1 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1	appropriate	MS-ESS2-2 DCI: MS-PS1-4 SP: MS-LS1-8 SP: MS-LS4-5 SP: MS-PS1-3 SP: MS-PS2-3 SP: HS-ESS1-5 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-LS2-6 SP: HS-LS2-8 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS4-3	argument	SP: MS-LS1-3 SP: MS-LS1-4 SP: MS-LS2-4 SP: MS-LS2-5 SP: MS-LS4-6 SP: MS-PS2-3 SP: MS-PS2-4 SP: MS-PS3-5 SP: MS-PS4-1 SP: HS-ESS1-5 SP: HS-ESS2-4 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-ESS3-5
			K-ESS2-2 2-PS1-4 3-LS2-1 3-LS4-3 4-LS1-1 5-ESS1-1 5-LS1-1 5-PS2-1		SP: HS-LS2-6 SP: HS-LS2-8 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS4-2 SP: HS-PS4-3
			MS-ESS3-4 MS-LS1-3 MS-LS1-4 MS-LS2-4 MS-PS2-4 MS-PS3-5 HS-LS2-8 HS-LS3-2 SP: 7		
			SP: K-ESS2-2 SP: 2-PS1-4 SP: 3-ESS3-1 SP: 3-LS2-1 SP: 3-LS4-3 SP: 3-LS4-4 SP: 4-LS1-1 SP: 5-ESS1-1 SP: 5-LS1-1 SP: 5-PS2-1		
			SP: MS-ESS3-4 SP: MS-ESS3-5 SP: MS-ETS1-1 SP: MS-ETS1-2		

assumption	basic	MS-LS4-1	MS-PS4-3	DCI: 3-5-ETS1-1
		CC: HS-ESS1-2	SP: 1	DCI: 4-PS3-4
		CC: HS-LS4-1	CC: HS-ESS1-2	DCI: MS-ETS1-4
		CC: HS-LS4-4	CC: HS-PS1-7	DCI: MS-PS1-6
		CC: HS-PS3-1	CC: HS-PS3-1	DCI: MS-PS3-3
		SP: MS-ESS1-4	SP: MS-ESS1-3	SP: 1-PS4-1
		SP: MS-ESS2-2	SP: MS-ESS2-3	SP: 1-PS4-3
		SP: MS-ESS3-1	SP: MS-ESS3-2	SP: 2-LS2-1
		SP: MS-LS1-5	SP: MS-ETS1-3	SP: 2-PS1-1
		SP: MS-LS1-6	SP: MS-LS2-1	SP: 3-5-ETS1-3
		SP: HS-ESS1-2	SP: MS-LS4-1	SP: 3-PS2-1
		SP: HS-ESS1-4	SP: MS-LS4-3	SP: 3-PS2-2
		SP: HS-ESS3-1	SP: MS-PS1-2	SP: 4-ESS2-1
		SP: HS-ESS3-3	SP: MS-PS3-1	SP: 4-PS3-2
		SP: HS-ESS3-4	SP: HS-ESS1-4	SP: 5-PS1-3
		SP: HS-ESS3-6	SP: HS-ESS3-3	SP: 5-PS1-4
		SP: HS-ETS1-4	SP: HS-ESS3-6	SP: MS-ESS2-5
		SP: HS-LS1-1	SP: HS-ETS1-4	SP: MS-LS1-1
		SP: HS-LS1-6	SP: HS-LS2-1	SP: MS-PS2-5
		SP: HS-LS2-1	SP: HS-LS2-2	SP: HS-LS1-3
		SP: HS-LS2-2	SP: HS-LS2-4	SP: HS-PS1-3
		SP: HS-LS2-3	SP: HS-LS4-6	SP: HS-PS2-5
		SP: HS-LS2-4	SP: HS-PS1-7	SP: HS-PS3-4
		SP: HS-LS4-2	SP: HS-PS2-2	BBK
		SP: HS-LS4-4	SP: HS-PS2-4(a)	HS-ESS3-2
		SP: HS-LS4-6	SP: HS-PS2-4(b)	CC: 3-5-ETS1-2
		SP: HS-PS1-2	SP: HS-PS3-1	CC: 3-ESS3-1
		SP: HS-PS1-7	SP: HS-PS4-1	CC: 4-ESS3-2
		SP: HS-PS2-2		CC: HS-ESS2-2
		SP: HS-PS2-4(a)		CC: HS-ESS3-2
		SP: HS-PS2-4(b)		CC: HS-ESS3-4
		SP: HS-PS3-1		CC: HS-ETS1-1
bar graph		SP: 3-ESS2-1		CC: HS-ETS1-3
		SP: 5-ESS1-2		CC: HS-PS3-3
				CC: HS-PS4-2
				DCI: HS-ESS3-2
				DCI: HS-LS2-7
				DCI: HS-LS4-6
				bias
				BBK

boundary	MS-LS2-3 HS-LS2-1 CC: HS-ESS3-6 CC: HS-PS2-2 CC: HS-PS3-4 DCI: 4-ESS2-2 DCI: MS-LS1-2	comparison	1-ESS1-2 MS-PS2-2 HS-LS2-1 HS-LS2-2 DCI: MS-LS4-3 SP: K-PS3-1 SP: 1-ESS1-2 SP: 2-LS4-1 SP: HS-ESS2-2 SP: HS-ESS3-5 SP: HS-LS3-3 SP: HS-LS4-3 SP: HS-PS2-1	component	MS-LS2-2 MS-LS2-4 HS-PS3-1 HS-PS3-4 CC: 3-LS4-4 CC: 4-LS1-1 CC: 4-LS1-2 CC: 5-ESS2-1 CC: 5-ESS3-1 CC: 5-LS2-1 CC: HS-ESS2-5 CC: HS-LS1-1 CC: HS-PS2-6 DCI: MS-LS2-4 DCI: HS-LS1-2 DCI: HS-LS2-5 SP: HS-ESS1-1 SP: HS-ESS2-1 SP: HS-ESS2-3 SP: HS-ESS2-4 SP: HS-ESS2-6 SP: HS-LS1-2 SP: HS-LS1-4 SP: HS-LS1-5 SP: HS-LS1-7 SP: HS-LS2-5 SP: HS-PS1-1 SP: HS-PS1-4 SP: HS-PS1-8 SP: HS-PS3-2 SP: HS-PS3-5
causality	CC: HS-LS4-1 CC: HS-LS4-3 CC: HS-PS1-1 CC: HS-PS1-2 CC: HS-PS1-3 CC: HS-PS1-5 CC: HS-PS2-4(a) CC: HS-PS2-4(b)		MS-ESS2-5 MS-LS4-1 MS-PS1-1 HS-ETS1-2 HS-ETS1-3 HS-ETS1-4 HS-LS1-4 HS-LS2-6 CC: MS-LS1-2 CC: MS-LS1-3 CC: MS-LS3-1 CC: HS-PS3-5 CC: HS-PS4-4 DCI: MS-ESS2-5 DCI: MS-LS1-6 DCI: MS-LS1-7 DCI: HS-ESS3-6 DCI: HS-LS1-4 DCI: HS-LS2-2 DCI: HS-LS2-5 DCI: HS-LS2-6 SP: HS-ESS3-4 SP: HS-ETS1-1 SP: HS-ETS1-2 SP: HS-ETS1-3 SP: HS-LS2-7 SP: HS-PS1-6 SP: HS-PS3-3	complex	MS-ESS3-4 MS-PS1-1 HS-ESS1-2 HS-ESS1-6 HS-ESS2-3 HS-ESS2-4 HS-ESS3-5 HS-PS1-8 CC: MS-LS3-1 DCI: HS-ESS1-1 DCI: HS-ESS1-2 DCI: HS-ESS1-3
causation	CC: MS-ESS3-3 SP: MS-ESS1-3 SP: MS-ESS2-3 SP: MS-ESS3-2 SP: MS-ETS1-3 SP: MS-LS2-1 SP: MS-LS4-1 SP: MS-LS4-3 SP: MS-PS1-2 SP: MS-PS3-1				
chart	5-PS3-1 MS-PS2-4 HS-LS2-1 CC: MS-ESS3-2 CC: MS-LS4-1 CC: MS-LS4-3 CC: MS-PS4-1 SP: 5-ESS1-2				

computational	concept	HS-LS3-3 HS-LS4-3 CC: 3-LS4-3 CC: 4-ESS3-1 CC: 4-PS4-3 CC: HS-LS2-2 DCI: HS-PS3-1 DCI: HS-PS3-2 SP: MS-LS4-6 SP: MS-PS4-1 SP: HS-LS3-3 SP: HS-LS4-3	K-ESS2-1 3-ESS2-1 MS-ESS2-5 MS-LS1-4 MS-LS1-5 HS-LS2-3 HS-LS2-6 HS-LS4-5 HS-PS1-6 SP: 3 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 CC: HS-ESS3-6 condition
		MS-ESS1-2 MS-PS1-1 MS-PS4-2 MS-PS4-3 HS-ETS1-4 HS-PS3-2 CC: HS-ETS1-4 CC: HS-LS1-2 CC: HS-LS1-4 CC: HS-LS2-5 CC: HS-PS4-3 DCI: 4-PS4-3 DCI: HS-ESS3-6 DCI: HS-ETS1-4 DCI: HS-LS4-6 DCI: HS-PS4-2 DCI: HS-PS4-5 SP: HS-ETS1-4	DCI: HS-LS1-3 DCI: HS-LS2-2 DCI: HS-LS2-6 DCI: HS-LS4-3 DCI: HS-LS4-5 DCI: HS-LS4-6 DCI: HS-PS1-6 SP: MS-ESS2-5

connection	HS-ESS2-5 HS-PS1-6 CC: MS-PS1-2 CC: MS-PS3-5 CC: HS-PS2-6 SP: MS-LS1-6 SP: MS-LS4-1 SP: MS-PS1-2 SP: MS-PS2-2 SP: MS-PS2-4 SP: Ms-PS3-4 SP: MS-PS3-5 SP: MS-PS4-1	consistent	MS-LS2-2 HS-LS2-6 SP: 6 CC: 3-LS4-1 CC: 4-ESS1-1 CC: 5-PS1-2 CC: MS-ESS1-1 CC: MS-ESS1-2 CC: MS-LS2-3 CC: MS-LS4-1 CC: MS-LS4-2 CC: HS-PS1-7 CC: HS-PS3-1 SP: MS-ESS1-4 SP: MS-ESS2-2 SP: MS-ESS3-1 SP: MS-ESS3-3 SP: MS-LS1-5 SP: MS-LS1-6 SP: MS-LS2-2 SP: MS-LS4-2 SP: MS-LS4-4 SP: MS-PS1-6 SP: MS-PS2-1 SP: MS-PS3-3 SP: HS-ESS1-2 SP: HS-ESS1-6 SP: HS-ESS3-1 SP: HS-ESS3-4 SP: HS-ETS1-2 SP: HS-ETS1-3 SP: HS-LS1-1 SP: HS-LS1-6 SP: HS-LS2-3 SP: HS-LS2-7 SP: HS-LS4-2 SP: HS-LS4-4 SP: HS-PS1-2 SP: HS-PS1-5 SP: HS-PS1-6 SP: HS-PS2-3 SP: HS-PS3-3	3-5-ETS1-1 3-5-ETS1-2 4-PS3-4 MS-ETS1-1 MS-ETS1-2 MS-LS2-5 HS-ESS2-3 HS-ETS1-1 HS-ETS1-3 HS-ETS1-4 HS-PS3-3 SP: 1 SP: 4 DCI: 3-5-ETS1-1 DCI: 3-5-ETS1-3 DCI: 4-PS3-4 DCI: 4-PS4-3 DCI: MS-ETS1-1 DCI: MS-ETS1-2 DCI: MS-ETS1-3 DCI: MS-LS2-5 DCI: MS-PS3-3 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ETS1-1 DCI: HS-ETS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6 DCI: HS-PS2-3 SP: 3-5-ETS1-1 SP: 3-5-ETS1-2 SP: 3-ESS3-1 SP: 3-LS4-4 SP: 4-ESS3-2 SP: 4-PS4-3 SP: MS-ETS1-1 SP: MS-PS1-6 SP: HS-ETS1-1

correlation	cost	SP: 5	3-5-ETS1-1	DCI: HS-PS1-6
		CC: MS-ESS3-3	4-PS3-4	DCI: HS-PS2-3
		CC: HS-ESS2-4	HS-ESS3-3	DCI: HS-PS3-3
		CC: HS-ESS3-1	HS-ETS1-3	SP: 3-5-ETS1-1
		CC: HS-LS2-8	SP: 6	SP: 3-5-ETS1-2
		CC: HS-LS3-1	CC: HS-ESS2-2	SP: 3-ESS3-1
		CC: HS-LS3-2	CC: HS-ESS3-2	SP: 3-LS4-4
		CC: HS-LS4-2	CC: HS-ETS1-1	SP: 4-ESS3-2
		CC: HS-LS4-4	CC: HS-ETS1-3	SP: 4-PS4-3
		CC: HS-LS4-5	CC: HS-PS3-3	SP: MS-ETS1-1
		CC: HS-LS4-6	CC: HS-PS4-2	SP: MS-ETS1-2
		CC: HS-PS2-1	DCI: HS-ESS3-2	SP: MS-LS2-5
		CC: HS-PS2-5	DCI: HS-ESS3-4	SP: MS-PS1-6
		CC: HS-PS4-1	DCI: HT-ETS1-3	SP: HS-ESS3-4
		SP: MS-ESS1-3	DCI: HS-LS2-7	SP: HS-ETS1-1
		SP: MS-ESS2-3	DCI: HS-LS4-6	SP: HS-ETS1-2
		SP: MS-ESS3-2	SP: 3-5-ETS1-1	SP: HS-ETS1-3
		SP: MS-ETS1-3	SP: HS-ESS2-5	SP: HS-LS2-7
		SP: MS-LS2-1	SP: HS-LS1-3	SP: HS-PS1-6
		SP: MS-LS4-1	SP: HS-PS1-3	SP: HS-PS3-3
		SP: MS-LS4-3	SP: HS-PS2-5	K-2-ETS1-3
		SP: MS-PS1-2	SP: HS-PS3-4	K-PS2-2
		SP: MS-PS3-1	BBK	2-PS1-2
		SP: HS-LS3-3	3-5-ETS1-1	3-ESS2-1
		SP: HS-LS4-3	3-5-ETS1-2	3-LS3-1
criteria	criteria	SP: 6	MS-ETS1-1	3-LS4-1
		DCI: 3-5-ETS1-1	MS-ETS1-2	4-ESS2-2
		DCI: 3-5-ETS1-3	MS-ETS1-3	5-ESS1-2
		DCI: 4-PS3-4	HS-ETS1-1	MS-ESS1-3
		DCI: 4-PS4-3	HS-ETS1-3	MS-ESS2-3
		DCI: MS-ETS1-1	HS-ETS1-4	MS-ESS2-5
		DCI: MS-ETS1-2	SP: 1	MS-ESS3-2
		DCI: MS-ETS1-3	SP: 4	MS-ETS1-3
		DCI: MS-LS2-5	SP: 6	MS-ETS1-4
		DCI: MS-PS3-3	DCI: 3-5-ETS1-1	MS-LS2-1
		DCI: HS-ETS1-1	DCI: 3-5-ETS1-3	MS-LS2-4
		DCI: HS-ETS1-2	DCI: 4-PS3-4	MS-LS4-1
		DCI: HS-ETS1-3	DCI: 4-PS4-3	MS-LS4-4
		DCI: MS-LS2-5	DCI: MS-ETS1-1	MS-PS2-3
		DCI: MS-PS3-3	DCI: MS-ETS1-2	MS-PS2-4
		DCI: HS-ETS1-1	DCI: MS-PS3-3	MS-PS3-1
		DCI: HS-ETS1-2	DCI: HS-ETS2-2	HS-ESS2-2
				HS-ESS3-4

data (cont'd)	HS-ESS3-5	SP: 5-LS1-1	SP: HS-PS3-4
	HS-LS2-1	SP: 5-PS1-1	SP: HS-PS4-1
	HS-LS2-2	SP: 5-PS1-2	SP: HS-PS4-2
	HS-LS3-2	SP: 5-PS1-3	SP: HS-PS4-4
	HS-PS2-1	SP: 5-PS1-4	MS-ESS3-4
	HS-PS3-4	SP: 5-PS2-1	CC: MS-ESS3-4
	HS-PS4-1	SP: MS-ESS1-3	CC: MS-LS2-5
	SP: 3	SP: MS-ESS2-3	CC: MS-LS4-5
	SP: 4	SP: MS-ESS2-5	CC: HS-ESS2-2
	SP: 5	SP: ETS1-3	CC: HS-ESS3-2
	CC: MS-LS4-1	SP: ETS1-4	CC: HS-ETS1-1
	CC: MS-LS4-3	SP: MS-LS1-1	CC: HS-ETS1-3
	CC: MS-PS4-1	SP: MS-LS2-1	DCI: MS-ESS3-5
	CC: MS-ESS3-2	SP: MS-LS4-1	DCI: HS-ETS1-2
	CC: HS-ESS1-4	SP: MS-LS4-3	DCI: HS-PS1-6
	CC: HS-ESS3-5	SP: MS-LS4-6	DCI: HS-PS2-3
	CC: HS-LS3-3	SP: MS-PS1-2	K-ESS2-1
	SP: K-2-ETS1-3	SP: MS-PS2-2	5-PS2-1
	SP: K-ESS2-1	SP: MS-PS2-5	MS-PS3-2
	SP: K-LS1-1	SP: MS-PS3-1	MS-PS4-2
	SP: K-PS2-1	SP: MS-PS3-4	HS-PS1-6
	SP: K-PS2-2	SP: MS-PS4-1	HS-PS2-4
	SP: K-PS3-1	SP: HS-ESS1-4	HS-PS3-2
	SP: 1-ESS1-1	SP: HS-ESS1-6	HS-PS4-4
	SP: 1-ESS1-2	SP: HS-ESS2-2	SP: MS-PS1-5
	SP: 1-PS4-1	SP: HS-ESS2-5	SP: HS-PS2-1
	SP: 1-PS4-3	SP: HS-ESS2-7	SP: HS-PS2-4
	SP: 2-LS2-1	SP: HS-ESS3-3	2-ESS2-1
	SP: 2-LS4-1	SP: HS-ESS3-5	MS-ESS3-3
	SP: 2-PS1-1	SP: HS-ESS3-6	MS-ETS1-4
	SP: 2-PS1-2	SP: HS-ETS1-4	MS-PS1-6
	SP: 3-5-ETS1-3	SP: HS-LS1-3	MS-PS2-5
	SP: 3-ESS2-1	SP: HS-LS2-1	MS-PS3-3
	SP: 3-LS2-1	SP: HS-LS2-2	HS-PS1-6
	SP: 3-LS3-1	SP: HS-LS2-4	HS-PS2-3
	SP: 3-LS4-1	SP: HS-LS3-3	SP: 2
	SP: 3-PS2-1	SP: HS-LS4-3	SP: 3
	SP: 3-PS2-2	SP: HS-LS4-6	SP: 4
	SP: 4-ESS2-1	SP: HS-PS1-3	SP: 5
	SP: 4-ESS2-2	SP: HS-PS1-7	SP: 6
	SP: 4-LS1-1	SP: HS-PS2-1	SP: 7
	SP: 4-PS3-2	SP: HS-PS2-2	SP: 8
	SP: 5-ESS1-1	SP: HS-PS2-4(a)	CC: HS-PS3-3
	SP: 5-ESS1-2	SP: HS-PS2-4(b)	CC: HS-PS4-2
	SP: 5-ESS2-2	SP: HS-PS2-5	DCI: K-2-ETS1-2
data			
decision			
description			
design (noun)			

design (noun) (cont'd)	DCI: K-2-ETS1-3 DCI: K-ESS3-3 DCI: 2-ESS2-1 DCI: 2-LS2-2 DCI: 3-5-ETS1-2 DCI: 3-5-ETS1-3 DCI: MS-ETS1-1 DCI: MS-PS1-6 DCI: HS-ETS1-1 DCI: HS-ETS1-4 DCI: HS-LS4-6 DCI: HS-PS2-3 DCI: HS-PS3-3 SP: MS-ETS1-1 SP: MS-ETS1-3 SP: MS-PS1-1 SP: MS-PS1-4 SP: MS-PS1-5 SP: MS-PS1-6 SP: HS-ESS1-2 SP: HS-ESS1-3 SP: HS-ESS1-6 SP: HS-ESS2-5 SP: HS-ESS3-1 SP: HS-ESS3-2 SP: HS-ESS3-4 SP: HE-ETS1-2 SP: HE-ETS1-3 SP: HS-LS1-1 SP: HS-LS1-3 SP: HS-LS1-6 SP: HS-LS2-3 SP: HS-LS2-7 SP: HS-LS4-1 SP: HS-LS4-2 SP: HS-LS4-4 SP: HS-PS1-2 SP: HS-PS1-3 SP: HS-PS1-5 SP: HS-PS1-6 SP: HS-PS2-3 SP: HS-PS2-5 SP: HS-PS2-6 SP: HS-PS3-3 SP: HS-PS3-4	design (noun)	SP: HS-PS4-2 SP: HS-PS4-4 SP: HS-PS4-5 3-PS2-4 3-5-ETS1-1 MS-ETS1-1 SP: 3-5-ETS1-1 SP: 3-5-ETS1-2 SP: 3-LS3-2 SP: 3-LS4-2 SP: 4-ESS1-1 SP: 4-ESS3-2 SP: 4-PS3-1 SP: 4-PS3-4 SP: 5-ESS3-1 SP: 5-ESS3-2 SP: 5-LS2-1 SP: 5-PS1-1 SP: 5-PS1-2 SP: 5-PS1-3 SP: 5-PS1-4 SP: 5-PS3-1 SP: MS-ESS2-5 SP: MS-ETS1-2 SP: MS-LS2-5 SP: MS-LS4-6 SP: MS-PS2-2 SP: MS-PS2-5 SP: MS-PS3-4 SP: MS-PS4-1	SP: 4-ESS3-2 SP: 4-LS1-2 SP: 4-PS3-2 SP: 4-PS4-1 SP: 4-PS4-2 SP: 4-PS4-3 SP: 5-ESS2-1 SP: 5-ESS2-2 SP: 5-LS2-1 SP: 5-PS1-1 SP: 5-PS1-2 SP: 5-PS1-3 SP: 5-PS3-1 SP: MS-ESS2-5 SP: MS-ETS1-2 SP: MS-LS2-5 SP: MS-LS4-6 SP: MS-PS2-2 SP: MS-PS2-5 SP: MS-PS3-4 SP: MS-PS4-1
	design problem	K-PS2-2 3-ESS3-1 MS-ETS1-2 MS-ETS1-3 MS-LS2-5 HS-ESS3-2 HS-ESS3-4 DCI: 2-ESS2-1 SP: K-2-ETS1-2 SP: K-ESS3-1 SP: K-PS2-1 SP: K-PS3-1 SP: 1-PS4-1 SP: 1-PS4-3 SP: 2-ESS2-2 SP: 2-LS2-1 SP: 2-LS2-2 SP: 2-LS4-1 SP: 3-5-ETS1-3 SP: 3-LS1-1 SP: 3-PS2-1 SP: 3-PS2-2 SP: 4-ESS2-1	SP: HS-ESS2-2 SP: HS-ESS3-2 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-PS2-1 SP: HS-PS4-1	
	design solution	K-2-ETS1-3 2-ESS2-1 HS-PS2-6 CC: K-2-ETS1-2 CC: K-ESS2-2 CC: K-ESS3-1 CC: K-LS1-1 CC: 1-LS1-1 CC: 2-LS2-2 CC: 2-PS1-1 CC: 4-PS4-3 CC: MS-ESS2-1 CC: MS-ESS2-4 CC: MS-ESS2-5	CC: K-2-ETS1-2 CC: K-ESS2-2 CC: K-ESS3-1 CC: K-LS1-1 CC: 1-LS1-1 CC: 2-LS2-2 CC: 2-PS1-1 CC: 4-PS4-3 CC: MS-ESS2-1 CC: MS-ESS2-4 CC: MS-ESS2-5	
designed [by humans; human-made]				

designed [by humans; human-made] (cont'd)	CC: MS-ESS3-1	designed [by humans; human-made]	SP: HS-ESS3-6	difference	3-LS3-1
	CC: MS-ESS3-4		SP: HS-LS1-2		5-ESS1-1
	CC: MS-LS2-1		SP: HS-LS1-4		MS-ESS1-3
	CC: MS-PS1-4		SP: HS-LS1-5		MS-ETS1-3
	CC: MS-PS1-6		SP: HS-LS1-7		MS-LS4-2
	CC: MS-PS2-1		SP: HS-LS2-5		HS-LS4-4
	CC: MS-PS2-2		SP: HS-LS2-6		CC: 3-LS3-1
	CC: MS-PS2-4		SP: HS-LS2-8		CC: 4-PS4-1
	CC: MS-PS3-3		SP: HS-LS3-2		CC: 4-PS4-3
	CC: HS-ESS2-5		SP: HS-LS4-5		CC: 5-ESS1-2
	CC: HS-PS3-5		SP: HS-LS4-6		CC: MS-ESS2-1
	CC: HS-PS4-4		SP: HS-PS1-1		CC: MS-ESS3-2
	DCI: 3-5-ETS1-1		SP: HS-PS1-4		CC: MS-ESS3-3
	DCI: 4-PS3-4		SP: HS-PS1-8		CC: MS-ETS1-1
	DCI: MS-ETS1-1		SP: HS-PS3-1		CC: MS-LS2-5
	DCI: MS-PS3-3		SP: HS-PS3-2		CC: MS-PS1-3
	SP: K-2-ETS1-1		SP: HS-PS3-5		CC: MS-PS2-1
	SP: K-ESS2-2		SP: HS-PS4-3		DCI: 3-LS4-2
	SP: K-ESS3-2	desire	SP: 1		DCI: MS-LS3-2
	SP: 2-PS1-4		CC: MS-ESS3-2		DCI: MS-LS4-2
	SP: 3-ESS3-1		CC: MS-ESS3-3		DCI: MS-PS1-4
	SP: 3-LS2-1		CC: MS-ETS1-1		DCI: HS-LS4-1
	SP: 3-LS4-3		CC: MS-LS2-5		DCI: HS-LS4-2
	SP: 4-LS1-1		CC: MS-PS1-3		DCI: HS-LS4-3
	SP: 5-ESS1-1		CC: MS-PS2-1		SP: MS-ESS1-3
	SP: 5-LS1-1	diagram	4-PS4-1		SP: MS-ESS3-2
	SP: 5-PS2-1		5-PS3-1		SP: MS-ETS1-3
	SP: MS-ESS3-4		MS-ESS2-5		SP: MS-LS4-1
	SP: MS-ETS1-2		MS-ESS2-6		SP: MS-PS1-2
	SP: MS-ETS1-4		MS-LS3-2		MS-ESS2-6
	SP: MS-LS1-3		MS-LS4-3		MS-PS1-5
	SP: MS-LS1-4		MS-PS1-4		MS-PS2-4
	SP: MS-LS2-4		MS-PS3-2		MS-PS4-3
	SP: MS-LS2-5		HS-LS1-5		HS-PS4-2
	SP: MS-PS2-4		HS-PS1-4		SP: 3-ESS2-1
	SP: MS-PS3-5		HS-PS1-8		SP: 3-LS3-1
	SP: HS-ESS1-1		HS-PS3-2		SP: 3-LS4-1
	SP: HS-ESS1-5		HS-PS3-5		SP: 4-ESS2-2
	SP: HS-ESS2-1		SP: K-2-ETS1-2		SP: 5-ESS1-2
	SP: HS-ESS2-3		SP: K-ESS3-1		SP: HS-LS3-3
	SP: HS-ESS2-4		SP: 2-ESS2-2		SP: HS-LS4-3
	SP: HS-ESS2-6		SP: 2-LS2-2		
	SP: HS-ESS2-7				
	SP: HS-ESS3-2				
	SP: HS-ESS3-3				

discovery	MS-LS4-5 CC: 3-PS2-4 CC: MS-ESS1-3 CC: MS-LS1-1 CC: MS-LS4-5 CC: MS-PS1-3 DCI: HS-ESS3-6		MS-LS3-1 MS-LS3-2 MS-PS2-3 HS-ESS2-5 HS-ESS2-7 HS-LS4-5 HS-PS1-5		CC: HS-LS4-2 CC: HS-LS4-4 CC: HS-LS4-5 CC: HS-LS4-6 CC: HS-PS2-1 CC: HS-PS2-3 CC: HS-PS2-5
	BBK K-PS2-2 1-PS4-4 3-PS2-3 5-ESS1-1 MS-ESS1-2 MS-PS2-4 MS-PS3-2 HS-ESS1-5 CC: MS-PS3-1 CC: MS-PS3-4 DCI: 1-PS4-4 DCI: 3-PS2-3 DCI: 3-PS2-4 DCI: 4-PS4-3 DCI: 5-ESS1-1 DCI: MS-ESS2-3 DCI: MS-PS2-3 DCI: MS-PS2-5 DCI: HS-ESS1-2 DCI: HS-ESS1-3 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-5 DCI: HS-PS4-2 DCI: HS-PS4-5		HS-PS4-3 HS-PS4-4 CC: 3-ESS3-1 CC: 3-LS2-1 CC: 3-LS3-2 CC: 3-LS4-2 CC: 3-LS4-3 CC: 3-PS2-1 CC: 3-PS2-3 CC: 4-ESS2-1 CC: 4-ESS3-1 CC: 4-ESS3-2 CC: 4-PS4-2 CC: 5-PS1-4 CC: 5-PS2-1 CC: MS-ESS1-1 CC: MS-ESS2-5 CC: MS-ESS3-1 CC: MS-ESS3-4 CC: MS-LS1-4 CC: MS-LS1-5 CC: MS-LS1-8 CC: MS-LS2-1 CC: MS-LS2-2 CC: MS-LS3-2 CC: MS-LS4-2		CC: HS-PS3-5 CC: HS-PS4-1 CC: HS-PS4-4 CC: HS-PS4-5 DCI: 5-ESS3-1 DCI: 5-PS1-1 DCI: MS-PS2-5 DCI: HS-ESS1-4 DCI: HS-ESS2-1 DCI: HS-ESS2-2 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) SP: 2-PS1-4 SP: 3-PS2-3 SP: 4-PS3-3 SP: HS-ETS1-4 SP: HS-PS1-5 SP: HS-PS2-3
	distance	effect			
effect	BBK K-PS2-1 K-PS3-1 K-PS3-2 1-PS4-3 3-LS4-2 3-PS2-1 3-PS2-3 4-ESS2-1 4-ESS3-1 MS-ESS3-2 MS-LS2-1		CC: MS-LS4-4 CC: MS-LS4-5 CC: MS-PS1-4 CC: MS-PS2-3 CC: MS-PS2-5 CC: HS-ESS1-4 CC: HS-ESS2-4 CC: HS-ESS3-1 CC: HS-LS2-8 CC: HS-LS3-1 CC: HS-LS3-2 CC: HS-LS3-3		

empirical	BBK	energy	4-PS3-4	CC: MS-LS2-3
	MS-LS1-4		5-PS3-1	CC: MS-PS1-1
	MS-LS2-4		MS-ESS2-1	CC: MS-PS1-5
	MS-PS1-1		MS-ESS2-4	CC: MS-PS1-6
	MS-PS1-4		MS-ESS3-1	CC: MS-PS2-1
	MS-PS1-6		MS-ESS3-4	CC: MS-PS2-4
	MS-PS3-5		MS-LS1-6	CC: MS-PS3-2
	HS-LS4-1		MS-LS1-7	CC: MS-PS3-3
	SP: 1		MS-LS2-3	CC: MS-PS3-5
	CC: 5-ESS3-1		MS-PS1-6	CC: HS-ESS1-2
	CC: HS-ESS1-5		MS-PS3-1	CC: HS-ESS1-3
	CC: HS-ESS2-4		MS-PS3-2	CC: HS-ESS2-3
	CC: HS-ESS3-1		MS-PS3-3	CC: HS-ESS2-6
	CC: HS-LS2-8		MS-PS3-4	CC: HS-ETS1-4
	CC: HS-LS3-1		MS-PS3-5	CC: HS-LS1-2
	CC: HS-LS3-2		MS-PS4-1	CC: HS-LS1-4
	CC: HS-LS4-2		HS-ESS1-1	CC: HS-LS1-5
	CC: HS-LS4-4		HS-ESS2-4	CC: HS-LS1-6
	CC: HS-LS4-5		HS-ESS3-2	CC: HS-LS1-7
	CC: HS-LS4-6		HS-LS1-5	CC: HS-LS2-3
	CC: HS-PS2-1		HS-LS1-7	CC: HS-LS2-4
	CC: HS-PS2-5		HS-LS2-3	CC: HS-LS2-5
	CC: HS-PS3-4		HS-LS2-4	CC: HS-PS1-4
	CC: HS-PS4-1		HS-PS1-1	CC: HS-PS1-7
	SP: MS-ESS3-4		HS-PS1-4	CC: HS-PS3-2
	SP: MS-LS1-4		HS-PS1-5	CC: HS-PS3-3
	SP: MS-LS2-4		HS-PS1-8	CC: HS-PS4-3
	SP: MS-PS2-4		HS-PS3-1	DCI: 4-ESS3-1
	SP: MS-PS3-5		HS-PS3-2	DCI: 4-PS3-1
	SP: HE-ESS2-3		HS-PS3-3	DCI: 4-PS3-2
	SP: HS-ESS2-5		HS-PS3-4	DCI: 4-PS3-3
	SP: HS-ESS3-2		HS-PS3-5	DCI: 4-PS3-4
	SP: HS-ESS3-5		HS-PS4-4	DCI: 5-PS3-1
	SP: HS-ETS1-1		HS-PS4-5	DCI: MS-ESS2-1
	SP: HS-LS1-3		CC: 4-PS3-1	DCI: MS-ESS2-6
	SP: HS-LS3-1		CC: 4-PS3-2	DCI: MS-LS1-6
	SP: HS-PS1-3		CC: 4-PS3-3	DCI: MS-LS1-7
	SP: HS-PS2-5		CC: 4-PS3-4	DCI: MS-LS2-3
	SP: HS-PS3-4		CC: 5-LS1-1	DCI: MS-LS2-5
	SP: HS-PS4-2		CC: 5-PS3-1	DCI: MS-PS1-4
energy	BBK		CC: MS-ESS1-3	DCI: MS-PS1-6
	4-ESS3-1		CC: MS-ESS1-4	DCI: MS-PS3-1
	4-PS3-1		CC: MS-ESS2-2	DCI: MS-PS3-2
	4-PS3-2		CC: MS-ESS2-4	DCI: MS-PS3-3
	4-PS3-3		CC: MS-ESS2-6	DCI: MS-PS3-4

energy (cont'd)	DCI: MS-PS3-5	engineering	HS-ETS1-2	episode	SP: HS-ESS1-5
	DCI: HS-ESS1-1		HS-PS2-3		SP: HS-ESS2-7
	DCI: HS-ESS1-2		SP: 1		SP: HS-ESS3-2
	DCI: HS-ESS1-3		SP: 2		SP: HS-LS2-6
	DCI: HS-ESS2-3		SP: 5		SP: HS-LS2-8
	DCI: HS-ESS2-4		SP: 6		SP: HS-LS3-2
	DCI: HS-ESS2-5		CC: 3-5-ETS1-2		SP: HS-LS4-5
	DCI: HS-ESS3-2		CC: 3-ESS3-1		SP: HS-PS4-3
	DCI: HS-ETS1-1		CC: 3-LS4-3		2-ESS1-1
	DCI: HS-LS1-5		CC: 3-LS4-4		MS-ESS1-4
	DCI: HS-LS1-6		CC: 3-PS2-4		MS-ESS2-2
	DCI: HS-LS1-7		CC: 4-ESS3-1		MS-ESS3-2
	DCI: HS-LS2-3		CC: 4-PS3-4		CC: K-ESS3-2
	DCI: HS-LS2-4		CC: 4-PS4-3		CC: K-ESS3-3
	DCI: HS-LS2-5		CC: MS-ESS1-3		CC: K-PS3-1
	DCI: HS-PS1-4		CC: MS-LS1-1		CC: K-PS3-2
	DCI: HS-PS1-5		CC: MS-LS4-5		CC: 1-ESS1-1
	DCI: HS-PS1-8		CC: MS-PS1-3		CC: 2-LS2-1
	DCI: HS-PS2-4(a)		CC: HS-ESS1-2		CC: 2-PS1-4
	DCI: HS-PS2-4(b)		CC: HS-ESS1-4		CC: MS-ESS1-1
	DCI: HS-PS2-5		CC: HS-ESS2-3		CC: MS-ESS1-2
	DCI: HS-PS3-1		CC: HS-ESS3-2		CC: MS-ESS3-5
	DCI: HS-PS3-2		CC: HS-ESS3-4		CC: MS-LS2-3
	DCI: HS-PS3-3		CC: HS-LS3-3		CC: MS-LS4-1
	DCI: HS-PS3-4		CC: HS-PS3-3		CC: MS-LS4-2
	DCI: HS-PS3-5		CC: HS-PS4-2		DCI: K-ESS3-2
	DCI: HS-PS4-4		CC: HS-PS4-5		DCI: 2-ESS1-1
	DCI: HS-PS4-5		DCI: K-2-ETS1-1	event	DCI: MS-ESS3-1
			DCI: K-PS2-2		DCI: MS-ESS3-2
			DCI: 3-5-ETS1-1		DCI: HS-ESS2-4
			DCI: 4-ESS3-2		SP: K-2-ETS1-2
			DCI: 4-PS3-4		SP: K-ESS3-1
			DCI: MS-ESS3-5		SP: 2-ESS2-2
			DCI: MS-PS3-3		SP: 2-LS2-2
			DCI: HS-ETS1-1		SP: 2-PS1-4
			DCI: HS-ETS1-4		SP: 3-LS1-1
			DCI: HS-LS4-6		SP: 4-LS1-2
			DCI: HS-PS3-3		SP: 4-PS4-1
			SP: 5-PS1-2		SP: 4-PS4-2
			SP: HS-LS3-3		SP: 5-ESS2-1
			SP: HS-LS4-3		SP: 5-LS2-1
					SP: 5-PS1-1
					SP: 5-PS3-1
					SP: MS-LS4-2

	BBK K-ESS2-2 1-LS3-1 1-PS4-1 1-PS4-2 2-ESS1-1 2-PS1-3 2-PS1-4 3-LS3-1 3-LS3-2 3-LS4-1 3-LS4-2 3-LS4-3 3-PS2-1 3-PS2-2 4-ESS1-1 4-ESS2-1 4-PS3-1 4-PS3-2 5-ESS2-2 5-PS1-1 5-PS1-2		HS-ESS2-3 HS-ESS2-5 HS-ESS2-7 HS-ESS3-1 HS-ESS3-5 HS-LS1-1 HS-LS1-3 HS-LS1-6 HS-LS2-2 HS-LS2-3 HS-LS2-6 HS-LS2-8 HS-LS3-2 HS-LS4-1 HS-LS4-2 HS-LS4-3 HS-LS4-4 HS-LS4-5 HS-PS1-3 HS-PS1-5 HS-PS1-6 HS-PS2-5 HS-PS3-4		CC: HS-ESS2-3 CC: HS-ESS2-4 CC: HS-ESS3-5 CC: HS-LS2-8 CC: HS-LS3-1 CC: HS-LS3-2 CC: HS-LS4-1 CC: HS-LS4-2 CC: HS-LS4-4 CC: HS-LS4-5 CC: HS-LS4-6 CC: HS-PS1-1 CC: HS-PS1-2 CC: HS-PS1-3 CC: HS-PS1-5 CC: HS-PS2-1 CC: HS-PS2-4(a) CC: HS-PS2-4(b) CC: HS-PS2-5 CC: HS-PS4-1 DCI: 3-LS4-1 DCI: HS-ESS2-3
evidence	MS-ESS1-4 MS-ESS2-2 MS-ESS2-3 MS-ESS2-5 MS-ESS3-1 MS-ESS3-4 MS-ESS3-5 MS-LS1-1 MS-LS1-3 MS-LS1-4 MS-LS1-5 MS-LS1-6 MS-LS2-1 MS-LS2-4 MS-LS4-4 MS-PS2-2 MS-PS2-4 MS-PS2-5 MS-PS3-5 HS-ESS1-1 HS-ESS1-2 HS-ESS1-5 HS-ESS1-6	evidence	HS-PS4-3 SP: 6 SP: 7 CC: K-ESS2-1 CC: K-LS1-1 CC: K-PS2-1 CC: K-PS2-2 CC: 1-ESS1-1 CC: 1-ESS1-2 CC: 1-LS1-2 CC: 1-LS3-1 CC: 1-PS4-1 CC: 1-PS4-2 CC: 1-PS4-3 CC: 2-PS1-2 CC: 4-ESS1-1 CC: 4-ESS2-2 CC: 5-ESS3-1 CC: MS-PS1-2 CC: MS-PS4-1 CC: HS-ESS1-2 CC: HS-ESS1-5 CC: HS-ESS1-6	evidence	DCI: HS-ESS3-1 DCI: HS-LS4-1 SP: K-2-ETS1-2 SP: K-ESS2-2 SP: K-PS3-2 SP: 1-LS1-1 SP: 1-LS3-1 SP: 1-PS4-1 SP: 1-PS4-2 SP: 1-PS4-3 SP: 1-PS4-4 SP: 2-ESS1-1 SP: 2-ESS2-1 SP: 2-LS2-1 SP: 2-LS2-2 SP: 2-PS1-1 SP: 2-PS1-3 SP: 2-PS1-4 SP: 3-5-ETS1-2 SP: 3-5-ETS1-3 SP: 3-ESS3-1 SP: 3-LS2-1 SP: 3-LS3-2

evidence (cont'd)	SP: 3-LS4-2	SP: MS-PS2-5	evidence	SP: HS-PS3-3
	SP: 3-LS4-3	SP: MS-PS3-3		SP: HS-PS3-4
	SP: 3-LS4-4	SP: MS-PS3-4		SP: HS-PS3-5
	SP: 3-PS2-1	SP: MS-PS3-5		SP: HS-PS4-3
	SP: 3-PS2-2	SP: MS-PS4-1		BBK
	SP: 4-ESS1-1	SP: HS-ESS1-1		MS-ESS2-5
	SP: 4-ESS2-1	SP: HS-ESS1-2		MS-PS3-4
	SP: 4-ESS3-2	SP: HS-ESS1-5		HS-ESS2-3
	SP: 4-LS1-1	SP: HS-ESS1-6		SP: MS-ESS1-4
	SP: 4-PS3-1	SP: HS-ESS2-1		SP: MS-ESS2-2
	SP: 4-PS3-2	SP: HS-ESS2-3		SP: MS-ESS3-1
	SP: 4-PS4-3	SP: HS-ESS2-4		SP: MS-LS1-5
	SP: 5-ESS1-1	SP: HS-ESS2-5		SP: MS-LS1-6
	SP: 5-LS1-1	SP: HS-ESS2-6		SP: HS-ESS1-2
	SP: 5-PS1-3	SP: HS-ESS2-7		SP: HS-ESS1-6
	SP: 5-PS1-3	SP: HS-ESS3-1		SP: HS-LS4-1
	SP: 5-PS1-4	SP: HS-ESS3-2		SP: HS-PS4-3
	SP: 5-PS2-1	SP: HS-ESS3-4		3-LS3-2
	SP: MS-ESS1-4	SP: HS-ESS3-5		3-LS4-2
	SP: MS-ESS2-3	SP: HS-ETS1-2		4-ESS1-1
	SP: MS-ESS2-5	SP: HS-ETS1-3		4-PS3-1
	SP: MS-ESS3-1	SP: HS-LS1-1		5-LS2-1
	SP: MS-ESS3-3	SP: HS-LS1-2		MS-ESS1-4
	SP: MS-ESS3-4	SP: HS-LS1-3		MS-ESS2-2
	SP: MS-ESS3-5	SP: HS-LS1-4		MS-ESS3-1
	SP: MS-ETS1-2	SP: HS-LS1-5		MS-LS1-4
	SP: MS-LS1-1	SP: HS-LS1-7		MS-LS1-5
	SP: MS-LS1-3	SP: HS-LS2-2		MS-LS1-6
	SP: MS-LS1-4	SP: HS-LS2-3		MS-LS2-2
	SP: MS-LS1-5	SP: HS-LS2-5		MS-LS4-2
	SP: MS-LS1-6	SP: HS-LS2-6		MS-LS4-4
	SP: MS-LS1-8	SP: HS-LS2-7		MS-LS4-6
	SP: MS-LS2-1	SP: HS-LS2-8		HS-ESS1-2
	SP: MS-LS2-2	SP: HS-LS3-2		HS-ESS3-1
	SP: MS-LS2-4	SP: HS-LS4-1		HS-LS1-1
	SP: MS-LS2-5	SP: HS-PS1-1		HS-LS1-6
	SP: MS-LS4-1	SP: HS-PS1-2		HS-LS2-1
	SP: MS-LS4-2	SP: HS-PS1-3		HS-LS2-2
	SP: MS-LS4-4	SP: HS-PS1-4		HS-LS2-3
	SP: MS-LS4-5	SP: HS-PS1-5		HS-LS4-2
	SP: MS-PS1-3	SP: HS-PS1-6		HS-LS4-3
	SP: MS-PS1-6	SP: HS-PS1-8		HS-LS4-4
	SP: MS-PS2-1	SP: HS-PS2-3		HS-PS1-2
	SP: MS-PS2-2	SP: HS-PS2-5		HS-PS1-5
	SP: MS-PS2-4	SP: HS-PS3-2		SP: 2

explanation (cont'd)	SP: 3	SP: 4-ESS1-1	SP: HS-ESS1-5
	SP: 6	SP: 4-ESS2-1	SP: HS-ESS1-6
	SP: 7	SP: 4-ESS3-2	SP: HS-ESS2-3
	CC: 4-ESS1-1	SP: 4-LS1-1	SP: HS-ESS2-4
	CC: 4-ESS2-2	SP: 4-PS3-1	SP: HS-ESS2-7
	CC: MS-ESS2-1	SP: 4-PS3-2	SP: HS-ESS3-1
	CC: MS-PS2-2	SP: 4-PS3-4	SP: HS-ESS3-2
	CC: HS-ESS1-6	SP: 4-PS4-3	SP: HS-ESS3-4
	CC: HS-ESS2-7	SP: 5-ESS1-1	SP: HS-ESS3-6
	CC: HS-LS2-6	SP: 5-LS1-1	SP: HS-ETS1-2
	CC: HS-LS2-7	SP: 5-LS2-1	SP: HS-ETS1-3
	CC: HS-LS4-1	SP: 5-PS1-3	SP: HS-LS1-1
	CC: HS-LS4-3	SP: 5-PS1-4	SP: HS-LS1-6
	CC: HS-PS1-1	SP: 5-PS2-1	SP: HS-LS2-1
	CC: HS-PS1-2	SP: MS-ESS1-4	SP: HS-LS2-2
	CC: HS-PS1-3	SP: MS-ESS2-2	SP: HS-LS2-3
	CC: HS-PS1-5	SP: MS-ESS2-5	SP: HS-LS2-6
	CC: HS-PS1-6	SP: MS-ESS3-1	SP: HS-LS2-7
	CC: HS-PS2-4	SP: MS-ESS3-3	SP: HS-LS2-8
	SP: K-PS2-1	SP: MS-ESS3-4	SP: HS-LS3-2
	SP: K-PS3-1	SP: MS-ETS1-2	SP: HS-LS4-1
	SP: K-PS3-2	SP: MS-LS1-1	SP: HS-LS4-2
	SP: 1-ESS1-2	SP: MS-LS1-3	SP: HS-LS4-4
	SP: 1-LS1-1	SP: MS-LS1-4	SP: HS-PS2-1
	SP: 1-LS3-1	SP: MS-LS1-5	SP: HS-PS2-3
	SP: 1-PS4-1	SP: MS-LS1-6	SP: HS-PS2-4(a)
	SP: 1-PS4-2	SP: MS-LS2-2	SP: HS-PS2-4(b)
	SP: 1-PS4-3	SP: MS-LS2-4	SP: HS-PS3-3
	SP: 1-PS4-4	SP: MS-LS2-5	SP: HS-PS4-1
	SP: 2-ESS1-1	SP: MS-LS4-1	SP: HS-PS4-3
	SP: 2-ESS2-1	SP: MS-LS4-2	
	SP: 2-LS2-1	SP: MS-LS4-4	
	SP: 2-LS4-1	SP: MS-LS4-6	
	SP: 2-PS1-1	SP: MS-PS1-2	
	SP: 2-PS1-3	SP: MS-PS1-6	
	SP: 3-5-ETS1-2	SP: MS-PS2-1	
	SP: 3-5-ETS1-3	SP: MS-PS2-2	
	SP: 3-ESS3-1	SP: MS-PS2-4	
	SP: 3-LS2-1	SP: MS-PS2-5	
	SP: 3-LS3-2	SP: MS-PS3-3	
	SP: 3-LS4-2	SP: MS-PS3-4	
	SP: 3-LS4-3	SP: MS-PS3-5	
	SP: 3-LS4-4	SP: MS-PS4-1	
	SP: 3-PS2-1	SP: HS-ESS1-2	
	SP: 3-PS2-2	SP: HS-ESS1-4	
explanation		explanation	

	CC: HS-ESS1-4 CC: HS-LS3-3 DCI: HS-ESS1-5 DCI: HS-ESS1-6 SP: HS-ESS1-4 SP: HS-ESS3-3 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS4-6 SP: HS-PS1-2 SP: HS-PS1-5 SP: HS-PS1-6 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1	MS-ESS3-5 MS-LS1-5 MS-PS1-6 MS-PS2-3 HS-ESS2-7 HS-ESS3-3 HS-LS2-1 HS-LS2-2 HS-LS3-2 HS-LS3-3 HS-LS4-2 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 DCI: MS-ESS3-5 DCI: MS-LS1-5 DCI: MS-LS2-1 DCI: HS-ESS3-2 DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-LS3-2 DCI: HS-LS3-3 DCI: HS-LS4-2 SP: HS-ESS3-2	feedback	HS-ESS2-2 HS-ESS2-7 HS-LS1-3 CC: HS-ESS2-2 CC: HS-ESS2-7 CC: HS-ESS3-4 CC: HS-LS1-3 DCI: HS-ESS2-1 DCI: HS-ESS2-2 DCI: HS-LS1-3
exponential	factor	CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 DCI: MS-ESS3-5 DCI: MS-LS1-5 DCI: MS-LS2-1 DCI: HS-ESS3-2 DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-LS3-2 DCI: HS-LS3-3 DCI: HS-LS4-2 SP: HS-ESS3-2	finding	SP: 8 CC: 3-LS1-1 CC: 3-LS4-3 CC: 3-LS4-4 CC: 3-PS2-2 CC: 4-ESS3-1 CC: 4-PS4-1 CC: 4-PS4-3 CC: 5-ESS3-1 CC: MS-ESS2-3 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 CC: HS-LS1-3 SP: 3-LS1-1 SP: 3-PS2-2 SP: 4-PS4-1 SP: MS-ESS1-3 SP: MS-ESS3-2 SP: MS-ETS1-3 SP: MS-LS4-1 SP: MS-PS1-2 SP: MS-PS4-3 SP: HS-LS1-3
	feasible	MS-ESS3-3 SP: 6 SP: 3-ESS2-1 SP: 3-LS3-1 SP: 3-LS4-1 SP: 4-ESS2-2 SP: 5-ESS1-2 SP: HS-LS3-3 SP: HS-LS4-3		

firsthand	SP: K-ESS2-1 SP: K-LS1-1 SP: K-PS3-1 SP: 1-ESS1-1 SP: 1-ESS1-2 SP: 1-LS3-1 SP: 1-PS4-2 SP: 2-LS4-1 SP: 2-PS1-3	K-2-ETS1-2 2-LS2-2 MS-LS1-2 MS-LS1-3 MS-LS3-1 HS-ESS1-3 HS-LS1-1 HS-LS1-2 HS-PS2-1 SP: 6 CC: K-2-ETS1-2 CC: 1-LS1-1 CC: 2-LS2-2 CC: MS-LS1-2 CC: MS-LS3-1 CC: MS-PS1-3 CC: MS-PS4-2 CC: MS-PS4-3 CC: HS-ESS2-5 CC: HS-LS1-1 CC: HS-PS2-6 DCI: 3-LS2-1 DCI: 3-LS3-1 DCI: 4-LS1-1 DCI: MS-LS1-2 DCI: MS-LS1-3 DCI: MS-LS3-1 DCI: HS-LS1-1 DCI: HS-LS2-2 DCI: HS-LS2-4 DCI: HS-LS2-6 DCI: HS-LS2-7 DCI: HS-LS3-1 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-PS1-7	graph histogram historical hypothesis idea	BBK MS-ESS3-5 HS-LS2-1 HS-LS4-2 HS-PS1-4 HS-PS2-1 SP: 8 CC: MS-ESS3-2 CC: MS-LS4-1 CC: MS-LS4-3 CC: MS-PS4-1 HS-LS2-1 DCI: HS-ESS2-3 SP: HS-ESS1-5 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-LS2-6 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS4-3 BBK SP: MS-PS2-3 3-PS2-4 4-PS3-4 5-ESS3-1 5-LS1-1 5-LS2-1 MS-LS4-2 HS-ESS1-3 HS-PS1-4 HS-PS1-7 HS-PS2-3 HS-PS4-3 HS-PS4-4 SP: 8 CC: K-PS2-1 CC: K-PS2-2 CC: 1-PS4-2 CC: 2-PS1-2 CC: MS-LS1-3 DCI: K-2-ETS1-2 DCI: K-ESS3-3 DCI: 2-LS2-2 DCI: 3-5-ETS1-2
formula	BBK			

idea (cont'd)	SP: K-ESS2-2	idea	SP: HS-PS1-6	information	MS-ESS1-3
	SP: K-ESS3-3		SP: HS-PS2-3		MS-LS1-8
	SP: K-PS3-2		SP: HS-PS3-3		MS-LS3-2
	SP: 1-LS1-1		SP: HS-PS4-5		MS-LS4-5
	SP: 1-LS3-1	individual (adjective)	5-ESS3-1		MS-PS1-3
	SP: 1-PS4-2		MS-LS2-1		MS-PS4-3
	SP: 1-PS4-4		HS-LS2-8		HS-LS4-1
	SP: 2-ESS1-1		CC: MS-ESS3-2		HS-PS2-6
	SP: 2-ESS2-1		CC: MS-ESS3-3		HS-PS4-2
	SP: 2-PS1-3		CC: MS-ETS1-1		HS-PS4-5
	SP: 2-PS1-4		CC: MS-LS2-5		SP: 8
	SP: 3-ESS2-2		CC: MS-PS1-3		CC: MS-ESS2-3
	SP: 4-ESS3-1		CC: MS-PS2-1		CC: MS-ESS2-6
	SP: 4-PS3-4		DCI: MS-LS1-7		CC: MS-PS3-1
	SP: 5-ESS3-1		DCI: HS-LS1-4		CC: MS-PS3-4
	SP: MS-ESS1-4	individual (noun)	3-LS4-2		CC: HS-ETS1-4
	SP: MS-ESS2-2		MS-LS4-4		CC: HS-LS1-2
	SP: MS-ESS3-1		HS-LS4-2		CC: HS-LS1-4
	SP: MS-ESS3-3		HS-LS4-5		CC: HS-LS2-5
	SP: MS-ETS1-4		DCI: 1-LS3-1		CC: HS-PS4-3
	SP: MS-LS1-8		DCI: 3-LS3-2		DCI: K-2-ETS1-1
	SP: MS-LS2-2		DCI: 3-LS4-2		DCI: K-ESS3-2
	SP: MS-LS4-2		DCI: MS-LS3-1		DCI: 1-LS1-1
	SP: MS-LS4-4		DCI: MS-LS3-2		DCI: 1-PS4-4
	SP: MS-LS4-5		DCI: HS-LS2-1		DCI: 3-LS3-1
	SP: MS-PS1-3		DCI: HS-LS2-2		DCI: 4-LS1-2
	SP: MS-PS2-1		DCI: HS-LS2-8		DCI: 4-PS4-3
	SP: MS-PS3-3		DCI: HS-LS4-2		DCI: MS-LS3-2
	SP: MS-PS4-3		DCI: HS-LS4-3		DCI: MS-PS1-6
	SP: HS-ESS1-2		DCI: HS-LS4-4		DCI: MS-PS2-2
	SP: HS-ESS1-3	inference	MS-LS2-4		DCI: MS-PS4-3
	SP: HS-ESS1-6		DCI: MS-LS4-2		DCI: HS-ESS1-6
	SP: HS-ESS3-2	influence (noun)	5-ESS2-1		DCI: HS-LS1-1
	SP: HS-ETS1-2		MS-LS4-5		DCI: HS-LS3-1
	SP: HS-ETS1-3		HS-LS4-2		DCI: HS-LS4-1
	SP: HS-LS1-1		DCI: MS-ESS2-6		DCI: HS-LS4-2
	SP: HS-LS1-6	information	K-2-ETS1-1		DCI: HS-LS4-3
	SP: HS-LS2-3		K-ESS3-2		DCI: HS-PS4-2
	SP: HS-LS2-6		2-ESS1-1		DCI: HS-PS4-5
	SP: HS-LS2-7		2-ESS2-3		SP: K-2-ETS1-1
	SP: HS-LS2--8		3-ESS2-2		SP: K-ESS3-2
	SP: HS-LS4-2		4-ESS3-1		SP: K-ESS3-3
	SP: HS-LS4-4		4-LS1-2		SP: 1-LS1-2
	SP: HS-PS1-2		4-PS4-3		SP: 2-ESS2-3
	SP: HS-PS1-5		5-ESS3-1		SP: 4-ESS3-1

information (cont'd)	SP: 5-ESS3-1	interaction	CC: MS-PS2-4	investigation	CC: MS-PS4-3
	SP: MS-LS1-8		CC: MS-PS3-2		CC: HS-ESS3-5
	SP: MS-LS4-5		CC: HS-ETS1-4		DCI: MS-ESS2-3
	SP: MS-PS1-3		CC: HS-LS1-2		SP: K-PS2-1
	SP: MS-PS4-3		CC: HS-LS1-4		SP: K-PS3-1
	SP: HS-ESS1-1		CC: HS-LS2-5		SP: 1-ESS1-2
	SP: HS-LS4-1		CC: HS-PS4-3		SP: 1-PS4-1
input	SP: HS-PS2-6		DCI: 3-LS3-2	investigation	SP: 1-PS4-3
	SP: HS-PS4-4		DCI: MS-ESS2-2		SP: 2-LS2-1
	SP: HS-PS4-5		DCI: MS-ESS2-6		SP: 2-LS4-1
	HS-LS1-5		DCI: MS-LS2-1		SP: 2-PS1-1
	HS-LS1-7		DCI: MS-LS2-2		SP: 3-5-ETS1-3
	CC: MS-ESS2-6		DCI: MS-PS1-4		SP: 3-PS2-1
	CC: MS-PS2-1		DCI: HS-ESS2-4		SP: 4-ESS2-1
interaction	CC: MS-PS2-4	interpretation	DCI: HS-LS2-2	investigation	SP: 4-PS3-2
	CC: MS-PS3-2		DCI: HS-LS2-6		SP: 5-PS1-3
	CC: HS-ESS3-6		DCI: HS-LS4-2		SP: 5-PS1-4
	CC: HS-PS3-4		DCI: HS-PS1-3		SP: MS-ESS1-3
	DCI: 1-LS1-1		DCI: HS-PS1-6		SP: MS-ESS2-3
	DCI: MS-LS1-6		DCI: HS-PS3-1		SP: MS-ESS2-5
	DCI: MS-LS1-8		DCI: HS-PS3-2		SP: MS-ESS3-2
	SP: MS-ETS1-4		DCI: HS-PS4-5		SP: MS-ETS1-3
	3-PS2-3	interpretation	SP: 4-LS1-2		SP: MS-LS1-1
	MS-ESS2-5		SP: HS-ETS1-4		SP: MS-LS2-1
	MS-LS1-3		BBK		SP: MS-LS4-1
	MS-LS2-2		SP: 4		SP: MS-LS4-3
	MS-PS2-4		SP: HS-PS4-2		SP: MS-PS1-2
	MS-PS2-5		K-PS2-1		SP: MS-PS2-2
	HS-ESS1-5	investigation	1-PS4-1	investigation	SP: MS-PS2-5
	HS-ESS2-2		1-PS4-3		SP: MS-PS3-1
	HS-ESS2-5		2-LS2-1		SP: MS-PS3-4
	HS-ETS1-4		2-PS1-1		SP: HS-ESS1-2
	HS-LS2-6		3-PS2-1		SP: HS-ESS2-5
	HS-PS2-2		5-PS1-4		SP: HS-ESS3-1
	HS-PS3-5		MS-LS1-1		SP: HS-ESS3-5
	HS-PS4-5		MS-PS2-2		SP: HS-LS1-1
	CC: 3-LS4-4		MS-PS2-5		SP: HS-LS1-3
	CC: 4-LS1-1		MS-PS3-4		SP: HS-LS1-6
	CC: 4-LS1-2		HS-ESS2-5		SP: HS-LS2-3
	CC: 5-ESS2-1		HS-LS1-3		SP: HS-LS4-2
	CC: 5-ESS3-1		HS-PS1-3		SP: HS-LS4-4
	CC: 5-LS2-1		HS-PS2-5		SP: HS-PS1-3
	CC: MS-ESS1-2		HS-PS3-4		SP: HS-PS2-5
	CC: MS-ESS2-6		SP: 3		SP: HS-PS3-4
	CC: MS-PS2-1		SP: 4		

knowledge	HS-ESS3-2	knowledge	SP: HS-LS3-2	logical	BBK
	HS-PS1-2		SP: HS-PS1-6		HS-LS2-8
	SP: 6		SP: HS-PS3-3		SP: 6
	CC: 1-ESS1-1		CC: HS-ESS1-4		CC: MS-PS1-2
	CC: 1-LS1-1		CC: HS-ESS3-5		CC: MS-PS2-2
	CC: 2-PS1-2		CC: HS-LS3-3		CC: MS-PS2-4
	CC: 3-LS4-3		SP: MS-LS4-3		CC: MS-PS3-4
	CC: 4-ESS3-1		SP: MS-PS3-1		CC: MS-PS3-5
	CC: 4-PS4-3		SP: HS-ESS1-4		CC: MS-PS4-1
	CC: MS-ESS3-4		SP: HS-ESS3-3		CC: HS-LS1-3
	CC: MS-LS2-5		SP: HS-ESS3-6		CC: HS-LS2-6
	CC: MS-LS4-5		SP: HS-ETS1-4		SP: 3-LS1-1
	CC: HS-ESS1-2		SP: HS-LS2-1		SP: 3-LS4-1
	CC: HS-ESS3-2		SP: HS-LS2-2		SP: 4-ESS2-2
	CC: HS-ESS3-4		SP: HS-LS2-4		SP: MS-LS1-6
	CC: HS-ESS3-2		SP: HS-LS3-3		SP: MS-LS4-1
	CC: HS-LS4-1		SP: HS-LS4-3		SP: HS-ESS3-2
	CC: HS-LS4-4		SP: HS-LS4-6		SP: HS-LS2-8
	CC: HS-PS3-3		SP: HS-PS1-7	magnitude	MS-ESS3-2
	CC: HS-PS4-2		SP: HS-PS2-2		CC: MS-PS3-1
	DCI: MS-ESS3-5		SP: HS-PS2-4(a)		CC: MS-PS3-4
	DCI: MS-ETS1-1		SP: HS-PS2-4(b)		CC: HS-LS2-2
	DCI: MS-PS3-3		SP: HS-PS3-1		DCI: MS-PS2-3
	DCI: HS-PS1-2		SP: HS-PS4-1		DCI: HS-ESS3-5
	DCI: HS-PS1-7	logarithm	SP: HS-ESS1-4	material	K-PS3-2
	SP: MS-ETS1-1		SP: HS-ESS3-3		1-LS1-1
	SP: MS-LS1-5		SP: HS-ESS3-6		1-PS4-1
	SP: MS-LS1-6		SP: HS-ETS1-4		1-PS4-3
	SP: MS-LS4-1		SP: HS-LS2-1		1-PS4-4
	SP: MS-PS1-2		SP: HS-LS2-2		2-PS1-1
	SP: MS-PS1-6		SP: HS-LS2-4		2-PS1-2
	SP: MS-PS2-2		SP: HS-LS4-6		2-PS1-4
	SP: MS-PS2-4		SP: HS-PS1-7		3-5-ETS1-1
	SP: MS-PS3-4		SP: HS-PS2-2		4-ESS3-1
	SP: MS-PS3-5		SP: HS-PS2-4(a)		4-PS3-4
	SP: MS-PS4-1		SP: HS-PS2-4(b)		5-LS1-1
	SP: HS-ESS2-3		SP: HS-PS3-1		5-LS2-1
	SP: HS-ESS3-1		SP: HS-PS4-1		5-PS1-3
	SP: HS-ESS3-4				MS-ESS2-1
	SP: HS-ESS3-5				MS-LS3-1
	SP: HS-ETS1-2				MS-PS1-3
	SP: HS-ETS1-3				MS-PS3-4
	SP: HS-LS2-2				MS-PS4-2
	SP: HS-LS2-3				HS-ESS1-6
	SP: HS-LS2-7				HS-ESS2-5

material (cont'd)	HS-PS1-3	HS-PS3-1	5-PS1-2
	HS-PS2-6	HS-PS3-4	MS-LS1-6
	HS-PS4-4	HS-PS4-1	MS-LS1-7
	CC: 1-LS1-1	SP: 5	MS-LS2-3
	CC: 2-ESS2-1	CC: MS-PS1-5	MS-PS1-5
	CC: 2-PS1-2	CC: HS-ETS1-4	MS-PS3-4
	CC: MS-PS1-3	CC: HS-LS1-2	HS-ESS1-2
	CC: MS-PS4-2	CC: HS-LS1-4	HS-ESS2-3
	CC: HS-ESS2-5	CC: HS-LS2-5	HS-LS1-5
	CC: HS-LS1-1	CC: HS-PS4-3	HS-LS2-3
	CC: HS-PS2-6	DCI: HS-PS2-4(a)	HS-LS2-4
	DCI: 1-PS4-3	DCI: HS-PS2-4(b)	HS-PS4-4
	DCI: 3-5-ETS1-1	DCI: HS-PS3-1	HS-PS4-5
	DCI: 4-PS3-4	SP: 5-ESS2-2	CC: 5-LS1-1
	DCI: 5-ESS2-1	SP: 5-PS1-2	CC: MS-ESS2-4
	DCI: 5-LS1-1	SP: 5-PS1-5	CC: MS-ESS2-6
	DCI: 5-LS2-1	SP: MS-LS4-6	CC: MS-LS1-6
	DCI: 5-PS3-1	SP: MS-PS4-1	CC: MS-LS1-7
mathematical	DCI: MS-ESS2-1	SP: HS-ESS1-4	CC: MS-PS1-5
	DCI: MS-LS1-7	SP: HS-ESS2-2	CC: MS-PS2-1
	DCI: MS-PS1-4	SP: HS-ESS2-5	CC: MS-PS2-4
	DCI: MS-PS4-2	SP: HS-ESS3-3	CC: MS-PS3-2
	DCI: HS-ESS1-5	SP: HS-ESS3-6	CC: MS-PS3-5
	DCI: HS-ESS1-6	SP: HS-ETS1-4	CC: HS-ESS1-3
	DCI: HS-ESS2-3	SP: HS-LS1-3	CC: HS-ESS2-3
	DCI: HS-ESS2-5	SP: HS-LS2-1	CC: HS-ESS2-6
	DCI: HS-LS1-4	SP: HS-LS2-2	CC: HS-ETS1-4
	DCI: HS-PS4-5	SP: HS-LS2-4	CC: HS-LS1-2
	SP: K-PS3-2	SP: HS-LS4-1	CC: HS-LS1-4
	SP: 1-LS1-1	SP: HS-LS4-6	CC: HS-LS1-5
	SP: 1-PS4-4	SP: HS-PS1-3	CC: HS-LS1-6
	SP: 3-5-ETS1-1	SP: HS-PS1-7	CC: HS-LS2-5
mathematical	MS-ESS1-2	SP: HS-PS2-1	CC: HS-PS1-4
	MS-LS4-6	SP: HS-PS2-2	CC: HS-PS1-7
	MS-PS4-1	SP: HS-PS2-4	CC: HS-PS3-3
	HS-ESS1-4	SP: HS-PS2-5	CC: HS-PS4-3
	HS-LS2-1	SP: HS-PS2-6	DCI: 1-PS4-1
	HS-LS2-2	SP: HS-PS3-1	DCI: 5-LS2-1
	HS-LS2-4	SP: HS-PS3-4	DCI: 5-PS1-1
	HS-LS2-5	SP: HS-PS4-1	DCI: 5-PS3-1
	HS-LS4-2	SP: HS-PS4-5	DCI: MS-ESS2-1
	HS-PS1-7	1-PS4-1	DCI: MS-LS2-3
	HS-PS2-1	5-LS1-1	DCI: MS-PS1-1
	HS-PS2-2	5-LS2-1	DCI: MS-PS1-2
	HS-PS2-4	5-PS1-1	DCI: MS-PS1-4
matter	matter		

matter (cont'd)	DCI: MS-PS3-3 DCI: MS-PS3-4 DCI: MS-PS4-2 DCI: HS-ESS2-3 DCI: HS-LS1-6 DCI: HS-LS1-7 DCI: HS-LS2-3 DCI: HS-LS2-4 DCI: HS-PS1-3 DCI: HS-PS2-6 DCI: HS-PS3-1 DCI: HS-PS3-2 DCI: HS-PS4-4 DCI: HS-PS4-5	mechanism	HS-ESS1-1 HS-ESS2-1 CC: HS-PS3-5 CC: HS-PS4-4 SP: 5-LS2-1 SP: MS-ESS2-4 SP: MS-LS1-7 SP: MS-PS1-5 SP: MS-PS3-2 SP: HS-ESS1-6	merit	3-ESS3-1 3-LS4-4 SP: 3-ESS2-2 SP: 3-ESS3-1 SP: 3-LS4-4 SP: 4-ESS3-1 SP: 5-ESS3-1 SP: MS-LS1-8 SP: MS-LS4-5 SP: MS-PS1-3 SP: MS-PS4-3 SP: HS-ESS1-5 SP: HS-LS2-6 SP: HS-LS2-8 SP: HS-LS4-5 SP: HS-PS4-3
	3-PS2-2 4-ESS2-1 5-PS1-3 CC: MS-ESS1-1 CC: MS-ESS1-2 CC: MS-LS2-3 CC: MS-LS4-1 CC: MS-LS4-2 CC: MS-PS4-3 DCI: 5-PS1-3 SP: 3-PS2-2 SP: 4-ESS2-1 SP: 4-PS3-1 SP: 5-ESS2-2 SP: 5-PS1-2 SP: 5-PS1-3 SP: MS-PS2-2 SP: MS-PS3-4 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4		1-LS1-2 HS-PS4-1 DCI: MS-PS4-2 SP: K-ESS2-1 SP: K-ESS3-2 SP: K-LS1-1 SP: K-PS3-1 SP: 1-ESS1-1 SP: 1-ESS1-2 SP: 1-LS1-2 SP: 1-LS3-1 SP: 1-PS4-2 SP: 2-ESS2-3 SP: 2-LS4-1 SP: 2-PS1-3 SP: 3-ESS2-2 SP: 4-ESS3-1 SP: 5-ESS3-1 SP: MS-PS4-3 SP: HS-PS4-4		BBK MS-ESS3-3 SP: 7 SP: 3-ESS2-2 SP: 3-PS2-1 SP: 4-ESS3-1 SP: 5-ESS3-1 SP: MS-LS1-8 SP: MS-LS4-5 SP: MS-PS1-3 SP: MS-PS4-3 SP: HS-ESS1-3 SP: HS-ESS3-5 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-4 SP: HS-PS4-5
					K-2-ETS1-2 K-ESS3-1 2-ESS2-2 2-LS2-2 3-5-ETS1-3 3-LS1-1 4-LS1-2 4-PS4-1 4-PS4-2 5-ESS2-1 5-LS2-1 5-PS1-1

model (cont'd)	5-PS3-1	model	CC: MS-ESS1-2	model	SP: 5-LS1-1
	MS-ESS1-1		CC: MS-ESS1-3		SP: 5-LS2-1
	MS-ESS1-2		CC: MS-ESS1-4		SP: 5-PS1-1
	MS-ESS1-3		CC: MS-ESS2-2		SP: 5-PS2-1
	MS-ESS2-1		CC: MS-ESS2-6		SP: 5-PS3-1
	MS-ESS2-4		CC: MS-ETS1-4		SP: MS-ESS1-1
	MS-ESS2-6		CC: MS-PS1-1		SP: MS-ESS1-2
	MS-ETS1-4		CC: MS-PS2-1		SP: MS-ESS2-1
	MS-LS1-2		CC: MS-PS2-4		SP: MS-ESS2-4
	MS-LS1-7		CC: MS-PS3-2		SP: MS-ESS2-6
	MS-LS2-3		CC: HS-ESS3-6		SP: MS-ESS3-4
	MS-LS3-1		CC: HS-ETS1-4		SP: MS-ESS3-5
	MS-LS3-2		CC: HS-LS1-2		SP: MS-ETS1-1
	MS-LS4-6		CC: HS-LS1-4		SP: MS-ETS1-4
	MS-PS1-1		CC: HS-LS2-2		SP: MS-LS1-2
	MS-PS1-4		CC: HS-LS2-5		SP: MS-LS1-7
	MS-PS1-5		CC: HS-PS3-1		SP: MS-LS2-3
	MS-PS3-2		CC: HS-PS3-4		SP: MS-LS3-1
	MS-PS4-1		CC: HS-PS4-3		SP: MS-LS3-2
	MS-PS4-2		DCI: K-2-ETS1-2		SP: MS-PS1-1
	HS-ETS1-4		DCI: K-ESS3-3		SP: MS-PS1-4
	HS-ESS1-1		DCI: 2-LS2-2		SP: MS-PS1-5
	HS-ESS2-1		DCI: 5-PS1-1		SP: MS-PS2-3
	HS-ESS2-3		DCI: MS-ESS1-1		SP: MS-PS2-4
	HS-ESS2-4		DCI: MS-LS2-3		SP: MS-PS3-1
	HS-ESS2-6		DCI: MS-PS1-4		SP: MS-PS3-2
	HS-ESS3-5		DCI: MS-PS4-2		SP: MS-PS3-4
	HS-LS1-2		DCI: HS-ESS2-3		SP: MS-PS3-5
	HS-LS1-4		DCI: HS-ESS3-5		SP: MS-PS4-2
	HS-LS1-5		DCI: HS-ETS1-4		SP: HS-ESS1-1
	HS-LS1-6		DCI: HS-LS4-6		SP: HS-ESS1-4
	HS-LS1-7		DCI: HS-PS2-4(a)		SP: HS-ESS1-6
	HS-LS2-4		DCI: HS-PS2-4(b)		SP: HS-ESS2-1
	HS-LS2-5		DCI: HS-PS4-3		SP: HS-ESS2-2
	HS-LS4-2		SP: K-2-ETS1-2		SP: HS-ESS2-3
	HS-PS1-1		SP: K-ESS3-1		SP: HS-ESS2-4
	HS-PS1-4		SP: K-ESS3-3		SP: HS-ESS2-5
	HS-PS1-8		SP: 2-ESS2-2		SP: HS-ESS2-6
	HS-PS3-1		SP: 2-LS2-2		SP: HS-ESS3-1
	HS-PS3-2		SP: 3-LS1-1		SP: HS-ESS3-3
	HS-PS3-5		SP: 3-LS2-1		SP: HS-ESS3-5
	HS-PS4-3		SP: 4-LS1-2		SP: HS-ESS3-6
	SP: 2		SP: 4-PS4-1		SP: HS-ETS1-1
	SP: 6		SP: 5-ESS1-1		SP: HS-ETS1-4
	SP: 8		SP: 5-ESS2-1		SP: HS-LS1-1

model (cont'd)	SP: HS-LS1-2	motion	BBK	multiple	2-ESS2-1
	SP: HS-LS1-3		K-PS2-1		3-5-ETS1-2
	SP: HS-LS1-4		3-PS2-1		4-ESS3-2
	SP: HS-LS1-5		3-PS2-2		4-PS4-3
	SP: HS-LS1-6		4-PS3-4		MS-ESS2-4
	SP: HS-LS1-7		5-ESS1-2		MS-LS2-2
	SP: HS-LS2-1		5-PS3-1		MS-LS4-3
	SP: HS-LS2-2		MS-ESS1-2		HS-LS2-2
	SP: HS-LS2-3		MS-ESS2-2		HS-LS4-1
	SP: HS-LS2-4		MS-ESS2-3		HS-LS4-6
	SP: HS-LS2-5		MS-ESS2-5		DCI: 3-PS2-1
	SP: HS-LS3-1		MS-PS1-4		DCI: 4-ESS3-1
	SP: HS-LS3-3		MS-PS2-1		DCI: 5-ESS2-1
	SP: HS-LS4-2		MS-PS2-2		DCI: 5-LS2-1
	SP: HS-LS4-3		MS-PS3-5		DCI: MS-LS1-3
	SP: HS-LS4-4		HS-ESS1-2		DCI: HS-LS4-1
	SP: HS-LS4-6		HS-ESS1-4		DCI: HS-PS3-2
	SP: HS-PS1-1		HS-PS2-1		DCI: HS-PS3-3
	SP: HS-PS1-2		HS-PS3-2		DCI: HS-PS4-5
	SP: HS-PS1-3		CC: MS-ESS2-4		SP: 3-5-ETS1-2
	SP: HS-PS1-4		CC: MS-LS1-6		SP: 2-ESS2-1
	SP: HS-PS1-8		CC: MS-PS3-5		SP: 3-ESS2-1
	SP: HS-PS1-7		DCI: K-PS2-1		SP: 3-LS3-1
	SP: HS-PS2-1		DCI: K-PS2-2		SP: 3-LS3-2
	SP: HS-PS2-2		DCI: 1-ESS1-1		SP: 3-LS4-1
	SP: HS-PS2-4		DCI: 3-PS2-1		SP: 3-LS4-2
	SP: HS-PS2-5		DCI: 3-PS2-2		SP: 4-ESS1-1
	SP: HS-PS3-4		DCI: 4-PS3-2		SP: 4-ESS2-2
	SP: HS-PS4-1		DCI: 4-PS3-3		SP: 4-ESS3-2
	SP: HS-PS4-2		DCI: 4-PS3-4		SP: 4-PS3-1
			DCI: 4-PS4-1		SP: 4-PS3-4
			DCI: 5-PS3-1		SP: 4-PS4-3
			DCI: MS-ESS1-1		SP: 5-ESS1-2
			DCI: MS-PS1-4		SP: MS-ESS1-4
			DCI: MS-PS2-2		SP: MS-ESS2-2
			DCI: MS-PS3-1		SP: MS-ESS2-5
			DCI: MS-PS3-5		SP: MS-ESS3-1
			DCI: HS-ESS1-4		SP: MS-ESS3-3
			DCI: HS-ESS2-3		SP: MS-LS1-1
			DCI: HS-PS2-1		SP: MS-LS1-5
			DCI: HS-PS3-1		SP: MS-LS1-6
			DCI: HS-PS3-2		SP: MS-LS1-8
			DCI: HS-PS3-3		SP: MS-LS2-2
					SP: MS-LS4-2
					SP: MS-LS4-4

multiple (cont'd)	natural	SP: MS-LS4-5	CC: MS-ESS1-2	natural world	CC: 1-LS3-1
		SP: MS-PS1-3	CC: MS-ESS2-1		CC: 2-ESS2-2
		SP: MS-PS1-6	CC: MS-ESS2-3		CC: 2-ESS2-3
		SP: MS-PS2-1	CC: MS-ESS2-4		CC: 2-PS1-1
		SP: MS-PS2-2	CC: MS-ESS2-5		CC: 2-PS1-2
		SP: MS-PS2-5	CC: MS-ESS3-1		CC: 3-PS2-4
		SP: MS-PS3-3	CC: MS-ESS3-4		SP: K-2-ETS1-1
		SP: MS-PS3-4	CC: MS-LS1-2		SP: K-ESS2-1
		SP: MS-ETS1-1	CC: MS-LS1-6		SP: K-ESS2-2
		SP: HS-ESS1-2	CC: MS-LS1-8		SP: K-ESS3-1
		SP: HS-ESS1-3	CC: MS-LS2-1		SP: K-ESS3-2
		SP: HS-ESS1-6	CC: MS-LS2-3		SP: K-LS1-1
		SP: HS-ESS2-4	CC: MS-LS3-1		SP: 1-ESS1-1
		SP: HS-ESS3-1	CC: MS-LS3-2		SP: 2-PS1-4
		SP: HS-ESS3-4	CC: MS-LS4-1		SP: 3-ESS3-1
		SP: HS-ESS3-5	CC: MS-LS4-2		SP: 3-LS2-1
		SP: HS-ETS1-2	CC: MS-LS4-5		SP: 3-LS4-3
		SP: HS-ETS1-3	CC: MS-PS1-4		SP: 4-LS1-1
		SP: HS-LS1-1	CC: MS-PS1-6		SP: 5-ESS1-1
		SP: HS-LS1-6	CC: MS-PS2-2		SP: 5-LS1-1
		SP: HS-LS2-3	CC: MS-PS2-3		SP: 5-PS2-1
		SP: HS-LS4-1	CC: MS-PS2-5		SP: MS-ESS1-4
		SP: HS-LS4-2	CC: MS-PS3-3		SP: MS-ESS3-1
		SP: HS-LS4-4	CC: HS-ESS3-2		SP: MS-ESS3-4
		SP: HS-PS1-2	CC: HS-PS3-5		SP: MS-ETS1-2
		SP: HS-PS1-5	CC: HS-PS4-4		SP: MS-LS1-3
		SP: HS-PS1-6	DCI: 4-ESS3-1		SP: MS-LS1-4
		SP: HS-PS2-3	DCI: MS-ESS3-3		SP: MS-LS1-5
		SP: HS-PS2-6	DCI: MS-ESS3-4		SP: MS-LS1-6
		SP: HS-PS3-3	SP: 2-PS1-4		SP: MS-LS2-4
		SP: HS-PS4-4	SP: 4-LS1-2		SP: MS-LS2-5
		SP: HS-PS4-5	SP: HS-ESS2-3		SP: MS-PS2-4
natural	natural world	MS-ETS1-1	SP: HS-ESS2-5		SP: PS3-5
		HS-ESS3-2	SP: HS-ESS2-7		SP: HS-ESS1-1
		HS-ESS3-4	SP: HS-PS1-1		SP: HS-ESS1-2
		CC: K-2-ETS1-2	SP: HS-PS3-5		SP: HS-ESS1-5
		CC: 1-LS1-1	SP: HS-PS4-3		SP: HS-ESS1-6
		CC: 2-LS2-2	CC: K-ESS2-1		SP: HS-ESS2-1
		CC: 3-LS4-1	CC: K-ESS2-2		SP: HS-ESS2-2
		CC: 4-ESS1-1	CC: K-ESS3-1		SP: HS-ESS2-4
		CC: 5-ESS1-1	CC: K-ESS3-2		SP: HS-ESS2-6
		CC: 5-LS2-1	CC: K-LS1-1		SP: HS-ESS3-1
		CC: 5-PS1-1	CC: 1-ESS1-1		SP: HS-ESS3-2
		CC: 5-PS1-2	CC: 1-ESS1-2		SP: HS-LS1-1
		CC: MS-ESS1-1	CC: 1-LS1-2		SP: HS-LS1-2

natural world (cont'd)	SP: HS-LS1-6	nonlinear	SP: MS-LS4-3		HS-ESS1-6
	SP: HS-LS2-3		SP: MS-PS3-1		HS-PS2-1
	SP: HS-LS2-5		SP: HS-ESS1-4		HS-PS2-2
	SP: HS-LS2-6		SP: HS-ESS3-3		HS-PS2-3
	SP: HS-LS2-8		SP: HS-ESS3-6		HS-PS2-4
	SP: HS-LS3-2		SP: HS-ETS1-4		HS-PS3-2
	SP: HS-LS4-1		SP: HS-LS2-1		HS-PS3-4
	SP: HS-LS4-2		SP: HS-LS2-2		HS-PS3-5
	SP: HS-LS4-4		SP: HS-LS2-4		CC: K-2-ETS1-2
	SP: HS-LS4-5		SP: HS-LS4-6		CC: 1-LS1-1
	SP: HS-PS1-1		SP: HS-PS1-7		CC: 2-LS2-2
	SP: HS-PS1-4		SP: HS-PS2-2		CC: 2-PS1-3
	SP: HS-PS1-8		SP: HS-PS2-4(a)		CC: 4-PS3-1
	SP: HS-PS3-2		SP: HS-PS2-4(b)		CC: 4-PS3-2
	SP: HS-PS3-5		SP: HS-PS3-1		CC: 4-PS3-3
	SP: HS-PS4-3		SP: HS-PS4-1		CC: 4-PS3-4
need	K-ESS2-2	object	K-2-ETS1-1		CC: 5-ESS1-1
	K-ESS3-1		K-2-ETS1-2		CC: 5-PS1-1
	1-LS1-1		K-2-ETS1-3		CC: 5-PS3-1
	3-5-ETS1-1		K-PS2-1		CC: MS-ESS1-1
	3-LS4-3		K-PS2-2		CC: MS-ESS1-2
	HS-ETS1-1		1-PS4-1		CC: MS-LS2-3
	SP: 1		1-PS4-2		CC: MS-LS4-1
	CC: 3-5-ETS1-1		1-PS4-3		CC: MS-LS4-2
	CC: MS-ESS3-2		2-PS1-3		CC: HS-ESS1-2
	CC: MS-ESS3-3		3-PS2-1		CC: HS-ESS2-5
	CC: MS-ETS1-1		3-PS2-2		CC: HS-LS1-7
	CC: MS-LS2-5		3-PS2-3		CC: HS-LS2-4
	CC: MS-PS1-3		3-PS2-4		CC: HS-PS3-2
	CC: MS-PS2-1		4-PS3-1		DCI: K-PS2-1
	DCI: 5-LS2-1		4-PS3-3		DCI: K-PS2-2
	DCI: HS-ETS1-1		4-PS4-1		DCI: 1-LS1-1
	DCI: HS-ETS1-4		4-PS4-2		DCI: 1-PS4-2
	DCI: HS-LS4-6		5-PS2-1		DCI: 2-PS1-3
			MS-ESS1-2		DCI: 3-PS2-1
			MS-ESS1-3		DCI: 3-PS2-2
			MS-ETS1-4		DCI: 3-PS2-3
			MS-PS2-1		DCI: 3-PS2-4
			MS-PS2-2		DCI: 4-PS3-1
			MS-PS2-4		DCI: 4-PS3-2
			MS-PS2-5		DCI: 4-PS3-3
			MS-PS3-1		DCI: 4-PS4-2
			MS-PS3-2		DCI: 5-PS1-3
			MS-PS3-5		DCI: 5-PS2-1
			HS-ESS1-4		DCI: MS-ESS1-2

object (cont'd)	DCI: MS-ESS1-3 DCI: MS-PS1-4 DCI: MS-PS2-1 DCI: MS-PS2-2 DCI: MS-PS2-3 DCI: MS-PS2-4 DCI: MS-PS2-5 DCI: MS-PS3-1 DCI: MS-PS3-2 DCI: MS-PS3-3 DCI: MS-PS3-5 DCI: MS-PS4-2 DCI: HS-ESS1-4 DCI: HS-ESS1-6 DCI: HS-PS1-1 DCI: HS-PS1-3 DCI: HS-PS2-1 DCI: HS-PS2-2 DCI: HS-PS2-3 DCI: HS-PS2-4 DCI: HS-PS2-6 DCI: HS-PS3-1 DCI: HS-PS3-2 DCI: HS-PS3-4 DCI: HS-PS3-5 SP: K-2-ETS1-1 SP: K-2-ETS1-2 SP: K-2-ETS1-3 SP: K-PS2-2 SP: 2-LS2-2 SP: 2-PS1-2 SP: 3-5-ETS1-1 SP: 3-PS2-4 SP: MS-ESS3-3 SP: MS-ETS1-1 SP: MS-PS2-1 SP: MS-PS3-3 SP: HS-LS1-3	observable	2-PS1-1 SP: 2 CC: K-ESS3-2 CC: K-ESS3-3 CC: K-PS3-1 CC: K-PS3-2 CC: 2-LS2-1 CC: 2-PS1-4 CC: 3-LS4-1 CC: MS-LS1-1 CC: HS-PS2-1 CC: HS-PS2-4(a) CC: HS-PS2-4(b) DCI: 2-PS1-1 DCI: 5-ESS1-2	observation	CC: MS-LS4-1 CC: MS-LS4-2 DCI: K-2-ETS1-1 DCI: K-ESS3-2 DCI: 5-PS1-1 DCI: HS-ESS1-2 SP: K-2-ETS1-1 SP: K-ESS2-1 SP: K-ESS3-2 SP: K-LS1-1 SP: K-PS2-2 SP: K-PS3-1 SP: 1-ESS1-1 SP: 1-ESS1-2 SP: 1-LS1-2 SP: 1-LS3-1 SP: 1-PS4-2 SP: 2-ESS1-1 SP: 2-ESS2-3 SP: 2-LS4-1 SP: 2-PS1-2 SP: 2-PS1-3 SP: 3-ESS2-1 SP: 3-LS3-1 SP: 3-LS3-2 SP: 3-LS4-1 SP: 3-LS4-2 SP: 3-PS2-2 SP: 4-ESS2-1 SP: 4-ESS2-2 SP: 4-PS3-1 SP: 4-PS3-2 SP: 5-ESS1-2 SP: 5-PS1-3 SP: MS-PS2-3 SP: HS-ESS1-2 SP: HS-ESS1-6 SP: HS-LS4-1 SP: HS-PS4-3
			BBK		
			K-2-ETS1-1		
			K-ESS2-1		
			K-LS1-1		
			K-PS3-1		
			1-ESS1-1		
			1-ESS1-2		
			1-LS3-1		
			1-PS4-2		
	SP: K-2-ETS1-1 SP: K-2-ETS1-2 SP: K-2-ETS1-3 SP: K-PS2-2 SP: 2-LS2-2 SP: 2-PS1-2 SP: 3-5-ETS1-1 SP: 3-PS2-4 SP: MS-ESS3-3 SP: MS-ETS1-1 SP: MS-PS2-1 SP: MS-PS3-3 SP: HS-LS1-3		2-LS4-1		
			2-PS1-1		
			2-PS1-3		
			3-PS2-2		
			4-ESS2-1		
			4-PS3-2		
			5-PS1-3		
			HS-ESS1-1		
			SP: 3		
			CC: MS-ESS1-1		
objectivity	SP: HS-LS1-3		CC: MS-ESS1-2		CC: MS-LS2-3

oral	SP: 8 SP: K-ESS3-3 SP: MS-ESS3-4 SP: MS-LS1-3 SP: MS-LS1-4 SP: MS-LS2-4 SP: MS-PS2-4 SP: MS-PS3-5 SP: HS-ESS2-7		HS-PS1-1 HS-PS1-2 SP: 4 SP: 5 CC: K-ESS2-1 CC: K-ESS3-2 CC: K-ESS3-3 CC: K-LS1-1 CC: K-PS3-1		CC: HS-PS1-1 CC: HS-PS1-2 CC: HS-PS1-3 CC: HS-PS1-5 CC: HS-PS2-4(a) CC: HS-PS2-4(b) DCI: K-ESS2-1 DCI: 1-ESS1-1 DCI: 1-ESS1-2
output	HS-ESS2-4 HS-ESS3-5 HS-LS1-5 HS-LS1-7 CC: MS-ESS2-6 CC: MS-PS2-1 CC: MS-PS2-4 CC: MS-PS3-2 CC: HS-ESS3-6 CC: HS-PS3-4 DCI: HS-ESS2-4 SP: MS-ETS1-4		CC: K-PS3-2 CC: 1-ESS1-1 CC: 1-ESS1-2 CC: 1-LS1-2 CC: 1-LS3-1 CC: 2-ESS2-2 CC: 2-ESS2-3 CC: 2-LS2-1 CC: 2-PS1-1 CC: 2-PS1-4 CC: 3-ESS2-1 CC: 3-ESS2-2		DCI: 3-ESS2-1 DCI: 3-PS2-2 DCI: 4-ESS1-1 DCI: 4-ESS2-2 DCI: 4-PS4-1 DCI: 5-ESS1-2 DCI: 5-ESS2-1 DCI: MS-ESS1-1 DCI: MS-ESS2-3 DCI: MS-ESS2-5 DCI: MS-ESS2-6 DCI: MS-LS2-2
pattern	K-ESS2-1 K-LS1-1 1-ESS1-1 1-LS1-2 1-LS3-1 1-PS4-4 2-PS1-1 3-LS1-1 3-LS3-1 3-PS2-2 4-ESS2-2 4-PS4-1 4-PS4-3 5-ESS1-2 MS-ESS1-1 MS-ESS2-6 MS-LS2-2 MS-LS2-4 MS-LS4-1 MS-LS4-3 MS-PS4-3 HS-ESS2-4 HS-ESS2-7 HS-ESS3-1	pattern	CC: 3-LS1-1 CC: 3-LS3-1 CC: 3-LS4-1 CC: 3-PS2-2 CC: 4-PS4-1 CC: 4-PS4-3 CC: 4-ESS1-1 CC: 4-ESS2-2 CC: 5-ESS1-2 CC: 5-PS1-2 CC: MS-ESS1-1 CC: MS-ESS1-2 CC: MS-ESS2-3 CC: MS-ESS3-2 CC: MS-LS2-2 CC: MS-LS2-3 CC: MS-LS4-1 CC: MS-LS4-2 CC: MS-LS4-3 CC: MS-PS1-2 CC: MS-PS4-1 CC: HS-ESS1-5 CC: HS-LS4-1 CC: HS-LS4-3	pattern	DCI: MS-PS4-1 DCI: HS-PS1-1 DCI: HS-PS1-2 SP: K-ESS2-1 SP: K-ESS3-2 SP: K-LS1-1 SP: 1-ESS1-1 SP: 1-LS1-2 SP: 2-ESS2-2 SP: 2-LS4-1 SP: 3-ESS2-1 SP: 3-LS1-1 SP: 3-LS3-2 SP: 3-LS4-2 SP: 3-PS2-2 SP: 3-PS2-3 SP: 4-PS3-1 SP: 4-PS3-3 SP: 4-PS4-1 SP: 5-ESS1-2 SP: MS-LS4-6 SP: MS-PS4-1 SP: HS-ESS2-3

	BBK SP: HS-ESS1-2 SP: HS-ESS3-1 SP: HS-LS1-1 SP: HS-LS1-6 SP: HS-LS2-3 SP: HS-LS4-2 SP: HS-LS4-4 SP: HS-PS1-2	CC: HS-ESS1-6 CC: HS-LS2-1 CC: HS-LS4-1 CC: HS-LS4-3 CC: HS-PS1-1 CC: HS-PS1-2 CC: HS-PS1-3 CC: HS-PS1-5 CC: HS-PS2-1		SP: MS-ESS1-1 SP: MS-ESS1-2 SP: MS-ESS2-1 SP: MS-ESS2-3 SP: MS-ESS2-4 SP: MS-ESS2-6 SP: MS-ESS3-4 SP: MS-ETS1-4 SP: MS-LS1-2
	MS-ESS3-2 MS-PS2-5 HS-PS3-2 HS-PS4-3 SP: 1 SP: 6 CC: K-ESS2-1 CC: 1-ESS1-1 CC: 1-ESS1-2 CC: 1-LS1-2 CC: 1-LS3-1 CC: 3-LS3-1 CC: 3-LS4-1 CC: 4-PS4-1 CC: 5-ESS1-2 CC: MS-ESS1-3 CC: MS-ESS1-4 CC: MS-ESS2-2 CC: MS-ESS2-5 CC: MS-ESS3-1 CC: MS-ESS3-4 CC: MS-LS1-1 CC: MS-LS1-4 CC: MS-LS1-5 CC: MS-LS1-8 CC: MS-LS2-1 CC: MS-LS3-2 CC: MS-LS4-4 CC: MS-LS4-5 CC: MS-LS4-6 CC: MS-PS1-1 CC: MS-PS1-4 CC: MS-PS2-3 CC: MS-PS2-5 CC: HS-ESS1-1 CC: HS-ESS1-2	CC: HS-PS2-4(a) CC: HS-PS2-4(b) CC: HS-PS4-3 DCI: HS-ESS2-4 DCI: HS-PS3-2 SP: K-PS3-2 SP: 1-LS1-1 SP: 1-LS3-1 SP: 1-PS4-2 SP: 1-PS4-4 SP: 2-ESS1-1 SP: 2-ESS2-1 SP: 2-PS1-3 SP: 3-5-ETS1-2 SP: 3-ESS2-2 SP: 3-LS1-1 SP: 3-LS3-1 SP: 3-LS3-2 SP: 3-LS4-1 SP: 3-LS4-2 SP: 3-PS2-2 SP: 4-ESS1-1 SP: 4-ESS2-1 SP: 4-ESS2-2 SP: 4-ESS3-1 SP: 4-ESS3-2 SP: 4-PS3-1 SP: 4-PS3-2 SP: 4-PS3-4 SP: 4-PS4-2 SP: 4-PS4-3 SP: 5-ESS3-1 SP: 5-LS2-1 SP: 5-PS1-1 SP: 5-PS1-3 SP: 5-PS3-1	phenomenon	phenomenon
peer review				
phenomenon				

problem	K-2-ETS1-1	problem	SP: K-ESS3-2	process	SP: MS-PS3-4
	K-2-ETS1-2		SP: K-PS2-1		SP: HS-ESS3-2
	K-2-ETS1-3		SP: K-PS3-1		SP: HS-ESS3-4
	K-PS2-2		SP: K-PS3-2		SP: HS-ETS1-1
	1-LS1-1		SP: 1-ESS1-2		SP: HS-ETS1-2
	1-PS4-4		SP: 1-LS1-1		SP: HS-ETS1-3
	3-5-ETS1-1		SP: 1-PS4-1		SP: HS-LS2-7
	3-5-ETS1-2		SP: 1-PS4-3		SP: HS-LS3-1
	3-LS4-4		SP: 1-PS4-4		SP: HS-LS3-3
	3-PS2-4		SP: 2-ESS2-1		SP: HS-LS4-3
	MS-ETS1-1		SP: 2-LS2-1		SP: HS-PS1-5
	MS-ETS1-2		SP: 2-LS4-1		SP: HS-PS1-6
	MS-PS2-1		SP: 2-PS1-1		SP: HS-PS2-3
	HS-ETS1-2		SP: 3-5-ETS1-1		SP: HS-PS2-5
	HS-ETS1-3		SP: 3-5-ETS1-2		SP: HS-PS3-3
	HS-ETS1-4		SP: 3-5-ETS1-3		SP: HS-PS3-4
	HS-LS4-6		SP: 3-ESS3-1		SP: HS-PS4-2
	HS-PS1-7		SP: 3-LS3-2		4-ESS3-2
	SP: 1		SP: 3-LS4-2		4-LS1-2
	SP: 2		SP: 3-LS4-4		MS-ESS2-1
	SP: 4		SP: 3-PS2-1		MS-ESS2-2
	SP: 6		SP: 3-PS2-2		MS-ESS3-1
	SP: 7		SP: 3-PS2-3		MS-ESS3-2
	CC: HS-LS1-1		SP: 3-PS2-4		MS-ESS3-3
	CC: HS-PS2-6		SP: 4-ESS1-1		MS-ESS3-5
	DCI: K-2-ETS1-1		SP: 4-ESS2-1		MS-ETS1-2
	DCI: K-2-ETS1-2		SP: 4-ESS3-2		MS-ETS1-4
	DCI: K-2-ETS1-3		SP: 4-PS3-1		MS-LS1-7
	DCI: K-ESS3-2		SP: 4-PS3-2		MS-PS1-3
	DCI: K-ESS3-3		SP: 4-PS3-3		MS-PS1-6
	DCI: K-PS2-2		SP: 4-PS3-4	process	HS-ESS2-1
	DCI: 2-ESS2-1		SP: 4-PS4-3		HS-ESS2-5
	DCI: 2-LS2-2		SP: 5-ESS3-1		HS-ESS3-1
	DCI: 3-5-ETS1-1		SP: 5-PS1-2		HS-LS1-7
	DCI: 3-5-ETS1-2		SP: 5-PS1-3		HS-LS4-2
	DCI: 3-5-ETS1-3		SP: 5-PS1-4		HS-PS1-8
	DCI: 4-PS3-4		SP: MS-ESS3-4		SP: 6
	DCI: 4-PS4-3		SP: MS-ESS3-5		CC: 3-PS2-4
	DCI: MS-ETS1-2		SP: MS-ETS1-1		CC: MS-ESS2-1
	DCI: MS-ETS1-3		SP: MS-LS1-1		CC: MS-ESS2-6
	DCI: MS-LS2-5		SP: MS-LS1-4		CC: MS-LS1-7
	DCI: MS-PS3-3		SP: MS-LS2-4		CC: MS-PS1-5
	DCI: HS-ETS1-4		SP: MS-PS2-2		CC: MS-PS2-1
	DCI: HS-LS4-6		SP: MS-PS2-3		CC: MS-PS2-4
	SP: K-2-ETS1-1		SP: MS-PS2-4		CC: MS-PS3-1

process (cont'd)	CC: MS-PS3-2	process	SP: MS-PS3-5	quantitative	K-ESS2-1
	CC: MS-PS3-4		SP: HS-ESS1-3		MS-PS4-1
	CC: HS-ESS1-3		SP: HS-ESS2-3		HS-ESS2-6
	CC: HS-ESS2-3		SP: HS-ESS3-3		HS-ETS1-1
	CC: HS-PS1-8		SP: HS-LS4-1		HS-LS2-1
	DCI: 3-5-ETS1-2		SP: HS-LS4-6		HS-PS2-2
	DCI: 3-ESS3-1		SP: HS-PS2-6		HS-PS2-4
	DCI: 4-ESS3-2		SP: HS-PS3-1		HS-PS3-3
	DCI: 5-ESS2-1	proportion	SP: HS-PS4-5		HS-PS3-4
	DCI: 5-PS3-1		HS-LS4-3		SP: 5
	DCI: MS-ESS2-1		CC: HS-ESS1-1		DCI: HS-PS3-1
	DCI: MS-ESS2-3		CC: HS-LS2-1		DCI: HS-PS3-2
	DCI: MS-ETS1-2		DCI: HS-LS4-3		SP: 3-ESS2-1
	DCI: MS-ETS1-3		DCI: HS-LS4-4		SP: 3-LS3-1
	DCI: MS-ETS1-4	qualitative	K-ESS2-1		SP: 3-LS4-1
	DCI: MS-LS1-6		MS-PS1-4		SP: 4-ESS2-2
	DCI: MS-LS1-7		MS-PS2-2		SP: 5-ESS1-2
	DCI: MS-LS2-5		MS-PS4-1		SP: 5-ESS2-2
	DCI: MS-LS4-6		MS-PS4-3		SP: 5-PS1-2
	DCI: MS-PS1-2		HS-ETS1-1		SP: MS-ESS1-3
	DCI: MS-PS1-3		HS-PS1-8		SP: MS-ESS2-3
	DCI: MS-PS1-5		HS-PS2-2		SP: MS-ESS3-2
	DCI: MS-PS1-6		HS-PS3-3		SP: MS-ETS1-3
	DCI: MS-PS3-3		SP: 3-5-ETS1-1		SP: MS-LS2-1
	DCI: HS-ESS1-1		SP: 3-ESS2-1		SP: MS-LS2-2
	DCI: HS-ESS1-2		SP: 3-LS3-1		SP: MS-LS4-1
	DCI: HS-ESS1-3		SP: 3-LS4-1		SP: MS-LS4-3
	DCI: HS-ESS1-6		SP: 3-PS2-3		SP: MS-LS4-4
	DCI: HS-ESS2-3		SP: 3-PS2-4		SP: MS-PS1-2
	DCI: HS-ETS1-4		SP: 4-ESS2-2		SP: MS-PS3-1
	DCI: HS-LS1-4	quantity	SP: 4-PS3-3	quantity	CC: MS-PS1-2
	DCI: HS-LS1-5		SP: 5-ESS1-2		CC: MS-PS1-3
	DCI: HS-LS1-7		SP: MS-LS2-2		CC: HS-ESS1-1
	DCI: HS-LS2-3		SP: MS-LS4-4		CC: HS-LS2-1
	DCI: HS-LS2-5		SP: MS-PS4-3		DCI: HS-PS3-1
	DCI: HS-LS3-2				DCI: HS-PS3-2
	DCI: HS-LS4-6				
	DCI: HS-PS1-4				
	DCI: HS-PS1-5				
	DCI: HS-PS1-8				
	SP: 3-5-ETS1-1				
	SP: MS-ESS3-1				
	SP: MS-ESS3-3				
	SP: MS-ETS1-1				
	SP: MS-PS2-1				

range		rate	4-ESS2-1 MS-ESS3-4 MS-ESS3-5 MS-LS1-5 HS-ESS2-3 HS-ESS2-7 HS-ESS3-5 HS-LS1-3 HS-LS4-5 HS-PS1-5 CC: 5-ESS1-2 CC: MS-ESS2-3 CC: HS-ESS2-1 CC: HS-ESS3-3 CC: HS-ESS3-5 DCI: HS-PS1-4 DCI: HS-PS1-5	K-ESS3-1 3-LS4-2 3-PS2-3 MS-LS2-1 MS-LS2-2 MS-LS3-2 MS-LS4-2 MS-LS4-3 MS-PS3-1 MS-PS3-4 HS-ESS3-3 HS-ESS3-6 HS-LS2-1 HS-LS3-1 HS-LS4-5 HS-PS1-7 HS-PS2-1 HS-PS4-1 SP: 5 CC: 3-ESS3-1 CC: 3-LS2-1 CC: 3-LS3-2 CC: 3-LS4-2 CC: 3-LS4-3 CC: 3-PS2-1 CC: 3-PS2-3 CC: 4-ESS2-1 CC: 4-ESS3-1 CC: 4-ESS3-2 CC: 4-PS4-2 CC: 5-PS1-4 CC: 5-PS2-1 CC: MS-ESS1-1 CC: MS-ESS2-3 CC: MS-ESS2-5 CC: MS-ESS3-1 CC: MS-ESS3-3 CC: MS-ESS3-4 CC: MS-LS1-2 CC: MS-LS1-4 CC: MS-LS1-5 CC: MS-LS1-8 CC: MS-LS2-1 CC: MS-LS2-2 CC: MS-LS3-1
				MS-LS1-4 MS-LS4-4 MS-LS4-6 HS-ESS1-6 HS-LS2-4 HS-LS2-6 HS-LS4-2 HS-PS1-5 HS-PS4-3 SP: 7 SP: 3-LS3-1 SP: 3-LS4-1 SP: 4-ESS2-2 SP: MS-ESS3-4 SP: MS-LS1-4 SP: MS-LS2-4 SP: MS-PS2-4 SP: MS-PS3-5 SP: HS-ESS1-5 SP: HS-ESS1-6 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-LS2-6 SP: HS-LS2-8 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS4-3
				relationship
				CC: 3-LS4-2 CC: 3-LS4-3 CC: 3-PS2-1 CC: 3-PS2-3 CC: 4-ESS2-1 CC: 4-ESS3-1 CC: 4-ESS3-2 CC: 4-PS4-2 CC: 5-PS1-4 CC: 5-PS2-1 CC: MS-ESS1-1 CC: MS-ESS2-3 CC: MS-ESS2-5 CC: MS-ESS3-1 CC: MS-ESS3-3 CC: MS-ESS3-4 CC: MS-LS1-2 CC: MS-LS1-4 CC: MS-LS1-5 CC: MS-LS1-8 CC: MS-LS2-1 CC: MS-LS2-2 CC: MS-LS3-1
				reasoning

relationship (cont'd)	CC: MS-LS3-2	relationship	SP: HS-LS1-5	reliable	MS-ESS3-2
	CC: MS-LS4-2		SP: HS-LS1-7		MS-LS4-5
	CC: MS-LS4-4		SP: HS-LS2-5		MS-PS4-3
	CC: MS-LS4-5		SP: HS-LS2-6		HS-PS4-4
	CC: MS-LS4-6		SP: HS-LS2-8		DCI: MS-PS4-3
	CC: MS-PS1-4		SP: HS-LS3-1		SP: 3-ESS2-2
	CC: MS-PS2-3		SP: HS-PS1-1		SP: 4-ESS3-1
	CC: MS-PS2-5		SP: HS-PS1-4		SP: 5-ESS3-1
	CC: MS-PS3-1		SP: HS-PS1-3		SP: MS-ESS1-4
	CC: MS-PS3-4		SP: HS-PS2-1		SP: MS-ESS2-2
	CC: HS-PS3-5		SP: HS-PS2-4		SP: MS-ESS3-1
	CC: HS-PS4-4		SP: HS-PS3-2		SP: MS-LS1-5
	DCI: 2-LS2-1		SP: HS-PS3-5		SP: MS-LS1-6
	DCI: 2-LS2-2	relevant	MS-ETS1-1		SP: HS-ESS1-2
	DCI: 4-PS3-3	relevant	HS-ETS1-4		SP: HS-ESS2-2
	DCI: 5-LS2-1	relevant	SP: 3		SP: HS-ESS2-5
	DCI: MS-LS4-3	relevant	CC: 3-LS4-3		SP: HS-ESS3-1
	DCI: MS-PS1-4	relevant	CC: 4-ESS3-1		SP: HS-ESS3-5
	DCI: MS-PS3-3	relevant	CC: 4-PS4-3		SP: HS-LS1-1
	DCI: MS-PS3-4	relevant	DCI: MS-ETS1-1		SP: HS-LS1-3
	DCI: HS-LS2-2	relevant	DCI: MS-PS3-3		SP: HS-LS1-6
	DCI: HS-PS3-2	relevant	SP: 3-ESS3-1		SP: HS-LS2-3
	SP: K-ESS3-1	relevant	SP: 3-LS2-1		SP: HS-LS4-2
	SP: 2-PS1-4	relevant	SP: 3-LS4-3		SP: HS-LS4-4
	SP: 3-5-ETS1-1	relevant	SP: 3-LS4-4		SP: HS-PS1-2
	SP: 3-ESS2-1	relevant	SP: 4-LS1-1		SP: HS-PS1-3
	SP: 3-LS4-3	relevant	SP: 5-ESS1-1		SP: HS-PS2-1
	SP: 3-PS2-3	relevant	SP: 5-LS1-1		SP: HS-PS2-5
	SP: 3-PS2-4	relevant	SP: 5-PS2-1		SP: HS-PS3-4
	SP: 4-PS3-3	relevant	SP: HS-ESS3-2		
	SP: 5-ESS1-2				
	SP: MS-ESS3-5				
	SP: MS-ETS1-1				
	SP: MS-LS2-2				
	SP: MS-LS4-3				
	SP: MS-LS4-4				
	SP: MS-PS2-3				
	SP: MS-PS3-1				
	SP: HS-ESS1-1				
	SP: HS-ESS2-1				
	SP: HS-ESS2-3				
	SP: HS-ESS2-4				
	SP: HS-ESS2-6				
	SP: HS-LS1-2				
	SP: HS-LS1-4				

representation	MS-ESS2-6 MS-LS4-6 MS-PS1-1 MS-PS3-2 MS-PS3-5 MS-PS4-1 HS-ESS1-4 HS-ESS3-6 HS-LS2-1 HS-LS2-2 HS-LS2-4 HS-PS1-4 HS-PS1-7 HS-PS2-2 HS-PS2-4 HS-PS4-4 SP: 5 DCI: K-2-ETS1-2 DCI: K-ESS3-3 DCI: 2-LS2-2 SP: K-ESS2-2 SP: 2-PS1-4 SP: 4-PS4-1 SP: MS-LS4-6 SP: MS-PS4-1 SP: HS-ESS1-4 SP: HS-ESS3-6 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4 SP: HS-PS4-1	research and development [R&D] research question	CC: HS-ESS1-2 CC: HS-ESS1-4 CC: HS-ESS2-3 CC: HS-PS4-5 BBK	risk routinely	BBK CC: 3-5-ETS1-2 CC: 3-ESS3-1 CC: 4-ESS3-2 CC: HS-ESS3-2 CC: HS-ESS3-4 CC: HS-PS3-3 CC: HS-PS4-2 DCI: HS-ESS3-2 DCI: HS-ETS1-1 DCI: HS-PS2-3 DCI: HS-PS3-3 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4 SP: 8 CC: 3-ESS3-1 CC: 3-LS2-1 CC: 3-LS3-2 CC: 3-LS4-2 CC: 3-LS4-3 CC: 3-PS2-1 CC: 3-PS2-3 CC: 4-ESS2-1 CC: 4-ESS3-1 CC: 4-ESS3-2 CC: 4-PS4-2 CC: 5-PS1-4 CC: 5-PS2-1
			5-PS1-4 MS-ESS3-1 MS-LS3-1 MS-LS3-2 HS-ESS1-5 HS-ESS2-1 HS-ESS3-1 HS-ESS3-6 HS-LS2-6 HS-LS4-2 SP: 4 SP: 6 SP: 8 CC: HS-ESS3-3 DCI: 3-ESS3-1 DCI: 3-LS3-2 DCI: 4-ESS3-2 DCI: 4-PS3-2 DCI: 4-PS3-3 DCI: MS-ESS1-1 DCI: MS-ESS2-1 DCI: MS-ESS3-1 DCI: MS-ETS1-4 DCI: MS-LS1-8 DCI: MS-LS3-1 DCI: MS-LS3-2 DCI: MS-PS1-6 DCI: MS-PS3-3 DCI: HS-LS1-7 SP: HS-LS1-3		
			CC: 3-LS4-3 CC: 4-ESS3-1 CC: 4-PS4-3 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 DCI: 3-5-ETS1-2 DCI: HS-PS4-5		

similarity	simulation	SP: 7	sketch	K-2-ETS1-2
		3-LS3-1		DCI: K-2-ETS1-2
		MS-ESS1-3		DCI: K-ESS3-3
		MS-ESS2-3		DCI: 2-LS2-2
		MS-ETS1-3		MS-ESS3-4
		MS-LS4-2		MS-LS4-5
		MS-LS4-3		MS-PS1-3
		HS-LS4-1		CC: MS-ESS3-4
		SP: 1		CC: MS-LS2-5
		CC: 3-LS3-1		CC: MS-LS4-5
		CC: 4-PS4-1		CC: HS-ESS2-2
		CC: 4-PS4-3		CC: HS-ETS1-1
		CC: 5-ESS1-2		CC: HS-ETS1-3
		DCI: MS-LS4-2		CC: HS-LS3-3
		DCI: MS-LS4-3		CC: HS-PS3-3
		DCI: HS-LS4-1		DCI: HS-ESS3-1
		SP: MS-ESS1-3		DCI: HS-ETS1-1
		SP: MS-ESS3-2		DCI: HS-PS2-3
		SP: MS-ETS1-3		DCI: HS-PS3-3
		SP: MS-LS4-1	society	K-ESS3-3
		SP: MS-PS1-2		K-PS2-2
				1-LS1-1
				2-ESS2-1
				3-5-ETS1-2
				3-LS4-4
				4-ESS3-2
				4-PS4-3
				MS-ESS3-3
				MS-ETS1-1
				MS-PS2-1
				HS-ESS3-4
				HS-ETS1-4
				HS-ETS1-1
				HS-ETS1-2
				HS-ETS1-3
				HS-LS2-7
				HS-LS4-6
				SP: 1
				SP: 2
				SP: 4
				SP: 6
				SP: 7
				CC: HS-ESS3-2
				DCI: K-2-ETS1-1
				DCI: K-2-ETS1-2
size	BBK			

solution (cont'd)	DCI: K-2-ETS1-3	solution	SP: 3-5-ETS1-3	solution	SP: MS-LS4-2
	DCI: K-ESS3-3		SP: 3-ESS3-1		SP: MS-LS4-6
	DCI: K-PS2-2		SP: 3-LS1-1		SP: MS-LS4-4
	DCI: 2-ESS2-1		SP: 3-LS2-1		SP: MS-PS1-6
	DCI: 2-LS2-2		SP: 3-LS3-2		SP: MS-PS2-1
	DCI: 3-5-ETS1-1		SP: 3-LS4-2		SP: MS-PS2-2
	DCI: 3-5-ETS1-3		SP: 3-LS4-3		SP: MS-PS2-4
	DCI: 4-ESS3-2		SP: 3-LS4-4		SP: MS-PS2-5
	DCI: 4-PS3-4		SP: 3-PS2-1		SP: MS-PS3-3
	DCI: 4-PS4-3		SP: 3-PS2-2		SP: MS-PS3-4
	DCI: MS-ETS1-1		SP: 4-ESS1-1		SP: MS-PS3-5
	DCI: MS-ETS1-2		SP: 4-ESS2-1		SP: MS-PS4-1
	DCI: MS-ETS1-3		SP: 4-ESS3-2		SP: HS-ESS1-2
	DCI: MS-ETS1-4		SP: 4-LS1-1		SP: HS-ESS1-5
	DCI: MS-LS2-5		SP: 4-PS3-1		SP: HS-ESS1-6
	DCI: MS-PS1-6		SP: 4-PS3-2		SP: HS-ESS2-2
	DCI: MS-PS3-3		SP: 4-PS3-4		SP: HS-ESS3-1
	DCI: HS-ESS3-2		SP: 4-PS4-3		SP: HS-ESS3-2
	DCI: HS-ESS3-4		SP: 4-PS4-2		SP: HS-ESS3-4
	DCI: HS-ETS1-3		SP: 5-ESS1-1		SP: HS-ESS3-6
	DCI: HS-LS2-7		SP: 5-ESS2-1		SP: HS-ETS1-1
	DCI: HS-LS4-6		SP: 5-ESS2-2		SP: HS-ETS1-2
	SP: K-2-ETS1-2		SP: 5-ESS3-1		SP: HS-ETS1-3
	SP: K-ESS3-1		SP: 5-LS1-1		SP: HS-ETS1-4
	SP: K-ESS3-3		SP: 5-LS2-1		SP: HS-LS1-1
	SP: K-PS2-1		SP: 5-PS1-1		SP: HS-LS1-6
	SP: K-PS3-1		SP: 5-PS1-2		SP: HS-LS2-1
	SP: K-PS3-2		SP: 5-PS1-3		SP: HS-LS2-2
	SP: 1-ESS1-2		SP: 5-PS1-4		SP: HS-LS2-4
	SP: 1-LS1-1		SP: MS-ESS1-4		SP: HS-LS2-4
	SP: 1-LS3-1		SP: MS-ESS2-2		SP: HS-LS2-6
	SP: 1-PS4-1		SP: MS-ESS2-5		SP: HS-LS2-7
	SP: 1-PS4-2		SP: MS-ESS3-1		SP: HS-LS4-2
	SP: 1-PS4-3		SP: MS-ESS3-3		SP: HS-LS4-4
	SP: 1-PS4-4		SP: MS-ESS3-4		SP: HS-LS4-5
	SP: 2-ESS1-1		SP: MS-ETS1-1		SP: HS-PS1-2
	SP: 2-ESS2-1		SP: MS-ETS1-2		SP: HS-PS1-5
	SP: 2-ESS2-2		SP: MS-LS1-1		SP: HS-PS1-6
	SP: 2-LS2-1		SP: MS-LS1-3		SP: HS-PS2-1
	SP: 2-LS2-2		SP: MS-LS1-4		SP: HS-PS2-3
	SP: 2-LS4-1		SP: MS-LS1-5		SP: HS-PS2-5
	SP: 2-PS1-1		SP: MS-LS1-6		SP: HS-PS3-3
	SP: 2-PS1-3		SP: MS-LS2-2		SP: HS-PS3-4
	SP: 3-5-ETS1-1		SP: MS-LS2-4		SP: HS-PS4-3
	SP: 3-5-ETS1-2		SP: MS-LS2-5		

source	1-PS4-2	specific	MS-LS1-2	statistical	MS-ESS1-3
	1-PS4-4		MS-LS4-4		SP: 4
	2-ESS1-1		MS-LS4-6		SP: 5
	MS-LS4-5		MS-PS2-2		SP: MS-ESS1-3
	SP: 4		MS-PS3-4		SP: MS-ESS2-3
	DCI: 4-ESS3-1		HS-LS1-2		SP: MS-ESS3-2
	DCI: HS-ETS1-1		HS-LS4-4		SP: MS-ETS1-3
	DCI: HS-ESS2-3		HS-PS1-3		SP: MS-LS2-1
	DCI: HS-LS3-2		HS-PS2-6		SP: MS-LS4-1
	SP: 2-ESS1-1		CC: HS-ESS2-4		SP: MS-LS4-3
	SP: MS-ESS1-4		CC: HS-ESS3-1		SP: MS-PS1-2
	SP: MS-ESS2-2		CC: HS-LS2-8		SP: MS-PS3-1
	SP: MS-ESS2-2		CC: HS-LS3-1		SP: HS-ESS1-4
	SP: MS-ESS3-1		CC: HS-LS3-2		SP: HS-ESS2-2
	SP: MS-ESS3-3		CC: HS-LS4-2		SP: HS-ESS3-3
	SP: MS-LS1-5		CC: HS-LS4-4		SP: HS-ESS3-5
	SP: MS-LS1-6		CC: HS-LS4-5		SP: HS-ESS3-6
	SP: MS-LS1-8		CC: HS-LS4-6		SP: HS-ETS1-4
	SP: MS-LS2-2		CC: HS-PS2-1		SP: HS-LS2-1
	SP: MS-LS4-2		CC: HS-PS2-5		SP: HS-LS2-2
	SP: MS-LS4-4		CC: HS-PS4-1		SP: HS-LS2-4
source	SP: MS-LS4-5	stability	DCI: MS-LS3-1	standard	SP: HS-LS3-3
	SP: MS-PS1-3		DCI: MS-PS3-3		SP: HS-LS4-3
	SP: MS-PS1-6		DCI: MS-PS4-1		SP: HS-LS4-6
	SP: MS-PS2-1		DCI: HS-LS4-3		SP: HS-PS1-7
	SP: MS-PS3-3		DCI: HS-LS4-4		SP: HS-PS2-1
	SP: HS-ESS1-2		SP: K-PS3-2		SP: HS-PS2-2
	SP: HS-ESS1-6		SP: 1-LS1-1		SP: HS-PS2-4(a)
	SP: HS-ESS3-1		SP: 1-PS4-4		SP: HS-PS2-4(b)
	SP: HS-ESS3-4		SP: MS-PS1-6		SP: HS-PS3-1
	SP: HS-ETS1-2		CC: K-2-ETS1-2		SP: HS-PS4-1
	SP: HS-ETS1-3		CC: 1-LS1-1		
	SP: HS-LS1-1		CC: 2-ESS1-1		
	SP: HS-LS1-6		CC: 2-ESS2-1		
	SP: HS-LS2-3		CC: 2-LS2-2		
	SP: HS-LS2-7		CC: MS-ESS2-1		
	SP: HS-LS4-2		CC: MS-ESS3-5		
	SP: HS-LS4-4		CC: MS-PS2-2		
	SP: HS-PS1-2		CC: HS-PS4-2		
	SP: HS-PS1-5		CC: 5-ESS2-2		
	SP: HS-PS1-6		CC: 5-PS1-2		
	SP: HS-PS2-3		CC: 5-PS1-3		
	SP: HS-PS3-3				

structure	K-PS2-2	sufficient	MS-ETS1-1	system	CC: 4-LS1-2
	K-PS3-2		SP: HS-ESS1-5		CC: 5-ESS2-1
	1-LS1-1		SP: HS-ESS2-7		CC: 5-ESS3-1
	4-LS1-1		SP: HS-ESS3-2		CC: 5-LS1-1
	MS-ESS2-3		SP: HS-LS2-6		CC: 5-LS2-1
	MS-ESS3-4		SP: HS-LS2-8		CC: 5-PS1-2
	MS-LS1-4		SP: HS-LS3-2		CC: MS-ESS1-2
	MS-LS3-1		SP: HS-LS4-5		CC: MS-ESS1-3
	MS-LS4-1		SP: HS-PS4-3		CC: MS-ESS1-4
	MS-LS4-2		K-ESS3-1		CC: MS-ESS2-1
	MS-PS1-1		3-LS4-3		CC: MS-ESS2-2
	HS-ESS2-3		5-ESS2-1		CC: MS-ESS2-3
	HS-LS1-1		5-LS2-1		CC: MS-ESS2-4
	HS-LS4-1		MS-ESS1-1		CC: MS-ESS2-5
	HS-PS2-6		MS-ESS2-4		CC: MS-ESS2-6
	CC: K-2-ETS1-2		MS-ESS3-2		CC: MS-ESS3-1
	CC: 1-LS1-1		MS-ESS3-4		CC: MS-ESS3-4
	CC: 2-LS2-2		MS-LS1-2		CC: MS-LS1-1
	CC: MS-LS1-2		MS-LS1-3		CC: MS-LS1-2
	CC: MS-LS3-1		MS-LS2-3		CC: MS-LS1-3
	CC: MS-PS1-2		MS-PS2-2		CC: MS-LS1-4
	CC: MS-PS1-3		MS-PS2-4		CC: MS-LS1-5
	CC: MS-PS4-2		MS-PS3-2		CC: MS-LS1-8
	CC: MS-PS4-3		HS-ETS1-4		CC: MS-LS2-1
	CC: HS-ESS2-5		HS-ESS2-2		CC: MS-LS2-3
	CC: HS-LS1-1		HS-ESS2-4		CC: MS-LS2-4
	CC: HS-PS2-6		HS-ESS2-5		CC: MS-LS2-5
	DCI: 4-ESS2-2	system	HS-ESS2-7		CC: MS-LS3-1
	DCI: 4-LS1-1		HS-ESS3-2		CC: MS-LS3-2
	DCI: MS-LS1-2		HS-ESS3-5		CC: MS-LS4-1
	DCI: MS-LS3-1		HS-ESS3-6		CC: MS-LS4-2
	DCI: MS-PS1-1		HS-LS1-1		CC: MS-LS4-4
	DCI: HS-ESS2-3		HS-LS1-2		CC: MS-LS4-5
	DCI: HS-LS2-4		HS-PS2-2		CC: MS-LS4-6
	DCI: HS-PS1-1		HS-PS3-1		CC: MS-PS1-1
	DCI: HS-PS1-3		HS-PS3-4		CC: MS-PS1-3
	DCI: HS-PS2-6		SP: 2		CC: MS-PS1-4
			SP: 5		CC: MS-PS1-6
			SP: 6		CC: MS-PS2-1
			CC: K-ESS2-2		CC: MS-PS2-2
			CC: K-ESS3-1		CC: MS-PS2-3
			CC: 1-ESS1-1		CC: MS-PS2-4
			CC: 3-LS4-4		CC: MS-PS2-5
			CC: 4-ESS1-1		CC: MS-PS3-2
			CC: 4-LS1-1		CC: MS-PS3-3

system (cont'd)	CC: HS-ESS1-2	DCI: 5-ESS2-1	system	SP: MS-PS1-4
	CC: HS-ESS2-1	DCI: 5-ESS3-1		SP: MS-PS1-5
	CC: HS-ESS2-2	DCI: MS-ESS2-1		SP: MS-PS2-1
	CC: HS-ESS2-3	DCI: MS-ESS2-2		SP: MS-PS3-2
	CC: HS-ESS2-5	DCI: MS-ESS3-3		SP: MS-PS3-3
	CC: HS-ESS2-6	DCI: MS-LS1-3		SP: MS-PS4-2
	CC: HS-ESS3-1	DCI: MS-PS1-4		SP: HS-ESS1-1
	CC: HS-ESS3-2	DCI: MS-PS3-2		SP: HS-ESS1-3
	CC: HS-ESS3-3	DCI: MS-PS3-3		SP: HS-ESS2-1
	CC: HS-ESS3-4	DCI: MS-PS3-4		SP: HS-ESS2-3
	CC: HS-ESS3-5	DCI: HS-ESS2-1		SP: HS-ESS2-4
	CC: HS-ESS3-6	DCI: HS-ESS2-2		SP: HS-ESS2-6
	CC: HS-ETS1-4	DCI: HS-ESS1-5		SP: HS-ESS3-3
	CC: HS-LS1-1	DCI: HS-ESS2-2		SP: HS-ETS1-4
	CC: HS-LS1-2	DCI: HS-ESS2-4		SP: HS-LS1-2
	CC: HS-LS1-3	DCI: HS-ESS2-7		SP: HS-LS1-4
	CC: HS-LS1-4	DCI: HS-ESS3-3		SP: HS-LS1-5
	CC: HS-LS1-5	DCI: HS-LS1-1		SP: HS-LS1-7
	CC: HS-LS1-6	DCI: HS-LS1-2		SP: HS-LS2-5
	CC: HS-LS1-7	DCI: HS-LS1-3		SP: HS-LS4-1
	CC: HS-LS2-3	DCI: HS-LS1-4		SP: HS-LS4-6
	CC: HS-LS2-4	DCI: HS-LS1-6		SP: HS-PS1-1
	CC: HS-LS2-5	DCI: HS-LS1-7		SP: HS-PS1-2
	CC: HS-LS4-1	DCI: HS-PS2-2		SP: HS-PS1-4
	CC: HS-LS4-3	DCI: HS-PS2-3		SP: HS-PS1-8
	CC: HS-PS1-1	DCI: HS-PS3-1	technique	SP: HS-PS2-6
	CC: HS-PS1-2	DCI: HS-PS3-2		SP: HS-PS3-1
	CC: HS-PS1-3	DCI: HS-PS3-4		SP: HS-PS3-2
	CC: HS-PS1-4	SP: 3-5-ETS1-1		SP: HS-PS3-5
	CC: HS-PS1-5	SP: 3-LS4-4		SP: HS-PS4-5
	CC: HS-PS1-7	SP: 4-LS1-2		HS-PS1-7
	CC: HS-PS2-2	SP: MS-ESS1-1		SP: 5
	CC: HS-PS2-3	SP: MS-ESS1-2		SP: 3-PS2-1
	CC: HS-PS2-4(a)	SP: MS-ESS2-1		SP: MS-ESS1-3
	CC: HS-PS2-4(b)	SP: MS-ESS2-4		SP: MS-ESS2-3
	CC: HS-PS2-6	SP: MS-ESS2-6		SP: MS-ESS3-2
	CC: HS-PS3-1	SP: MS-ESS3-3		SP: MS-ETS1-3
	CC: HS-PS3-2	SP: MS-ETS1-1		SP: MS-LS2-1
	CC: HS-PS3-3	SP: MS-ETS1-4		SP: MS-LS4-1
	CC: HS-PS3-4	SP: MS-LS1-2		SP: MS-LS4-3
	CC: HS-PS3-5	SP: MS-LS1-7		SP: MS-PS1-2
	CC: HS-PS4-2	SP: MS-LS2-3		SP: MS-PS3-1
	CC: HS-PS4-3	SP: MS-LS3-1		
	CC: HS-PS4-4	SP: MS-LS3-2		
	CC: HS-PS4-5	SP: MS-PS1-1		

technology	BBK	K-2-ETS1-3	HS-ESS1-2
	MS-ESS3-2	3-5-ETS1-3	HS-ESS1-5
	MS-LS4-5	MS-ETS1-3	HS-PS4-3
	HS-ESS3-3	MS-PS3-3	SP: 1
	HS-PS4-5	HS-LS4-6	SP: 3
	SP: 4	SP: 4	SP: 6
	SP: 8	CC: K-PS2-1	DCI: HS-ESS1-2
	CC: K-ESS3-2	CC: K-PS2-2	DCI: HS-ESS1-5
	CC: 1-PS4-4	CC: 1-PS4-1	DCI: HS-ESS2-1
	CC: 2-ESS2-1	CC: 1-PS4-2	SP: MS-ESS1-4
	CC: 3-5-ETS1-1	CC: 1-PS4-3	SP: MS-ESS2-2
	CC: 3-5-ETS1-2	CC: 2-PS1-2	SP: MS-ESS3-1
	CC: 3-ESS3-1	DCI: 3-5-ETS1-3	SP: MS-ESS3-3
	CC: 3-PS2-4	DCI: MS-ETS1-3	SP: MS-LS1-5
	CC: 4-ESS3-1	DCI: MS-ETS1-4	SP: MS-LS1-6
	CC: 4-ESS3-2	DCI: MS-PS1-6	SP: MS-LS2-2
	CC: 4-PS3-4	DCI: MS-PS2-5	SP: MS-LS4-2
	CC: MS-ESS3-2	DCI: MS-PS3-3	SP: MS-LS4-4
	CC: MS-ESS3-3	SP: K-2-ETS1-3	SP: MS-PS1-6
	CC: MS-ETS1-1	SP: K-PS2-1	SP: MS-PS2-1
	CC: MS-LS2-5	SP: K-PS2-2	SP: MS-PS3-3
	CC: MS-PS1-3	SP: K-PS3-1	SP: HS-ESS1-2
	CC: MS-PS2-1	SP: 1-ESS1-2	SP: HS-ESS1-6
	CC: MS-PS4-3	SP: 1-PS4-1	SP: HS-ESS2-3
	CC: HS-ESS2-2	SP: 1-PS4-3	SP: HS-ESS3-1
	CC: HS-ESS3-2	SP: 1-PS4-3	SP: HS-ESS3-4
	CC: HS-ESS3-3	SP: 2-LS2-1	SP: HS-ETS1-2
	CC: HS-ETS1-1	SP: 2-LS4-1	SP: HS-ETS1-3
	CC: HS-ETS1-3	SP: 2-LS4-1	SP: HS-LS1-1
	CC: HS-LS3-3	SP: 2-PS1-1	SP: HS-LS1-6
	CC: HS-PS3-3	SP: 2-PS1-2	SP: HS-LS2-3
	DCI: MS-ESS3-3	SP: 3-5-ETS1-3	SP: HS-LS2-7
	DCI: MS-ESS3-4	SP: 3-PS2-1	SP: HS-LS3-1
	DCI: HS-ESS3-2	SP: 4-PS3-2	SP: HS-LS4-1
	DCI: HS-ESS3-4	SP: 5-PS1-4	SP: HS-LS4-2
	DCI: HS-PS4-5		SP: HS-LS4-5
	SP: HS-ESS2-2		SP: HS-PS1-2
	SP: HS-ESS3-5		SP: HS-PS1-5
	SP: HS-PS2-1		SP: HS-PS1-6
			SP: HS-PS2-1
			SP: HS-PS2-3
			SP: HS-PS2-4
			SP: HS-PS3-3
			SP: HS-PS4-3

time	K-ESS2-1	time	DCI: HS-ESS2-4	type	K-LS1-1
	1-ESS1-2		DCI: HS-LS2-2		3-LS4-1
	3-5-ETS1-1		DCI: HS-LS2-6		3-LS4-4
	4-ESS1-1		SP: 3-5-ETS1-1		4-LS1-2
	4-PS3-4		SP: HS-ESS2-5		5-PS1-2
	MS-ESS1-4		SP: HS-LS1-3		MS-ESS2-3
	MS-ESS2-2		SP: HS-PS1-3		MS-LS1-1
	MS-ESS2-5		SP: HS-PS2-5		MS-LS2-2
	MS-LS4-6		SP: HS-PS3-4		MS-PS1-1
	HS-LS4-4		5-PS1-2		MS-PS1-6
	HS-PS2-1	total	MS-PS1-5		MS-PS3-4
	CC: 3-5-ETS1-1		HS-PS1-4		HS-ESS3-1
	CC: 3-LS4-1		HS-PS2-2		HS-ESS3-4
	CC: 4-ESS3-1		CC: HS-ESS1-3		HS-LS2-6
	CC: 5-PS1-2		CC: HS-ESS2-6		HS-PS1-1
	CC: 5-PS1-3		CC: HS-PS1-7		CC: MS-PS3-1
	CC: MS-ESS1-3		CC: HS-PS1-8		CC: MS-PS3-4
	CC: MS-ESS1-4		DCI: 5-PS1-2		DCI: 3-LS4-1
	CC: MS-ESS2-1		DCI: MS-PS1-4		DCI: 4-ESS1-1
	CC: MS-ESS2-2		DCI: MS-PS1-5		DCI: 4-ESS2-1
	CC: MS-ESS3-2		DCI: MS-PS2-2		DCI: 4-PS4-1
	CC: MS-ESS3-3		DCI: MS-PS3-3		DCI: 5-LS2-1
	CC: MS-ESS3-5		DCI: MS-PS3-4		DCI: 5-PS1-1
	CC: MS-LS2-5		DCI: HS-PS1-8		DCI: 5-PS2-1
	CC: MS-PS1-1		DCI: HS-PS2-2		DCI: MS-LS1-1
	CC: MS-PS1-3		DCI: HS-PS2-3		DCI: MS-PS1-1
	CC: MS-PS2-2		DCI: HS-PS3-1		DCI: MS-PS1-4
	CC: MS-PS3-1		DCI: HS-PS3-2		DCI: MS-PS1-5
	CC: MS-PS3-4	trigonometric	SP: HS-ESS1-4		DCI: MS-PS3-3
	CC: HS-ESS2-1		SP: HS-ESS3-3		DCI: MS-PS3-4
	CC: HS-ESS3-3		SP: HS-ESS3-6		DCI: HS-LS2-2
	CC: HS-ESS3-5		SP: HS-ETS1-4		DCI: HS-LS2-6
	DCI: K-ESS2-1		SP: HS-LS2-1		DCI: HS-PS1-6
	DCI: 2-ESS1-1		SP: HS-LS2-2		DCI: HS-PS4-1
	DCI: 3-ESS2-1		SP: HS-LS2-4		SP: HS-ESS2-5
	DCI: 4-ESS1-1		SP: HS-LS4-6		SP: HS-LS1-3
	DCI: 4-ESS3-1		SP: HS-PS1-7		SP: HS-PS1-3
	DCI: 5-ESS1-2		SP: HS-PS2-2		SP: HS-PS2-5
	DCI: MS-ESS1-4		SP: HS-PS2-4(a)		SP: HS-PS3-4
	DCI: MS-ESS2-6		SP: HS-PS2-4(b)		
	DCI: MS-LS2-4		SP: HS-PS3-1		
	DCI: MS-LS4-6		SP: HS-PS4-1		
	DCI: MS-PS3-5				
	DCI: HS-ESS1-2				
	DCI: HS-ESS1-3				

valid	HS-PS4-4 SP SP: MS-ESS1-4 SP: MS-ESS2-2 SP: MS-ESS3-1 SP: MS-LS1-5 SP: MS-LS1-6 SP: MS-LS1-8 SP: MS-LS4-5 SP: MS-PS1-3 SP: MS-PS4-3 SP: HS-ESS1-2 SP: HS-ESS1-3 SP: HS-ESS2-2 SP: HS-ESS3-1 SP: HS-ESS3-5 SP: HS-LS1-1 SP: HS-LS1-6 SP: HS-LS2-3 SP: HS-LS4-1 SP: HS-LS4-2 SP: HS-LS4-4 SP: HS-PS1-2 SP: HS-PS2-1 SP: HS-PS2-6 SP: HS-PS4-4 SP: HS-PS4-5	variable	3-5-ETS1-3 4-ESS2-1 SP: 3 SP: 5 CC: HS-ESS1-4 CC: HS-LS3-3 SP: 3-5-ETS1-2 SP: 3-5-ETS1-3 SP: 3-LS3-2 SP: 3-LS4-2 SP: 3-PS2-1 SP: 3-PS2-2 SP: 4-ESS1-1 SP: 4-ESS2-1 SP: 4-ESS3-2 SP: 4-PS3-1 SP: 4-PS3-2 SP: 4-PS3-4 SP: 4-PS4-3 SP: 5-PS1-3 SP: 5-PS1-4 SP: MS-ESS2-5 SP: MS-ESS3-5 SP: MS-ETS1-1 SP: MS-LS1-1 SP: MS-LS2-2 SP: MS-LS4-4	various	5-ESS2-2 MS-LS2-3 MS-PS4-2 HS-PS4-1 CC: K-ESS3-2 CC: 1-PS4-4 CC: 2-ESS2-3 CC: 3-ESS2-1 CC: 3-PS2-2 CC: 4-PS3-1 CC: 4-PS3-2 CC: 4-PS3-3 CC: 4-PS3-4 CC: 5-PS3-1 CC: MS-ESS1-3 CC: MS-ESS1-4 CC: MS-ESS2-2 CC: MS-PS1-1 CC: HS-ESS2-5 DCI: 4-LS1-1 DCI: MS-LS4-2 DCI: MS-PS1-1 DCI: HS-ETS1-4 DCI: HS-LS4-6 DCI: HS-PS3-1 DCI: HS-PS3-2				
value	CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 CC: HS-ESS3-2 CC: HS-LS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6 DCI: HS-PS4-2 DCI: HS-PS4-5								

Cognitive Verbs

Term	Source		
accept	SP: 6	3-LS3-2	4-PS4-2
	SP: HS-ESS1-2	3-PS2-3	MS-ESS3-2
	SP: HS-ESS1-5	4-ESS3-1	HS-ESS1-1
	SP: HS-ESS1-6	MS-LS1-4	CC: HS-LS2-2
	SP: HS-LS2-6	MS-LS1-5	DCI: 1-PS4-3
	SP: HS-LS2-8	MS-LS2-4	DCI: HS-ESS1-2
	SP: HS-LS4-1	MS-LS3-1	DCI: HS-ESS1-5
	SP: HS-LS4-5	MS-PS2-3	DCI: HS-ESS1-6
	SP: HS-PS4-3	HS-ESS3-1	DCI: HS-ESS2-7
		HS-ESS3-3	DCI: HS-LS1-3
accommodate	CC: HS-ESS1-2	HS-LS2-1	DCI: HS-LS1-4
	CC: HS-ESS1-6	HS-LS2-2	DCI: HS-PS3-1
	CC: HS-LS4-1	HS-LS4-5	K-2-ETS1-3
	CC: HS-PS4-3	HS-PS1-4	K-PS2-2
account	HS-ETS1-3	CC: 3-ESS3-1	2-PS1-2
	HS-PS3-2	CC: 4-PS3-4	3-LS3-1
accumulate	SP: 6	DCI: K-ESS2-2	3-LS4-1
	CC: MS-ESS3-5	DCI: K-ESS3-3	4-ESS2-2
achieve	MS-ETS1-4	DCI: 3-LS3-2	MS-ESS1-3
	SP: 7	DCI: 3-LS4-4	MS-ESS2-3
	DCI: MS-PS2-2	DCI: 4-ESS2-1	MS-ESS3-2
	DCI: HS-ESS1-2	DCI: 4-ESS3-1	MS-ETS1-3
	DCI: HS-ESS1-3	DCI: 5-ESS2-1	MS-LS2-1
		DCI: MS-ESS2-6	MS-LS4-1
acquire	DCI: 5-LS1-1	DCI: MS-LS1-5	MS-LS4-3
	DCI: MS-LS3-2	DCI: MS-LS3-1	MS-PS1-2
affect	DCI: HS-ETS1-1	DCI: HS-ESS2-4	HS-ESS2-2
	SP: 5-ESS2-2	DCI: HS-ESS2-6	HS-ESS3-5
	SP: 5-PS1-2	DCI: HS-LS2-1	HS-ETS1-1
		DCI: HS-LS2-2	HS-PS2-1
		DCI: HS-LS3-2	SP: 2
		DCI: HS-LS3-3	SP: 4
		DCI: HS-LS4-3	SP: 5
			CC: 5-ESS1-2
			CC: MS-LS3-1
			CC: HS-ESS3-6
allow			CC: HS-PS3-4
			SP: K-2-ETS1-3
			SP: K-PS2-2
			SP: 2-PS1-2
analyze			

analyze (cont'd)	SP: 3-LS4-1	answer	SP: 1	apply	3-PS2-4
	SP: 3-PS3-1		CC: 5-ESS3-1		4-PS3-4
	SP: 4-ESS2-2		CC: HS-ESS3-2		MS-ESS3-3
	SP: 5-ESS2-2		SP: K-ESS2-1		MS-LS4-2
	SP: 5-PS1-2		SP: K-LS1-1		MS-PS2-1
	SP: MS-ESS1-3		SP: K-PS2-1		MS-PS3-3
	SP: MS-ESS2-3		SP: K-PS3-1		HS-ESS1-4
	SP: MS-ESS3-2		SP: 1-ESS1-1		HS-ESS1-6
	SP: MS-ETS1-3		SP: 1-ESS1-2		HS-LS3-3
	SP: MS-LS1-2		SP: 1-PS4-1		HS-LS4-3
	SP: MS-LS2-1		SP: 1-PS4-3		HS-PS1-5
	SP: MS-LS4-1		SP: 2-ESS2-3		HS-PS2-3
	SP: MS-LS4-3		SP: 2-LS2-1		SP: 5
	SP: MS-PS1-2		SP: 2-LS4-1		SP: 8
	SP: HS-ESS1-4		SP: 2-PS1-1		CC: 1-LS1-1
	SP: HS-ESS2-2		SP: 3-5-ETS1-3		CC: 2-PS1-2
	SP: HS-ESS3-3		SP: 3-PS2-1		CC: HS-ESS3-2
	SP: HS-ESS3-5		SP: 3-PS2-2		CC: HS-ESS3-4
	SP: HS-ESS3-6		SP: 4-ESS2-1		CC: HS-PS3-3
	SP: HS-ETS1-1		SP: 4-PS3-2		CC: HS-PS4-2
	SP: HS-ETS1-4		SP: 5-PS1-3		DCI: MS-ESS3-5
	SP: HS-LS2-1		SP: 5-PS1-4		SP: 4-PS3-4
	SP: HS-LS2-2		SP: MS-ESS2-5		SP: MS-ESS3-3
	SP: HS-LS2-4		SP: MS-PS2-2		SP: MS-LS4-2
	SP: HS-LS3-3		SP: MS-PS2-5		SP: MS-PS2-1
	SP: HS-LS4-3		SP: MS-PS3-4		SP: MS-PS3-3
	SP: HS-LS4-6		SP: HS-PS2-5		SP: HS-ESS1-6
	SP: HS-PS1-7		SP: HS-PS3-4		SP: HS-LS3-3
	SP: HS-PS2-1	anticipate	CC: HS-ESS2-2		SP: HS-LS4-3
	SP: HS-PS2-2		CC: HS-ESS3-3		SP: HS-PS1-5
	SP: HS-PS2-4(a)		CC: HS-ETS1-1		SP: HS-PS2-3
	SP: HS-PS2-4(b)		CC: HS-ETS1-3		
	SP: HS-PS3-1	approach		argue	DCI: K-2-ETS1-1
	SP: HS-PS4-1				DCI: K-PS2-2
					DCI: HS-ETS1-2
					DCI: HS-PS1-6
					DCI: HS-PS2-3
					SP: 3-ESS2-1
					SP: 3-LS3-1
					SP: 3-LS4-1
		arrange		arrange	SP: 4-ESS2-2
					SP: 5-ESS1-2
		argue		argue	Marzano Research
					Marzano Research

build (cont'd)	SP: 5-PS3-1	SP: MS-PS2-1	SP: HS-LS2-4
	SP: MS-ESS1-1	SP: MS-PS2-2	SP: HS-LS2-5
	SP: MS-ESS1-2	SP: MS-PS2-3	SP: HS-LS2-6
	SP: MS-ESS1-3	SP: MS-PS2-4	SP: HS-LS2-7
	SP: MS-ESS1-4	SP: MS-PS3-1	SP: HS-LS2-8
	SP: MS-ESS2-1	SP: MS-PS3-2	SP: HS-LS3-1
	SP: MS-ESS2-3	SP: MS-PS3-3	SP: HS-LS3-2
	SP: MS-ESS2-4	SP: MS-PS3-4	SP: HS-LS3-3
	SP: MS-ESS2-5	SP: MS-PS3-5	SP: HS-LS3-1
	SP: MS-ESS2-6	SP: MS-PS4-1	SP: HS-LS3-2
	SP: MS-ESS3-1	SP: MS-PS4-2	SP: HS-LS3-3
	SP: MS-ESS3-2	SP: MS-PS4-3	SP: HS-LS3-4
	SP: MS-ESS3-3	SP: HS-ESS1-1	SP: HS-LS3-5
	SP: MS-ESS3-4	SP: HS-ESS1-2	SP: HS-LS3-6
	SP: MS-ESS3-5	SP: HS-ESS1-3	SP: HS-PS1-1
	SP: MS-ETS1-2	SP: HS-ESS1-4	SP: HS-PS1-2
	SP: MS-ETS1-3	SP: HS-ESS1-5	SP: HS-PS1-3
	SP: MS-ETS1-4	SP: HS-ESS1-6	SP: HS-PS1-4
	SP: MS-LS1-1	SP: HS-ESS2-1	SP: HS-PS1-5
build	SP: MS-LS1-2	SP: HS-ESS2-2	SP: HS-PS1-6
	SP: MS-LS1-3	SP: HS-ESS2-3	SP: HS-PS1-7
	SP: MS-LS1-4	SP: HS-ESS2-4	SP: HS-PS1-8
	SP: MS-LS1-5	SP: HS-ESS2-5	SP: HS-PS2-1
	SP: MS-LS1-6	SP: HS-ESS2-6	SP: HS-PS2-2
	SP: MS-LS1-7	SP: HS-ESS2-7	SP: HS-PS2-3
	SP: MS-LS1-8	SP: HS-ESS3-1	SP: HS-PS2-4
	SP: MS-LS2-1	SP: HS-ESS3-2	SP: HS-PS2-5
	SP: MS-LS2-2	SP: HS-ESS3-3	SP: HS-PS2-6
	SP: MS-LS2-3	SP: HS-ESS3-4	SP: HS-PS3-1
build	SP: MS-LS2-4	SP: HS-ESS3-5	SP: HS-PS3-2
	SP: MS-LS2-5	SP: HS-ESS3-6	SP: HS-PS3-3
	SP: MS-LS3-1	SP: HS-ETS1-1	SP: HS-PS3-4
	SP: MS-LS3-2	SP: HS-ETS1-2	SP: HS-PS3-5
	SP: MS-LS4-1	SP: HS-ETS1-3	SP: HS-PS4-1
	SP: MS-LS4-2	SP: HS-ETS1-4	SP: HS-PS4-2
	SP: MS-LS4-3	SP: HS-LS1-1	SP: HS-PS4-3
	SP: MS-LS4-4	SP: HS-LS1-2	SP: HS-PS4-4
	SP: MS-LS4-5	SP: HS-LS1-3	SP: HS-PS4-5
	SP: MS-LS4-6	SP: HS-LS1-4	HS-PS3-1
calculate	SP: MS-PS1-1	SP: HS-LS1-5	SP: 4
	SP: MS-PS1-2	SP: HS-LS1-6	SP: 5
	SP: MS-PS1-3	SP: HS-LS1-7	
	SP: MS-PS1-4	SP: HS-LS2-1	
	SP: MS-PS1-5	SP: HS-LS2-2	
	SP: MS-PS1-6	SP: HS-LS2-3	

clarify	MS-ESS3-5 HS-LS3-1 SP: MS-ESS3-5 SP: MS-ETS1-1 SP: MS-PS2-3 SP: MS-PS4-3 SP: HS-LS2-6 SP: HS-LS2-8 SP: HS-LS3-1	combine	3-ESS2-2 4-ESS3-1 5-ESS3-1 MS-ETS1-3 HS-LS1-6 HS-PS3-4 DCI: MS-ESS3-2 DCI: MS-ETS1-3 DCI: MS-LS1-6 DCI: MS-PS1-1 DCI: HS-LS2-4 SP: 3-ESS2-2 SP: 4-ESS3-1 SP: 5-ESS3-1	compare	K-2-ETS1-3 K-PS2-1 1-ESS1-2 2-ESS2-1 2-LS4-1 3-5-ETS1-2 4-ESS3-2 4-PS4-3 5-ESS1-1 MS-LS4-3 MS-PS3-4 HS-PS1-3 SP: 4 SP: 7
	2-PS1-1 CC: 3-LS3-1 CC: 4-PS4-1 CC: 4-PS4-3 CC: 5-ESS1-2 CC: MS-ESS3-3 DCI: 2-PS1-1		K-ESS3-3 1-PS4-4 HS-ESS1-3 HS-LS4-1 HS-PS1-7 HS-PS2-6 HS-PS4-5 SP: 8 CC: 5-ESS1-2 DCI: 1-PS4-4 DCI: 2-LS2-2 DCI: K-2-ETS1-2 DCI: 3-5-ETS1-2 SP: K-ESS3-2 SP: K-ESS3-3 SP: 1-LS1-2 SP: 2-ESS2-3 SP: 3-ESS2-2 SP: 4-ESS3-1 SP: 5-ESS3-1 SP: MS-LS1-8 SP: MS-LS4-5 SP: MS-PS1-3 SP: MS-PS4-3 SP: HS-ESS1-3 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-4 SP: HS-PS4-5		DCI: K-2-ETS1-3 DCI: 2-ESS2-1 DCI: 3-5-ETS1-1 DCI: 4-PS3-4 DCI: MS-LS4-3 DCI: HS-LS4-1 SP: K-ESS2-2 SP: 2-ESS2-1 SP: 2-PS1-4 SP: 3-5-ETS1-2 SP: 4-ESS3-2 SP: 4-PS4-3 SP: 5-ESS2-2 SP: 5-PS1-2
	SP: 7 SP: 8				
	MS-ESS2-5 SP: 3 SP: 4 SP: K-2-ETS1-3 SP: K-ESS2-1 SP: K-LS1-1 SP: K-PS2-2 SP: K-PS3-1 SP: 1-ESS1-1 SP: 1-ESS1-2 SP: 2-LS4-1 SP: 2-PS1-2 SP: 3-ESS2-1 SP: 3-LS3-1 SP: 3-LS4-1 SP: 4-ESS2-2 SP: 5-ESS1-2 SP: MS-ESS2-5				

conduct	K-PS2-1 1-PS4-1 1-PS4-3 2-LS2-1 2-PS1-1 3-PS2-1 5-PS1-4 MS-LS1-1 MS-PS2-5 HS-ESS2-5 HS-LS1-3 HS-PS1-3 HS-PS2-5 HS-PS3-4 SP: 3 SP: K-PS2-1 SP: 1-PS4-1	consider	3-5-ETS1-3 HS-ESS3-6 DCI: 3-5-ETS1-1 DCI: 4-PS3-4 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ETS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6 SP: 3-5-ETS1-3 SP: 3-PS2-1 SP: 5-PS1-4 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4	construct	HS-ESS2-7 HS-ESS3-1 HS-LS1-1 HS-LS1-6 HS-LS2-3 HS-LS4-2 HS-LS4-4 HS-PS1-2 SP: 5 SP: 6 CC: MS-ESS2-1 CC: MS-PS2-2 CC: HS-ESS1-6 CC: HS-ESS2-7 CC: HS-LS2-6 CC: HS-LS2-7 CC: HS-PS1-6
	SP: 1-PS4-3 SP: 2-LS2-1 SP: 2-PS1-1 SP: 3-5-ETS1-3 SP: 3-ESS2-1 SP: 3-LS3-1 SP: 3-LS4-1 SP: 3-PS2-1 SP: 4-ESS2-2 SP: 5-ESS1-2 SP: 5-PS1-4 SP: MS-LS1-1 SP: MS-PS2-5 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4		K-ESS2-2 1-LS3-1 1-PS4-2 2-PS1-3 2-PS1-4 3-LS2-1 3-LS4-2 3-LS4-3 3-PS2-4 4-LS1-1 4-PS3-1 MS-ESS1-4 MS-ESS2-2 MS-ESS3-1 MS-ESS3-4 MS-LS1-5 MS-LS1-6 MS-LS2-2 MS-LS2-4 MS-LS4-2 MS-LS4-4 MS-PS1-6 MS-PS2-4 MS-PS3-1 MS-PS3-3 MS-PS3-5 HS-ESS1-2 HS-ESS1-6		SP: K-ESS2-2 SP: K-PS3-2 SP: 1-LS1-1 SP: 1-LS3-1 SP: 1-PS4-2 SP: 1-PS4-4 SP: 2-ESS1-1 SP: 2-ESS2-1 SP: 2-PS1-3 SP: 2-PS1-4 SP: 3-5-ETS1-2 SP: 3-LS2-1 SP: 3-LS3-2 SP: 3-LS4-3 SP: 3-LS4-2 SP: 4-ESS1-1 SP: 4-ESS3-2 SP: 4-LS1-1 SP: 4-PS3-1 SP: 4-PS3-4 SP: 4-PS4-3 SP: MS-ESS1-4 SP: MS-ESS2-2 SP: MS-ESS3-1 SP: MS-ESS3-3 SP: MS-ESS3-4 SP: MS-ETS1-2 SP: MS-LS1-3
	CC: HS-ESS1-2 CC: HS-ESS1-6 CC: HS-LS4-1 CC: HS-PS4-3				

construct (cont'd)	SP: MS-LS1-4	continue	CC: HS-ESS1-2	create	3-PS2-4
	SP: MS-LS1-5		CC: HS-LS4-1		MS-LS1-4
	SP: MS-LS1-6		CC: HS-LS4-4		HS-ESS1-3
	SP: MS-LS2-2		DCI: HS-ESS3-6		HS-ESS2-2
	SP: MS-LS2-4		SP: MS-ESS1-4		HS-ESS2-7
	SP: MS-LS4-2		SP: MS-ESS2-2		HS-ESS3-3
	SP: MS-LS4-4		SP: MS-ESS3-1		HS-LS4-6
	SP: MS-PS1-6		SP: MS-LS1-5		HS-PS3-1
	SP: MS-PS2-1		SP: MS-LS1-6		CC: HS-ESS1-2
	SP: MS-PS2-4		SP: HS-ESS1-2		CC: HS-LS1-7
	SP: MS-PS3-1	contribute	SP: HS-ESS3-1		CC: HS-LS2-4
	SP: MS-PS3-3		SP: HS-LS1-1		CC: HS-PS3-2
	SP: MS-PS3-5		SP: HS-LS1-6		DCI: K-2-ETS1-1
	SP: HS-ESS1-2		SP: HS-LS2-3		DCI: K-PS2-2
	SP: HS-ESS1-6		SP: HS-LS4-2		DCI: K-PS4-3
	SP: HS-ESS2-7		SP: HS-LS4-4		DCI: MS-ESS2-2
	SP: HS-ESS3-1		SP: HS-PS1-2		DCI: MS-ETS1-3
	SP: HS-ESS3-4		MS-LS1-2		DCI: HS-LS3-2
	SP: HS-ETS1-2		HS-LS4-4		DCI: HS-PS3-1
	SP: HS-ETS1-3		DCI: MS-LS3-2		DCI: HS-PS3-4
	SP: HS-LS1-1	control	DCI: HS-LS4-5		SP: HS-ESS1-4
	SP: HS-LS1-6		DCI: HS-LS4-6		SP: HS-ESS3-3
	SP: HS-LS2-3		3-5-ETS1-3		SP: HS-ESS3-6
	SP: HS-LS2-7		MS-ESS1-2		SP: HS-ETS1-4
	SP: HS-LS4-2		HS-ESS2-3		SP: HS-LS2-1
	SP: HS-LS4-4		HS-ESS2-7		SP: HS-LS2-2
	SP: HS-PS1-2		DCI: MS-LS1-2		SP: HS-LS2-4
	SP: HS-PS1-5		DCI: MS-LS3-1		SP: HS-LS4-6
	SP: HS-PS1-6		SP: 3-5-ETS1-3		SP: HS-PS1-7
	SP: HS-PS2-3		SP: 3-PS2-1		SP: HS-PS2-2
	SP: HS-PS3-3		SP: 3-PS2-2		SP: HS-PS2-4(a)
		convey	SP: 4-ESS2-1		SP: HS-PS2-4(b)
			SP: 4-PS3-2		SP: HS-PS3-1
			SP: 5-PS1-3		SP: HS-PS4-1
			SP: 5-PS1-4		
			SP: MS-PS1-6		
		coordinate	DCI: K-2-ETS1-2		
			DCI: K-ESS3-3		
			DCI: 1-LS1-1		
			DCI: 2-LS2-2		
			SP: HS-ESS2-3		

	SP: 3-ESS3-1 SP: 3-LS2-1 SP: 3-LS4-3 SP: 3-LS4-4 SP: 4-LS1-1 SP: 5-ESS1-1 SP: 5-LS1-1 SP: 5-PS2-1 SP: HS-ESS1-5 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-LS2-6 SP: HS-LS2-8 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS4-3	K-2-ETS1-1 3-5-ETS1-1 3-PS2-4 MS-ESS2-5 MS-ETS1-1 MS-LS2-3 SP: 1 CC: HS-ESS3-6 CC: HS-PS2-2 CC: HS-PS3-4 DCI: 5-PS1-3 DCI: MS-ETS1-1 DCI: MS-PS3-3 SP: K-2-ETS1-1 SP: K-ESS3-2 SP: 3-5-ETS1-1	3-LS4-3 MS-PS2-2 MS-PS2-4 HS-LS1-2 HS-PS4-4 CC: K-ESS3-2 CC: 1-PS4-4 CC: MS-LS1-2 CC: MS-LS3-1 CC: HS-ESS1-1 CC: HS-ESS3-1 CC: HS-ESS3-3 CC: HS-LS2-1 CC: HS-PS3-3 CC: HS-PS4-2 CC: HS-PS4-5
decide	SP: 3 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4	SP: 3-PS2-3 SP: 3-PS2-4 SP: 4-PS3-3 SP: MS-ESS3-5 SP: MS-ETS1-1 SP: MS-PS2-3	DCI: 2-LS2-1 DCI: 2-LS2-2 DCI: 2-PS1-1 DCI: 3-PS2-3 DCI: 3-PS2-4 DCI: MS-ESS3-1
defend	HS-LS3-2 SP: 7 DCI: 3-LS2-1 SP: HS-ESS1-5 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-LS2-8 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS4-3	SP: HS-ETS1-1 SP: HS-LS3-1 SP: HS-PS4-2 delimit Marzano Research demonstrate DCI: MS-LS2-3	DCI: MS-ESS3-5 DCI: MS-LS1-4 DCI: MS-LS2-1 DCI: MS-PS1-4 DCI: MS-PS2-3 DCI: MS-PS3-2 DCI: MS-PS3-3 DCI: MS-PS3-4 DCI: MS-PS4-2 DCI: HS-ESS3-6 DCI: HS-LS2-7 DCI: HS-LS3-2 DCI: HS-LS3-3 DCI: HS-LS4-6 DCI: HS-PS3-1 DCI: HS-PS3-2 DCI: HS-PS4-1 DCI: HS-PS4-3

	K-ESS2-1 K-LS1-1 1-ESS1-1 2-PS1-1 3-ESS2-1 3-ESS2-2 3-LS1-1 4-ESS2-2 4-ESS3-1 4-LS1-2 4-PS4-1 4-PS4-2 5-ESS2-1 5-ESS2-2 5-LS2-1 5-PS1-1 5-PS3-1 MS-ESS1-1 MS-ESS1-2 MS-ESS2-1 MS-ESS2-4 MS-ESS2-6	HS-PS4-3 CC: K-ESS2-1 CC: 1-ESS1-1 CC: 1-ESS1-2 CC: 1-LS1-2 CC: 1-LS3-1 CC: 3-LS4-4 CC: 4-LS1-1 CC: 4-LS1-2 CC: 5-ESS2-1 CC: 5-ESS2-2 CC: 5-ESS3-1 CC: 5-LS2-1 CC: 5-PS1-2 CC: 5-PS1-3 CC: MS-ESS3-4 CC: MS-LS1-2 CC: MS-LS1-4 CC: MS-LS1-5 CC: MS-LS2-5 CC: MS-LS3-1 CC: MS-LS4-4	DCI: HS-PS3-1 SP: K-ESS2-1 SP: K-ESS3-2 SP: K-LS1-1 SP: 1-ESS1-1 SP: 3-5-ETS1-2 SP: 3-LS1-1 SP: 3-LS3-2 SP: 3-LS4-2 SP: 3-LS4-4 SP: 4-ESS1-1 SP: 4-ESS3-2 SP: 4-PS3-1 SP: 4-PS3-4 SP: 4-PS4-1 SP: 4-PS4-3 SP: 5-ESS2-1 SP: 5-ESS2-2 SP: 5-LS2-1 SP: 5-PS1-1 SP: 5-PS3-1 SP: MS-ESS1-1
describe	MS-ESS3-4 MS-LS1-2 MS-LS1-7 MS-LS2-3 MS-LS3-1 MS-LS3-2 MS-LS4-4 MS-PS1-1 MS-PS1-3 MS-PS1-4 MS-PS1-5 MS-PS3-1 MS-PS3-2 MS-PS4-1 MS-PS4-2 HS-ESS2-3 HS-ESS2-4 HS-ESS2-6 HS-LS2-4 HS-LS3-3 HS-PS2-1 HS-PS2-4 HS-PS3-4	describe CC: MS-LS4-5 CC: MS-LS4-6 CC: HS-ESS3-6 CC: HS-LS1-5 CC: HS-LS1-6 CC: HS-PS1-4 CC: HS-PS2-2 CC: HS-PS3-3 CC: HS-PS3-4 DCI: K-ESS2-1 DCI: 1-ESS1-1 DCI: 1-ESS1-2 DCI: 2-PS1-1 DCI: 3-ESS2-2 DCI: 3-PS2-2 DCI: MS-ESS1-1 DCI: MS-LS2-5 DCI: MS-PS1-4 DCI: MS-PS2-2 DCI: HS-ESS1-4 DCI: HS-PS1-2 DCI: HS-PS1-7 DCI: HS-PS2-4	describe SP: MS-ESS1-2 SP: MS-ESS1-4 SP: MS-ESS2-1 SP: MS-ESS2-1 SP: MS-ESS2-2 SP: MS-ESS2-4 SP: MS-ESS2-6 SP: MS-ESS3-1 SP: MS-ESS3-3 SP: MS-ETS1-4 SP: MS-LS1-2 SP: MS-LS1-5 SP: MS-LS1-6 SP: MS-LS1-7 SP: MS-LS1-8 SP: MS-LS2-3 SP: MS-LS3-1 SP: MS-LS3-2 SP: MS-LS4-4 SP: MS-LS4-5 SP: MS-PS1-1 SP: MS-PS1-3 SP: MS-PS1-4

describe (cont'd)	SP: MS-PS1-5	SP: K-PS3-2	SP: MS-LS1-7
	SP: MS-PS3-2	SP: 1-ESS1-2	SP: MS-LS2-2
	SP: MS-PS4-1	SP: 1-LS1-1	SP: MS-LS2-3
	SP: MS-PS4-2	SP: 1-LS3-1	SP: MS-LS2-5
	SP: HS-ESS1-2	SP: 1-PS4-2	SP: MS-LS3-1
	SP: HS-ESS1-4	SP: 1-PS4-4	SP: MS-LS3-2
	SP: HS-ESS3-1	SP: 2-ESS1-1	SP: MS-LS4-2
	SP: HS-ESS3-6	SP: 2-ESS2-1	SP: MS-LS4-4
	SP: HS-LS1-1	SP: 2-PS1-1	SP: MS-LS4-6
	SP: HS-LS1-6	SP: 2-PS1-3	SP: MS-PS1-6
design	SP: HS-LS2-3	SP: 3-5-ETS1-2	SP: MS-PS2-1
	SP: HS-LS4-2	SP: 3-5-ETS1-3	SP: MS-PS2-2
	SP: HS-LS4-4	SP: 3-LS1-1	SP: MS-PS2-5
	SP: HS-PS2-2	SP: 3-LS3-2	SP: MS-PS3-2
	SP: HS-PS2-4	SP: 3-LS4-2	SP: MS-PS3-3
	SP: HS-PS4-1	SP: 3-PS2-1	SP: MS-PS3-4
	K-PS3-2	SP: 4-ESS1-1	SP: MS-PS3-5
	1-LS1-1	SP: 4-ESS3-2	SP: MS-PS4-1
	1-LS3-1	SP: 4-PS3-1	SP: MS-PS4-2
	1-PS4-4	SP: 4-PS3-4	SP: MS-PS4-3
	4-ESS3-2	SP: 4-PS4-1	SP: HS-ESS1-2
	4-PS3-4	SP: 4-PS4-2	SP: HS-ESS1-6
	MS-ESS3-3	SP: 4-PS4-3	SP: HS-ESS3-1
	MS-PS2-1	SP: 5-ESS2-1	SP: HS-ESS3-4
	HS-ETS1-2	SP: 5-LS2-1	SP: HE-ETS1-1
	HS-LS2-7	SP: 5-PS1-1	SP: HE-ETS1-2
	HS-LS4-6	SP: 5-PS1-3	SP: HE-ETS1-3
	HS-PS2-3	SP: 5-PS1-4	SP: HS-LS1-1
	HS-PS2-5	SP: 5-PS3-1	SP: HS-LS1-6
	HS-PS3-3	SP: MS-ESS1-1	SP: HS-LS2-3
	SP: 1	SP: MS-ESS1-2	SP: HS-LS2-7
design	CC: K-PS2-1	SP: MS-ESS1-4	SP: HS-LS4-2
	CC-K-PS2-2	SP: MS-ESS2-1	SP: HS-LS4-4
	CC: 1-PS4-1	SP: MS-ESS2-2	SP: HS-PS1-2
	CC: 1-PS4-2	SP: MS-ESS2-4	SP: HS-PS1-5
	CC: 1-PS4-3	SP: MS-ESS2-5	SP: HS-PS1-6
	CC: 2-PS1-2	SP: MS-ESS2-6	SP: HS-PS2-3
	CC: MS-PS1-3	SP: MS-ESS3-1	SP: HS-PS3-3
	CC: MS-PS4-2	SP: MS-ESS3-3	SP: HS-PS4-2
	CC: MS-PS4-3	SP: MS-ETS1-4	SP: HS-PS4-5
	CC: HS-PS2-3	SP: MS-LS1-2	
	CC: HS-PS2-6	SP: MS-LS1-3	
	DCI: K-2-ETS1-1	SP: MS-LS1-4	
	DCI: 3-5-ETS1-2	SP: MS-LS1-5	
	DCI: 3-5-ETS1-3	SP: MS-LS1-6	

determine	K-PS2-2	determine	SP: MS-ETS1-3	develop	HS-LS2-8
	K-PS3-1		SP: MS-LS4-1		HS-PS1-4
	1-LS1-2		SP: MS-PS1-2		HS-PS1-8
	1-PS4-3		SP: HS-ESS1-5		HS-PS3-2
	2-LS2-1		SP: HS-ESS2-2		HS-PS3-5
	2-PS1-2		SP: HS-LS2-6		CC: 2-ESS2-1
	3-PS2-3		SP: HS-LS2-8		CC: 3-ESS3-1
	5-PS1-4		SP: HS-LS3-3		CC: 3-PS2-4
	MS-ESS1-3		SP: HS-LS4-3		CC: 4-ESS3-2
	MS-ESS2-6		SP: HS-LS4-5		CC: 4-PS3-4
	MS-ETS1-2		SP: HS-PS2-1		DCI: 3-5-ETS1-2
	MS-ETS1-3		SP: HS-PS4-3		DCI: 3-LS3-2
	MS-PS1-2	develop	K-2-ETS1-2		DCI: HS-ESS3-4
	MS-PS2-3		2-ESS2-2		DCI: HS-ETS1-3
	MS-PS3-4		2-LS2-2		DCI: HS-LS2-7
	HS-ESS2-3		3-LS1-1		DCI: HS-LS4-6
	HS-LS1-1		4-PS4-1		SP: K-2-ETS1-2
	HS-LS2-2		4-PS4-2		SP: K-ESS3-1
	HS-LS4-5		5-ESS2-1		SP: 2-ESS2-2
	HS-PS2-3		5-LS2-1		SP: 2-LS2-2
	HS-PS2-6		5-PS1-1		SP: 4-PS4-1
	SP: 1		MS-ESS1-1		SP: 4-PS4-2
	SP: 4		MS-ESS1-2		SP: 5-ESS2-1
	CC: MS-LS1-2		MS-ESS2-1		SP: 5-PS1-4
	CC: MS-LS3-1		MS-ESS2-4		SP: MS-ESS1-1
	DCI: 3-5-ETS1-1		MS-ESS2-6		SP: MS-ESS1-2
	DCI: 3-5-ETS1-3		MS-ETS1-4		SP: MS-ESS2-1
	DCI: 4-PS3-4		MS-LS1-1		SP: MS-ESS2-4
	DCI: 4-PS4-3	develop	MS-LS1-2		SP: MS-ESS2-6
	DCI: 5-ESS2-1		MS-LS1-7		SP: MS-ETS1-4
	DCI: MS-ESS2-2		MS-LS2-3		SP: MS-LS1-2
	DCI: MS-ESS2-5		MS-LS3-1		SP: MS-LS1-7
	DCI: MS-LS4-5		MS-LS3-2		SP: MS-LS2-3
	DCI: MS-PS2-2		MS-PS1-1		SP: MS-LS3-1
	DCI: HS-ESS1-5		MS-PS1-4		SP: MS-LS3-2
	DCI: HS-ESS1-6		MS-PS1-5		SP: MS-PS1-1
	DCI: HS-PS1-3		MS-PS3-2		SP: MS-PS1-4
	DCI: HS-PS1-6		MS-PS4-2		SP: MS-PS1-5
	DCI: HS-PS2-6		HS-ESS1-1		SP: MS-PS3-2
	SP: K-2-ETS1-3		HS-ESS2-1		SP: MS-PS4-2
	SP: K-PS2-2		HS-ESS2-3		SP: HS-ESS1-1
	SP: 1-LS1-2		HS-ESS2-6		SP: HS-ESS2-1
	SP: 2-PS1-2		HS-ESS3-2		SP: HS-ESS2-3
	SP: MS-ESS1-3		HS-LS1-2		SP: HS-ESS2-4
	SP: MS-ESS3-2		HS-LS2-5		SP: HS-ESS2-6

develop (cont'd)	SP: HS-LS1-2	distribute	DCI: MS-ESS2-6 DCI: MS-ESS3-1	engineer	CC: 3-5-ETS1-2 CC: 3-ESS3-1 CC: 4-ESS3-2 CC: 4-PS3-4 CC: MS-LS1-3 CC: HS-ESS1-2 CC: HS-ESS1-4 CC: HS-ESS2-3 CC: HS-ESS3-2 CC: HS-ESS3-4
	SP: HS-LS1-4	encounter	CC: K-ESS3-2		
	SP: HS-LS1-5		SP: 8		
	SP: HS-LS1-7		DCI: 1-LS1-2		
	SP: HS-LS2-5		DCI: MS-LS1-4		
	SP: HS-PS1-1		SP: K-ESS2-2		
	SP: HS-PS1-4		SP: 2-PS1-4		
	SP: HS-PS1-8		SP: 3-ESS3-1		
	SP: HS-PS3-2		SP: 3-LS2-1		
	SP: HS-PS3-5		SP: 3-LS4-3		
differentiate	CC: HS-ESS2-4		SP: 3-LS4-4		CC: HS-PS3-3
	CC: HS-ESS3-1		SP: 4-LS1-1		CC: HS-PS4-2
	CC: HS-LS2-8		SP: 5-ESS1-1		DCI: K-2-ETS1-1
	CC: HS-LS3-1		SP: 5-LS1-1		DCI: MS-ESS3-3
	CC: HS-LS3-2		SP: 5-PS2-1		DCI: MS-ESS3-4
	CC: HS-LS4-2		SP: MS-ESS3-4		SP
	CC: HS-LS4-4		SP: MS-ETS1-2		
	CC: HS-LS4-5		SP: MS-LS1-3		
	CC: HS-LS4-6		SP: MS-LS1-4		
	CC: HS-PS2-1		SP: MS-LS2-4		
disassemble	CC: HS-PS2-5		SP: MS-LS2-5		
	CC: HS-PS4-1		SP: MS-PS1-6		MS-PS2-5
			SP: MS-PS2-4		HS-ESS1-5
			SP: MS-PS3-5		HS-ESS3-2
			SP: HS-ESS1-5		HS-ESS3-4
			SP: HS-ESS2-7		HS-ETS1-3
			SP: HS-ESS3-2		HS-LS2-6
			SP: HS-LS2-6		HS-LS2-7
			SP: HS-LS2-8		HS-LS2-8
			SP: HS-LS3-2		HS-LS4-5
display			SP: HS-LS4-5		HS-PS2-3
			SP: HS-PS4-3		HS-PS4-2
					HS-PS4-3
					HS-PS4-4
	3-ESS2-1				SP: 6
	5-ESS1-2				SP: 7
	MS-LS4-3				SP: 8
	MS-PS2-4				CC: HS-ESS2-3
	MS-PS3-1				DCI: MS-ETS1-2
	SP: 3-ESS2-1				DCI: MS-ETS1-3
distinguish	SP: 5-ESS1-2				DCI: MS-LS2-5
	SP: MS-LS4-3				DCI: MS-PS3-3
	SP: MS-PS3-1				DCI: HS-ESS3-2
	SP: MS-PS4-3				DCI: HS-ESS3-4
	MS-LS1-1				
	HS-LS2-8				
	SP: MS-ESS1-3				
	SP: MS-ESS2-3				
	SP: MS-ESS3-2				

evaluate (cont'd)	DCI: HS-ETS1-3	expand	5-PS1-1	extend	MS-PS1-1
	DCI: HS-LS2-7		HS-ESS1-2		SP: 8
	DCI: HS-LS4-6		DCI: HS-ESS2-5		CC: MS-PS4-3
	SP: K-ESS3-2		HS-ESS1-5		DCI: MS-PS1-1
	SP: K-ESS3-3		HS-LS3-3		DCI: MS-PS2-5
	SP: 1-LS1-2		HS-LS4-2		SP: 5-ESS2-2
	SP: 2-ESS2-3		HS-PS3-1		SP: 5-PS1-2
	SP: 3-ESS2-2		SP		SP: MS-ESS1-3
	SP: 4-ESS3-1		CC: 3-ESS3-1		SP: MS-ESS2-3
	SP: 5-ESS3-1		CC: 3-LS2-1		SP: MS-ESS3-2
	SP: MS-ETS1-2		CC: 3-LS3-2		SP: MS-ETS1-3
	SP: MS-LS1-8		CC: 3-LS4-2		SP: MS-LS2-1
	SP: MS-LS2-4		CC: 3-LS4-2		SP: MS-LS4-1
	SP: MS-LS2-5		CC: 3-PS2-3		SP: MS-LS4-3
	SP: MS-LS4-5		CC: 4-ESS2-1		SP: MS-PS1-2
	SP: MS-PS1-3		CC: 4-ESS3-1		SP: MS-PS3-1
	SP: MS-PS2-5		CC: 4-ESS3-2		SP
	SP: MS-PS4-3		CC: 5-LS2-1	formulate	SP: 1
	SP: HS-ESS1-3		CC: 5-PS1-4		SP: 7
	SP: HS-ESS1-5		CC: 5-PS2-1		SP: HS-ETS1-1
examine	SP: HS-ESS1-5	explain	CC: MS-PS1-5		SP: HS-LS3-1
	SP: HS-ESS3-2		CC: HS-ESS1-2		SP: HS-PS4-2
	SP: HS-ESS2-3		CC: HS-ESS1-6		SP: MS-PS2-3
	SP: HS-ETS1-1		CC: HS-LS4-1	gather	K-2-ETS1-1
	SP: HS-ETS1-3		CC: HS-PS2-1		MS-LS1-8
	SP: HS-LS2-6		CC: HS-PS2-4(a)		MS-LS4-5
	SP: HS-LS2-7		CC: HS-PS2-4(b)		MS-PS1-3
	SP: HS-LS2-8		CC: HS-PS4-3		HS-LS2-1
	SP: HS-LS3-1		DCI: 5-PS1-1		HS-PS1-3
	SP: HS-LS4-1		DCI: MS-ESS1-1		CC: K-PS2-1
	SP: HS-LS4-5		DCI: MS-PS2-5		CC: K-PS2-2
	SP: HS-PS2-6		DCI: MS-PS4-2		CC: 1-PS4-1
	SP: HS-PS3-3		DCI: HS-ESS1-5		CC: 1-PS4-2
	SP: HS-PS4-2		DCI: HS-ESS2-1		CC: 1-PS4-3
	SP: HS-PS4-3		DCI: HS-PS1-1		CC: 2-PS1-2
	SP: HS-PS4-4		DCI: HS-PS1-3		DCI: K-ESS3-2
	SP: HS-PS4-5		DIC: HS-PS2-6	gather	DCI: K-2-ETS1-1
	MS-ESS3-3		DCI: HS-PS4-3		SP: MS-LS1-8
	HS-ESS2-5		SP: 2-PS1-4		SP: MS-LS4-5
	CC: MS-ESS2-1		SP: 3-ESS2-2		SP: MS-PS1-3
	CC: MS-PS2-2		SP: 3-LS4-3		SP: MS-PS2-2
	CC: HS-ESS1-4		SP: 4-ESS3-1	gather	SP: MS-PS3-4
	CC: HS-LS3-3		SP: 5-ESS3-1		
	CC: HS-PS3-5				
	CC: HS-PS4-4				
	SP: HS-LS3-1				

generate	3-5-ETS1-2 4-ESS3-2 4-PS4-3 MS-ETS1-4 MS-PS2-4 CC: K-ESS3-2 CC: K-ESS3-3 CC: K-PS3-1 CC: K-PS3-2 CC: 2-LS2-1 CC: 2-PS1-4	identify	CC: 3-LS3-2 CC: 3-LS4-2 CC: 3-LS4-3 CC: 3-PS2-1 CC: 3-PS2-3 CC: 4-ESS2-1 CC: 4-ESS3-1 CC: 4-ESS3-2 CC: 4-PS4-2 CC: 5-PS1-4 CC: 5-PS2-1	illustrate	K-2-ETS1-2 4-PS4-1 HS-ESS1-1 HS-ESS2-1 HS-ESS3-3 HS-ESS3-6 HS-LS1-2 HS-LS1-4 HS-LS1-5 HS-LS1-7 HS-LS2-5 HS-PS1-4 HS-PS1-8 HS-PS3-2 HS-PS3-5
	DCI: MS-ESS2-3 DCI: HS-ESS2-3 SP: 3-5-ETS1-2 SP: 4-ESS3-2 SP: 4-PS4-3 SP: MS-ETS1-4 SP: HS-ESS2-2 SP: HS-ESS3-5 SP: HS-LS3-3 SP: HS-LS4-3 SP: HS-PS2-1 SP: HS-PS2-3		CC: MS-ESS1-1 CC: MS-ESS3-2 CC: MS-LS2-2 CC: MS-LS4-1 CC: MS-LS4-2 CC: MS-LS4-3 CC: MS-PS4-1 CC: HS-ESS1-5 DCI: 3-5-ETS1-3 DCI: 5-PS1-3 DCI: MS-ETS1-3 DCI: MS-PS1-2		SP: HS-ESS1-1 SP: HS-ESS2-1 SP: HS-ESS2-3 SP: HS-ESS2-6 SP: HS-LS1-2 SP: HS-LS1-4 SP: HS-LS1-5 SP: HS-LS1-7
	BBK 5-ESS2-2 5-PS1-2 SP: 5-ESS2-2 SP: 5-PS1-2		DCI: MS-PS1-3 DCI: MS-PS1-6 DCI: HS-ESS1-2 DCI: HS-ESS1-3 SP: 4-ESS1-1		SP: HS-LS2-5 SP: HS-PS1-4 SP: HS-PS1-8 SP: HS-PS3-2 SP: HS-PS3-5
	CC: MS-LS1-3 CC: MS-LS1-3 DCI: 4-LS1-2 DCI: HS-ESS3-1		SP: MS-ESS3-5 SP: MS-LS4-1 SP: MS-LS4-3 SP: MS-LS4-6		impact MS-ESS3-4 MS-PS1-3
	2-ESS2-3 3-5-ETS1-3 4-ESS1-1 5-PS1-3 MS-ETS1-3 MS-LS1-2 MS-LS4-3 HS-LS2-8 SP: 3 SP: 4 SP: 7 CC: 3-ESS3-1 CC: 3-LS2-1		SP: MS-PS2-2 SP: MS-PS3-1 SP: MS-PS3-4 SP: MS-PS4-1		implement SP: MS-PS1-6
					3-5-ETS1-3 4-ESS3-2 HS-PS2-3 SP: 5 SP: 8
					CC: 3-5-ETS1-2 CC: 3-ESS3-1 CC: 4-ESS3-2 CC: 4-PS3-4
					DCI: 3-5-ETS1-3 DCI: MS-ETS1-4 DCI: MS-PS1-6
					DCI: MS-PS3-3

	K-ESS2-1 K-ESS2-2 K-ESS3-1 K-ESS3-3 K-LS1-2 K-PS2-1 K-PS2-2 K-PS3-1 K-PS3-2 1-ESS1-1 1-LS1-1 1-LS1-2 1-LS3-1 1-PS4-1 1-PS4-2 1-PS4-4 2-ESS1-1 2-ESS2-1 2-ESS2-2 2-PS1-1 2-PS1-2 2-PS1-3 include 2-PS1-4 3-5-ETS1-1 3-ESS2-1 3-ESS3-1 3-LS3-2 3-LS4-1 3-LS4-3 3-LS4-4 3-PS2-1 3-PS2-2 3-PS2-3 3-PS2-4 4-ESS1-1 4-ESS2-1 4-ESS2-2 4-ESS3-1 4-ESS3-2 4-LS1-1 4-LS1-2 4-PS3-1 4-PS3-4 4-PS4-1 4-PS4-2		4-PS4-3 5-ESS1-2 5-ESS2-1 5-ESS2-2 5-LS2-1 5-PS1-1 5-PS1-2 5-PS1-3 5-PS3-1 MS-ESS1-3 MS-ESS1-4 MS-ESS2-2 MS-ESS2-3 MS-ESS3-1 MS-ESS3-2 MS-ESS3-3 MS-ESS3-4 MS-ESS3-5 MS-LS1-3 MS-LS1-4 MS-LS1-5 MS-LS2-2 MS-LS2-3 MS-LS2-4 MS-LS2-5 MS-LS2-6 MS-LS2-7 MS-LS2-8 MS-LS4-1 HS-ESS1-1 HS-ESS1-5 HS-ESS1-6 HS-ESS2-2 HS-ESS2-3 HS-ESS2-5		HS-ESS2-6 HS-ESS2-7 HS-ESS3-1 HS-ESS3-2 HS-ESS3-3 HS-ESS3-4 HS-ETS1-3 HS-LS1-3 HS-LS1-5 HS-LS2-1 HS-LS2-2 HS-LS2-5 HS-LS2-6 HS-LS2-7 HS-LS2-8 HS-LS4-1 HS-PS1-1 HS-PS1-2 HS-PS1-3 HS-PS1-4 HS-PS1-6 include HS-PS2-1 HS-PS2-3 HS-PS2-6 HS-PS3-2 HS-PS3-3 HS-PS3-4 HS-PS3-5 HS-PS3-6 HS-PS3-7 HS-PS3-8 HS-PS4-1 HS-PS4-2 HS-PS4-3 HS-PS4-4 HS-PS4-5 CC: MS-ESS2-1 CC: HS-ESS2-2 CC: HS-ESS3-3 CC: HS-ETS1-1 CC: HS-ETS1-3 CC: HS-ETS1-4 CC: HS-LS1-2 CC: HS-LS1-2 CC: HS-LS1-4 CC: HS-LS2-5 CC: HS-LS2-7
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include (cont'd)			indicate	4-ESS1-1 HS-ESS3-2 CC: HS-ESS3-2 DCI: 4-ESS1-1 SP: 3-ESS2-1 SP: 5-ESS1-2
			infer	MS-LS4-2 MS-LS4-3 HS-PS1-3 CC: HS-ESS2-5 DCI: HS-LS4-1
			influence	3-LS3-2 MS-LS1-5 MS-LS4-5 HS-ESS3-1 CC: MS-PS4-3 CC: HS-LS3-3 DCI: 5-ESS2-1 DCI: MS-ESS2-6 DCI: MS-LS2-5 DCI: MS-LS4-5
			integrate	MS-PS4-3 SP: 8 SP: MS-PS4-3
			intend	K-PS2-2 2-PS1-2 5-PS1-3 SP: K-2-ETS1-3 SP: K-PS2-2 SP: 2-PS1-2
			incorporate	SP: 6 DCI: MS-ETS1-3 DCI: MS-PS1-6

interact	4-PS3-3 5-ESS2-1 MS-PS1-2 HS-LS1-2 HS-PSW-6 HS-PS3-5 CC: MS-LS1-3 DCI: 5-ESS2-1 DCI: MS-LS2-3 DCI: MS-PS3-2 DCI: HS-ESS2-2 DCI: HS-ESS3-6 DCI: HS-LS1-7 DCI: HS-PS2-2 DCI: HS-PS2-3 DCI: HS-PS3-5	introduce	DCI: 5-LS2-1 SP: 3-ESS2-1 SP: 3-LS3-1 SP: 3-LS4-1 SP: 3-PS2-2 SP: 4-ESS2-2 SP: 5-ESS1-2 SP: HS-ESS2-2 SP: HS-ESS3-5 SP: HS-LS3-3 SP: HS-LS4-3 SP: HS-PS2-1	lead	MS-LS4-5 MS-LS4-6 HS-LS4-4 CC: 3-PS2-4 DCI: 3-5-ETS1-2 DCI: MS-ETS1-4 DCI: MS-LS2-4 DCI: MS-LS4-4 DCI: MS-PS1-6 DCI: HS-ESS2-3 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-LS4-4
	SP: 7 CC: HS-ESS3-6 CC: HS-LS1-1 CC: HS-PS2-2				
	CC: HS-PS2-6 CC: HS-PS3-4				
	DCI: 3-5-ETS1-2 DCI: 4-ESS3-2 SP: 3-PS2-3 SP: 4-PS3-3 SP: MS-PS2-3				
	3-LS4-3 MS-PS1-6 MS-PS2-1				
	CC: HS-ESS1-2 CC: HS-ESS1-4 CC: HS-ESS2-3				
	CC: HS-ESS3-2 DCI: 3-5-ETS1-2 DCI: 3-LS3-2 DCI: 4-ESS3-2 DCI: MS-ESS2-6 DCI: MS-ESS3-3				
	DCI: MS-ESS3-4 DCI: MS-LS1-7 DCI: MS-LS2-2 DCI: HS-ESS2-3 DCI: HS-PS1-2 DCI: HS-PS2-3				
	DCI: HS-PS1-7 DCI: HS-PS1-8				
interpret	3-LS3-1 3-LS4-1 4-ESS2-2 MS-ESS1-3 MS-ESS2-3 MS-ESS3-2 MS-LS2-1 MS-LS4-1 MS-PS1-2 MS-PS3-1 SP: 4 DCI: MS-ESS1-4 DCI: HS-PS4-5 SP: 3-LS3-1 SP: 3-LS4-1 SP: 4-ESS2-2 SP: MS-ESS1-3 SP: MS-ESS2-3 SP: MS-ESS3-2 SP: MS-ETS1-3 SP: MS-LS2-1 SP: MS-LS4-1 SP: MS-PS1-2 SP: MS-PS3-1 SP	investigate		learn	MS-ESS3-1 MS-ETS1-1 CC: 5-ESS3-1 CC: HS-PS3-1 DCI: 3-5-ETS1-1 DCI: 4-PS3-4 DCI: MS-ESS3-1 DCI: MS-ETS1-1 DCI: MS-LS2-1 DCI: MS-PS3-3 DCI: HS-LS1-3 DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-PS3-1 SP: MS-ETS1-1
involve		link		locate	

maintain	5-PS3-1 MS-LS2-5 HS-LS1-3 HS-LS1-4 HS-LS2-6 DCI: 5-PS3-1 DCI: HS-LS1-3 DCI: HS-LS1-4 DCI: HS-LS1-7 DCI: HS-LS2-7 DCI: HS-LS4-6	modify	MS-PS1-6 HS-ESS3-6 HS-PS2-3 HS-PS4-3 CC: HS-ESS3-2 CC: HS-ESS3-4 CC: HS-LS4-1 CC: HS-PS3-3 CC: HS-PS4-2 DCI: MS-ETS1-4 DCI: MS-PS1-6	observe	CC: K-ESS2-1 CC: K-LS1-1 CC: 1-ESS1-1 CC: 1-ESS1-2 CC: 1-LS1-2 CC: 1-LS3-1 CC: 2-ESS2-2 CC: 2-ESS2-3 CC: 2-PS1-1 CC: MS-ESS1-3 CC: MS-ESS1-4
manage	HS-ESS3-2 DCI: HS-ESS3-5		DCI: MS-PS3-3 DCI: HS-ES3-6		CC: MS-ESS2-2 CC: MS-LS1-1
manipulate	3-PS2-3		SP: HS-ESS1-2 SP: HS-ESS1-6		CC: MS-PS1-1 CC: HS-LS4-1
map	DCI: 2-ESS2-2 DCI: MS-ESS3-2 DCI: MS-PS2-5		SP: HS-LS4-1 SP: HS-PS4-3		CC: HS-LS4-3 CC: HS-PS1-1
maximize	MS-PS3-3	monitor	4-ESS3-2 MS-ESS3-2 MS-ESS3-3		CC: HS-PS1-2 CC: HS-PS1-3 CC: HS-PS1-5 CC: HS-PS2-4(a) CC: HS-PS2-4(b)
measure	5-PS1-2 MS-PS3-4 SP: 3 CC: 5-ESS2-2 CC: 5-PS1-2 CC: 5-PS1-3 DCI: K-ESS2-1 DCI: 3-PS2-2 DCI: HS-ESS1-2 SP: 5-PS1-2				DCI: 1-ESS1-1 DCI: 1-ESS1-2 DCI: 2-ESS1-1 DCI: 2-PS1-4 DCI: 3-PS2-2 DCI: MS-ESS1-1
mitigate	MS-ESS3-2 HS-LS4-6				
mix	5-PS1-2 5-PS1-4 MS-PS1-2 HS-PS3-4 DCI: 5-PS1-4 DCI: HS-PS4-3				
model	HS-ESS2-6 HS-ETS1-4 SP: HS-ESS3-5				

obtain	K-ESS3-2	optimize	DCI: K-2-ETS1-3	plan	K-PS2-1
	2-ESS2-3		DCI: 2-ESS2-1		1-PS4-1
	2-PS1-2		DCI: 3-5-ETS1-3		1-PS4-3
	3-ESS2-2		DCI: 4-PS4-3		2-LS2-1
	4-ESS3-1		DCI: MS-ETS1-3		2-PS1-1
	5-ESS3-1		DCI: MS-ETS1-4		3-5-ETS1-3
	MS-ESS2-5		DCI: MS-PS1-6		3-PS2-1
	HS-ESS1-6		DCI: HS-ETS1-2		MS-PS2-2
	HS-ESS2-3		DCI: HS-PS1-6		MS-PS3-4
	CC: MS-LS2-4		DCI: HS-PS2-3		HS-ESS2-5
	CC: HS-ESS3-5	organize	MS-ESS1-4		HS-LS1-3
	DCI: K-LS1-1		DCI: MS-ESS1-4		HS-PS1-3
	DCI: 3-LS2-1				HS-PS2-5
	DCI: 5-LS2-1				HS-PS3-4
	SP: K-ESS3-3				SP: 3
	SP: 1-LS1-2				SP: K-PS2-1
	SP: 2-ESS2-3				SP: K-PS3-1
	SP: 3-ESS2-2				SP: 1-ESS1-2
	SP: 4-ESS3-1				SP: 1-PS4-1
	SP: 5-ESS3-1				SP: 1-PS4-3
	SP: MS-ESS1-4				SP: 2-LS2-1
	SP: MS-ESS2-2				SP: 2-LS4-1
	SP: MS-ESS3-1				SP: 2-PS1-1
	SP: MS-LS1-5				SP: 3-5-ETS1-3
	SP: MS-LS1-6				SP: 3-PS2-1
	SP: MS-LS1-8				SP: 4-ESS2-1
	SP: MS-LS2-4				SP: 4-PS3-2
	SP: MS-LS4-5				SP: 5-PS1-3
	SP: MS-PS1-3				SP: 5-PS1-4
	SP: MS-PS4-3				SP: MS-ESS2-5
	SP: HS-ESS1-2				SP: MS-LS1-1
	SP: HS-ESS1-3				SP: MS-PS2-2
	SP: HS-ESS1-6				SP: MS-PS3-4
	SP: HS-ESS3-1				SP: HS-ESS2-5
	SP: HS-ESS3-5				SP: HS-LS1-3
	SP: HS-LS1-1				SP: HS-PS1-3
	SP: HS-LS1-6				SP: HS-PS2-5
	SP: HS-LS2-3				SP: HS-PS3-4
	SP: HS-LS4-1	predict	1-ESS1-1		
	SP: HS-LS4-2		3-PS2-2		
	SP: HS-LS4-4		4-PS3-3		
	SP: HS-PS1-2		MS-ESS2-5		
	SP: HS-PS2-6		MS-LS2-2		
	SP: HS-PS4-4		MS-PS1-4		
	SP: HS-PS4-5		HS-ESS1-2		

predict (cont'd)	HS-ESS1-4	predict	SP: MS-ETS1-4	prioritize	HS-ETS1-3
	HS-PS1-1		SP: MS-LS1-2		SP: HS-ESS3-4
	HS-PS2-4		SP: MS-LS1-7		SP: HS-ETS1-2
	HS-PS2-4		SP: MS-LS2-2		SP: HS-ETS1-3
	CC: MS-ESS2-5		SP: MS-LS2-3		SP: HS-LS2-7
	CC: MS-ESS3-1		SP: MS-LS3-1		SP: HS-PS1-6
	CC: MS-ESS3-4		SP: MS-LS3-2		SP: HS-PS3-3
	CC: MS-LS1-8		SP: MS-PS1-1		
	CC: MS-LS2-1		SP: MS-PS1-4		
	CC: MS-LS3-2		SP: MS-PS1-5		
	CC: MS-PS1-4		SP: MS-PS3-2		
	CC: MS-PS2-3		SP: MS-PS4-2		
	CC: MS-PS2-5		SP: HS-ESS1-1		
	CC: HS-ESS1-4		SP: HS-ESS2-1		
	CC: HS-LS3-3		SP: HS-ESS2-3		
	CC: HS-PS3-1		SP: HS-ESS2-4		
	CC: HS-PS3-5		SP: HS-ESS2-6		
	CC: HS-PS4-4		SP: HS-ETS1-4		
	DCI: 1-ESS1-1		SP: HS-LS1-2		
	DCI: 1-ESS1-2		SP: HS-LS1-4		
	DCI: 3-PS2-2		SP: HS-LS1-5		
	DCI: MS-ESS1-1		SP: HS-LS1-7		
	DCI: MS-ESS2-5		SP: HS-LS2-5		
	DCI: MS-PS1-4		SP: HS-PS1-1		
	DCI: HS-ESS3-5		SP: HS-PS1-4		
	DCI: HS-ESS3-6		SP: HS-PS1-8		
	DCI: HS-PS1-2		SP: HS-PS3-2		
	DCI: HS-PS1-7		SP: HS-PS3-5		
	DCI: HS-PS2-1	prepare	K-ESS3-2		
	DCI: HS-PS2-4		DCI: K-ESS3-2		
	DCI: HS-PS3-1	prescribe	CC: MS-ESS3-4		
	SP: 3-5-ETS1-2		CC: MS-LS2-5		
	SP: 3-LS3-2		CC: MS-LS4-5		
	SP: 3-LS4-2	present	MS-PS2-4		
	SP: 4-ESS1-1		MS-PS3-5		
	SP: 4-ESS3-2		DCI: 4-PS3-2		
	SP: 4-PS3-1		DCI: MS-PS3-3		
	SP: 4-PS3-3		DCI: MS-PS3-4		
	SP: 4-PS3-4		DCI: HS-PS1-6		
	SP: 4-PS4-3		SP: MS-PS2-4		
	SP: MS-ESS1-1	prevent	SP: MS-PS3-5		
	SP: MS-ESS1-2		2-ESS2-1		
	SP: MS-ESS2-1		3-ESS3-1		
	SP: MS-ESS2-4		MS-LS2-5		
	SP: MS-ESS2-6				

produce	propose	MS-ETS1-4 HS-ETS1-4 HS-LS4-6 SP: 6 DCI: 3-5-ETS1-2 DCI: MS-ETS1-4 DCI: MS-PS1-6 SP: K-2-ETS1-2 SP: 2-LS2-2 SP: 3-ESS3-1 SP: 3-LS2-1 SP: 3-LS4-3 SP: 3-LS4-4 SP: 4-LS1-1 SP: 5-ESS1-1 SP: 5-LS1-1 SP: 5-PS2-1 SP: HS-ESS1-3 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-5	provide	HS-ESS2-5 HS-ESS2-6 HS-LS1-2 HS-LS1-3 HS-LS4-4 HS-PS1-5 HS-PS2-5 HS-PS3-4 CC: MS-ESS2-3 CC: MS-PS3-1 CC: MS-PS3-4 CC: HS-ESS3-2 CC: HS-LS4-1 CC: HS-LS4-3 CC: HS-PS1-2 CC: HS-PS1-3 CC: HS-PS1-5 CC: HS-PS2-1 CC: HS-PS2-4(a) CC: HS-PS2-4(b) DCI: 3-LS4-1 DCI: 3-LS4-2 DCI: 5-PS3-1 DCI: MS-PS1-6 DCI: MS-ESS1-4 DCI: MS-ETS1-3 DCI: HS-ESS1-5 DCI: HS-ESS1-6 DCI: HS-ESS2-1 DCI: HS-ESS2-3 DCI: HS-LS2-3 DCI: HS-LS2-7 DCI: HS-LS4-1 DCI: HS-LS4-6 DCI: HS-PS1-4 DCI: HS-PS2-4 SP: K-ESS3-3 SP: K-PS2-1 SP: K-PS3-1 SP: K-PS3-2 SP: 1-ESS1-2 SP: 1-PS4-1 SP: 1-PS4-3 SP: 1-PS4-4 SP: 2-LS2-1
protect	protect	1-LS1-1 1-LS1-2 5-ESS3-1 MS-LS1-4 HS-PS2-3 DCI: 1-LS1-1 DCI: 5-ESS3-1	provide	DCI: 3-LS4-2 DCI: 5-PS3-1 DCI: MS-PS1-6 DCI: MS-ESS1-4 DCI: MS-ETS1-3
		1-PS4-1 2-ESS1-1 3-LS3-1 3-LS4-1 3-LS4-2 3-PS2-1 3-PS2-2 4-ESS2-1		
		4-PS3-2 5-ESS2-2 5-PS1-2 MS-ESS2-3 MS-ESS2-5 MS-LS1-1 MS-LS2-1 MS-PS2-2 MS-PS2-5		
	provide			DCI: HS-ESS2-1 DCI: HS-ESS2-3 DCI: HS-LS2-3 DCI: HS-LS2-7 DCI: HS-LS4-1 DCI: HS-LS4-6 DCI: HS-PS1-4 DCI: HS-PS2-4 SP: K-ESS3-3 SP: K-PS2-1 SP: K-PS3-1 SP: K-PS3-2 SP: 1-ESS1-2 SP: 1-PS4-1 SP: 1-PS4-3 SP: 1-PS4-4 SP: 2-LS2-1

provide (cont'd)	SP: 2-LS4-1 SP: 2-PS1-1 SP: 3-5-ETS1-3 SP: 3-PS2-1 SP: 3-PS2-2 SP: 4-ESS2-1 SP: 4-PS3-2 SP: 5-PS1-3 SP: 5-PS1-4 SP: MS-ESS2-3 SP: MS-ESS2-5 SP: MS-LS1-1 SP: MS-LS2-1 SP: MS-PS2-2 SP: MS-PS3-4 SP: HS-ESS2-4 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-5 SP: HS-PS2-1 SP: HS-PS2-4 SP: HS-PS2-5 SP: HS-PS3-4	reduce	K-ESS3-3 K-PS3-2 3-ESS3-1 4-ESS3-2 MS-ESS3-3 HS-ESS2-2 HS-ESS3-4 HS-LS2-7 SP: 1 DCI: K-ESS2-2 DCI: K-ESS3-3 DCI: 3-ESS3-1 DCI: 4-ESS3-2 DCI: MS-ESS3-5 DCI: MS-LS2-2	refute	CC: K-PS2-1 CC: K-PS2-2 CC: 1-PS4-1 CC: 1-PS4-2 CC: 1-PS4-3 CC: 2-PS1-2 SP: MS-ESS3-4 SP: MS-ETS1-2 SP: MS-LS1-3 SP: MS-LS1-4 SP: MS-LS2-4 SP: MS-LS2-5 SP: MS-PS2-4 SP: MS-PS3-5
quantify	CC: HS-ESS2-1 CC: HS-ESS3-3 CC: HS-ESS3-5 DCI: HS-ETS1-1 DCI: HS-PS2-3 DCI: HS-PS3-1 DCI: HS-PS3-3	refine	4-PS3-4 HS-ESS3-4 HS-LS2-7 HS-PS1-6 HS-PS2-3 HS-PS3-3 SP: HS-ESS2-5 SP: HS-ESS3-4 SP: HS-ETS1-1 SP: HS-LS1-3 SP: HS-LS2-7 SP: HS-LS3-1 SP: HS-PS1-3 SP: HS-PS1-6 SP: HS-PS2-5 SP: HS-PS3-3 SP: HS-PS3-4 SP: HS-PS4-2	relate	1-ESS1-2 4-PS3-1 MS-PS4-1 HS-LS3-3 HS-LS4-1 HS-LS4-6 CC: K-2-ETS1-2 CC: 1-LS1-1 CC: 2-LS2-2 CC: MS-PS1-2 CC: HS-LS2-2 DCI: 5-LS2-1 DCI: MS-ESS3-2 DCI: HS-PS4-1
receive	4-LS1-2 DCI: 1-PS4-4 DCI: 4-PS4-3			rely	CC: HS-ESS3-2 DCI: MS-LS2-5
				repeat	CC: 1-ESS1-1
record	SP: 3 DCI: K-ESS2-1 DCI: 3-ESS2-1 SP: K-2-ETS1-3 SP: K-ESS2-1 SP: K-LS1-1 SP: K-PS2-2 SP: 1-ESS1-1 SP: 2-PS1-2 SP: MS-PS2-2 SP: MS-PS3-4			report	SP: HS-LS1-3 SP: HS-PS4-4

represent	K-ESS3-1	respond	K-ESS3-2	search	SP: 7
	2-ESS2-2		4-LS1-2		SP: 2-PS1-4
	3-ESS2-1		MS-LS1-8		BBK
	4-PS4-3		DCI: K-ESS3-2		MS-ESS2-2
	5-ESS1-2		DCI: 1-LS1-1		CC: MS-PS1-3
	MS-PS1-5		DCI: MS-LS1-8		CC: MS-PS4-2
	SP: 5		2-PS1-4		CC: HS-ESS2-5
	SP: 6		HS-LS1-6		DCI: 4-ESS2-1
	CC: MS-ESS1-2		HS-LS2-2		DCI: 5-ESS2-1
	CC: MS-ESS2-6		HS-LS2-3		DCI: MS-ESS2-2
	CC: MS-PS2-1		HS-LS4-6		DCI: HS-ESS3-1
	CC: MS-PS2-4		HS-PS1-2		K-ESS2-1
	CC: MS-PS3-2		SP: 3		1-LS3-1
	SP: K-2-ETS1-2		SP: 7		2-PS1-1
	SP: K-ESS3-1		CC: MS-ESS2-3		3-LS3-1
	SP: 2-LS2-2		SP: 3-LS1-1		HS-PS4-2
	SP: 3-ESS2-1		SP: 4-LS1-2		CC: HS-ESS2-3
	SP: 3-LS1-1		SP: 4-PS4-1		DCI: 3-5-ETS1-2
	SP: 4-LS1-2		SP: 4-PS4-2		DCI: MS-LS2-2
	SP: 4-PS4-1		SP: 5-ESS2-1		DCI: MS-LS2-4
resolve	SP: 4-PS4-2		SP: 5-LS2-1		SP: K-2-ETS1-3
	SP: 5-ESS1-2		SP: 5-PS1-1		SP: K-ESS2-1
	SP: 5-ESS2-1		SP: 5-PS3-1		SP: K-LS1-1
	SP: 5-LS2-1		SP: MS-ESS1-1		SP: K-PS2-2
	SP: 5-PS1-1		SP: MS-ESS1-2		SP: 1-ESS1-1
	SP: 5-PS3-1		SP: MS-ESS2-1		SP: 2-PS1-2
	SP: MS-ETS1-4		SP: MS-ESS2-3		SP: MS-LS2-4
	SP: HS-ESS1-4		SP: MS-ESS2-4		
	SP: HS-ESS3-3		SP: MS-ESS2-6		
	SP: HS-ESS3-6		SP: MS-ETS1-4		
revise	SP: HS-ETS1-4		SP: MS-LS1-2		
	SP: HS-ESS1-4		SP: MS-LS1-7		
	SP: HS-LS2-1		SP: MS-LS2-3		
	SP: HS-LS2-2		SP: MS-LS3-1		
	SP: HS-LS2-4		SP: MS-LS3-2		
	SP: HS-LS4-6		SP: MS-PS1-1		
	SP: HS-PS1-7		SP: MS-PS1-4		
	SP: HS-PS2-2		SP: MS-PS1-5		
	SP: HS-PS2-4(a)		SP: MS-PS3-2		
	SP: HS-PS2-4(b)		SP: MS-PS4-2		
share	SP: HS-PS3-1		SP: HS-LS1-6		
	SP: HS-PS4-1		SP: HS-LS2-2		
	CC: HS-ESS3-2		SP: HS-LS2-3		
			SP: HS-LS4-6		
			SP: HS-PS1-2		

solve	specify	HS-ETS1-1 HS-PS1-6 SP SP: 3-5-ETS1-1 SP: 3-ETS1-2 SP: 3-LS3-2 SP: 3-LS4-2 SP: 3-PS2-3 SP: 3-PS2-4 SP: 4-ESS1-1 SP: 4-ESS3-2 SP: 4-PS3-1 SP: 4-PS3-3 SP: 4-PS3-4 SP: 4-PS4-3 SP: MS-ESS3-5 SP: MS-ETS1-1 SP: MS-PS2-3 SP: HS-ETS1-1	support	MS-LS1-4 MS-LS1-7 MS-LS2-4 MS-LS4-6 MS-PS2-4 MS-PS3-5 MS-PS4-3 HS-LS1-6 HS-LS2-1 HS-LS2-2 HS-LS2-4 HS-LS2-8 HS-LS3-2 HS-LS4-1 HS-LS4-3 HS-LS4-5 HS-PS1-7 HS-PS2-1 HS-PS2-2 HS-PS4-1 HS-PS4-3 CC: K-PS2-1 CC: K-PS2-2 CC: 1-PS4-1 CC: 1-PS4-2 CC: 1-PS4-3 CC: 2-PS1-2 CC: 4-ESS1-1 CC: 4-ESS2-2 CC: HS-ESS2-4 CC: HS-ESS3-5 DCI: 5-ESS2-1 DCI: MS-LS1-7
		SP: 6 CC: 2-ESS2-1 CC: MS-ESS1-3 CC: MS-ESS1-4 CC: MS-ESS2-2 CC: MS-PS1-1 DCI: HS-ESS1-6 SP: K-PS2-1 SP: K-PS3-1 SP: 1-PS4-1		
	study	CC: HS-ESS1-2 CC: HS-ESS1-6 CC: HS-LS4-1 CC: HS-PS4-3		
		DCI: 3-5-ETS1-3 CC: HS-PS3-5 CC: HS-PS4-4		
		K-ESS2-2 3-LS3-2 4-ESS1-1 4-LS1-1 5-ESS1-1 5-LS1-1 5-PS2-1 MS-ESS3-4 MS-LS1-3		
		SP: K-ESS2-2 SP: K-PS2-1 SP: K-PS3-1 SP: 1-ESS1-2 SP: 1-PS4-1		
	suggest	DCI: 3-5-ETS1-3 CC: HS-PS3-5 CC: HS-PS4-4		
		DCI: MS-LS4-6 DCI: HS-ESS1-2 DCI: HS-ESS3-3		
		DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-LS2-7 DCI: HS-LS4-6		
		SP: K-ESS2-2 SP: K-PS2-1 SP: K-PS3-1 SP: 1-ESS1-2 SP: 1-PS4-1		
sort		CC: 3-LS3-1 CC: 4-PS4-1 CC: 4-PS4-3 CC: 5-ESS1-2		

support (cont'd)	SP: 1-PS4-3	SP: MS-PS4-1	MS-LS1-8
	SP: 2-LS2-1	SP: HS-ESS1-2	MS-LS4-5
	SP: 2-LS4-1	SP: HS-ESS1-6	SP: MS-LS1-8
	SP: 2-PS1-1	SP: HS-ESS2-4	SP: MS-LS4-5
	SP: 2-PS1-4	SP: HS-ESS3-1	SP: MS-PS1-3
	SP: 3-5-ETS1-3	SP: HS-ESS3-4	SP: HS-ESS1-1
	SP: 3-LS3-2	SP: HS-ESS3-5	SP: HS-ESS2-1
	SP: 3-PS2-1	SP: HS-ESS3-6	SP: HS-ESS2-3
	SP: 3-PS2-2	SP: HS-ETS1-2	SP: HS-ESS2-4
	SP: 4-ESS1-1	SP: HS-ETS1-3	SP: HS-ESS2-6
	SP: 4-ESS2-1	SP: HS-LS1-1	SP: HS-LS1-2
	SP: 4-PS3-2	SP: HS-LS1-6	SP: HS-LS1-4
	SP: 5-ESS1-1	SP: HS-LS2-1	SP: HS-LS1-5
	SP: 5-LS1-1	SP: HS-LS2-2	SP: HS-LS1-7
	SP: 5-PS1-3	SP: HS-LS2-3	SP: HS-LS2-5
	SP: 5-PS1-4	SP: HS-LS2-4	SP: HS-PS1-1
	SP: MS-ESS1-4	SP: HS-LS2-7	SP: HS-PS1-4
	SP: MS-ESS2-2	SP: HS-LS4-2	SP: HS-PS1-8
	SP: MS-ESS2-5	SP: HS-LS4-4	SP: HS-PS3-2
	SP: MS-ESS3-1	SP: HS-PS1-2	SP: HS-PS3-5
	SP: MS-ESS3-3	SP: HS-PS1-5	K-2-ETS1-3
	SP: MS-ESS3-4	SP: HS-PS1-6	2-PS1-2
	SP: MS-ETS1-2	SP: HS-PS1-7	4-ESS2-1
	SP: MS-LS1-1	SP: HS-PS2-3	4-PS3-4
	SP: MS-LS1-3	SP: HS-PS3-3	MS-PS1-6
	SP: MS-LS1-4	SP: HS-PS4-1	MS-PS3-3
	SP: MS-LS1-5		HS-ESS2-5
	SP: MS-LS1-6		HS-LS4-6
	SP: MS-LS1-8		SP: 2
	SP: MS-LS2-2		SP: 3
	SP: MS-LS2-4		SP: 5
	SP: MS-LS2-5		SP: 7
	SP: MS-LS4-2		test
	SP: MS-LS4-4		CC: K-PS2-1
	SP: MS-LS4-5		CC: K-PS2-2
	SP: MS-LS4-6		CC: 3-ESS3-1
	SP: MS-PS1-3		CC: 3-PS2-3
	SP: MS-PS1-6		CC: 4-ESS2-1
	SP: MS-PS2-1		CC: 4-ESS3-2
	SP: MS-PS2-2		CC: 5-PS1-4
	SP: MS-PS2-4		DCI: K-2-ETS1-3
	SP: MS-PS2-5		DCI: 2-ESS2-1
	SP: MS-PS3-3		DCI: 3-5-ETS1-2
	SP: MS-PS3-4		DCI: 3-5-ETS1-3
	SP: MS-PS3-5		DCI: 4-ESS3-2
			DCI: 4-PS4-3
support			
synthesize			

test (cont'd)	DCI: MS-ETS1-4	SP: HS-PS2-5
	DCI: MS-PS1-6	SP: HS-PS3-4
	DCI: MS-PS3-3	MS-LS1-6
	DCI: HS-ETS1-4	DCI: 5-LS2-1
	DCI: HS-LS4-6	DCI: MS-PS4-2
	SP: K-ESS3-2	CC: MS-LS2-3
	SP: K-PS2-1	CC: MS-PS1-6
	SP: K-PS3-1	CC: MS-PS3-3
	SP: 1-ESS1-2	CC: HS-LS2-2
	SP: 1-PS4-1	DCI: K-2-ETS1-1
	SP: 1-PS4-3	DCI: HS-PS1-4
	SP: 2-LS2-1	DCI: HS-PS1-5
	SP: 2-LS4-1	DCI: HS-PS3-2
	SP: 2-PS1-1	MS-PS1-6
	SP: 2-PS1-2	SP: MS-PS1-6
	SP: 3-5-ETS1-3	CC: HS-ESS1-2
	SP: 3-PS2-2	CC: HS-ESS1-6
	SP: 4-ESS2-1	CC: HS-LS4-1
	SP: 4-LS1-2	CC: HS-PS4-3
	SP: 4-PS3-2	MS-ESS2-6
	SP: 5-PS1-3	MS-PS1-1
	SP: 5-PS1-4	DCI: 1-LS3-1
	SP: MS-ESS1-1	DCI: 3-ESS2-2
	SP: MS-ESS1-2	DCI: 3-LS2-1
	SP: MS-ESS2-1	DCI: 3-LS3-1
	SP: MS-ESS2-4	DCI: MS-ESS2-6
	SP: MS-ESS2-5	DCI: MS-LS2-2
	SP: MS-ESS2-6	DCI: MS-LS2-4
	SP: MS-ETS1-4	DCI: HS-LS4-1
	SP: MS-LS1-2	SP: HS-PS4-4
	SP: MS-LS1-7	CC: MS-LS1-2
	SP: MS-LS2-3	CC: MS-LS3-1

Domain-Specific Vocabulary Terms

Term	Source
ability to support life	BBK
abiotic	MS-LS2-2 HS-LS4-4
abiotic components of ecosystems	BBK
absorb	MS-PS1-6 MS-PS4-2 HS-PS4-4 DCI: MS-ESS2-6 DCI: MS-PS4-2 DCI: HS-ESS1-2 DCI: HS-ESS2-5 DCI: HS-ESS3-6 DCI: HS-PS4-4 DCI: HS-PS4-5
absorbency	2-PS1-2
absorption	HS-PS1-4 DCI: HS-ESS2-2 DCI: HS-ESS2-4 DCI: HS-PS1-8
abstract	SP: 4-PS4-1 SP: MS-ESS1-1 SP: MS-ESS1-2 SP: MS-ESS2-1 SP: MS-ESS2-4 SP: MS-ESS2-6 SP: MS-ETS1-4 SP: MS-LS1-2 SP: MS-LS1-7 SP: MS-LS2-3 SP: MS-LS3-1 SP: MS-LS3-2 SP: MS-PS1-1 SP: MS-PS1-4 SP: MS-PS1-5 SP: MS-PS3-2 SP: MS-PS4-2

abundance	DCI: HS-ESS2-5 DCI: HS-LS2-1 DCI: HS-LS2-2
abundant	MS-LS2-1
acceleration	BBK HS-PS2-1
accelerator	BBK
account	1-LS3-1 1-PS4-2 2-PS1-3 MS-ETS1-1 HS-ESS1-6 HS-ETS1-1 HS-ETS1-3 CC: MS-PS1-3 CC: MS-PS4-2 DCI: 3-5-ETS1-1 DCI: 4-PS3-4 DCI: HS-ESS3-4 DCI: HS-ETS1-1 DCI: HS-ETS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6 DCI: HS-PS2-3 DCI: HS-PS3-3 SP: K-PS3-2 SP: 1-LS3-1 SP: 1-PS4-4 SP: 2-ESS1-1 SP: 2-ESS2-1 SP: 2-PS1-3 SP: HS-ESS2-4 SP: HS-PS1-5 SP: HS-PS2-3 SP:

accuracy	SP: 3-ESS2-2 SP: 4-ESS3-1 SP: 5-ESS3-1 SP: MS-LS1-8 SP: MS-LS4-5 SP: MS-PS1-3 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4
acid	BBK
acid-base reactions	BBK
acidification	HS-ESS3-6
acidity	HS-LS4-4
acquired trait	BBK
actual mass	BBK
adaptation	BBK HS-LS4-2 HS-LS4-4 DCI: 3-LS4-3 DCI: MS-LS4-6 DCI: HS-LS4-3 DCI: HS-LS4-4
adaptive characteristics	BBK
adult	DCI: 1-LS1-2 DCI: MS-LS1-5
advance	SP: 8 CC: MS-ESS1-3 CC: MS-LS1-1 CC: MS-LS4-5 CC: MS-PS1-3 CC: MS-PS4-3 CC: HS-LS3-3 SP: HS-ESS3-5
advantage	3-LS4-2 HS-PS4-2 SP: 8 DCI: 3-LS4-2

advantageous	HS-LS4-3 DCI: HS-LS4-3 DCI: HS-LS4-4
advection	BBK
adverse	HS-LS4-6 DCI: HS-LS2-7 DCI: HS-LS4-6
aerobic	HS-LS2-3
aesthetics	HS-ETS1-3 SP: 6 DCI: HS-ETS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6 DCI: HS-ESS3-2 DCI: HS-ESS3-4
age	5-ESS1-1 MS-ESS1-4 HS-ESS1-5 HS-ESS1-6 DCI: HS-ESS1-5 DCI: HS-ESS1-6
age of the universe	BBK
agreed-upon	SP: MS-ETS1-2 SP: MS-LS2-5
agricultural	MS-ESS3-5 HS-ESS3-2 HS-ESS3-3
agriculture	MS-ESS3-3 HS-ESS3-4 DCI: 5-ESS3-1
air mass	MS-ESS2-5
air mass circulation	BBK
air movement	BBK
Albert Einstein	BBK
Alfred Wegener	BBK
algae	DCI: MS-LS1-6 DCI: HS-LS2-4

algebraic	CC: HS-ESS1-4 CC: HS-LS3-3 SP: HS-ESS1-4 SP: HS-ESS3-3 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS4-6 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1	anatomical anatomical characteristic anatomy ancestry ancient ancient core angle animal features animal husbandry animal product anthropogenic Antoine Lavoisier apparent movement of the planets apparent movement of the stars apparent movement of the sun application applied force approximation aquatic aquifer
allele	DCI: MS-LS3-2	BBK
alternative	MS-PS1-3 SP: 1 SP: 7 SP: 5-ESS2-2 SP: 5-PS1-2	MS-LS4-5
altitude	MS-ESS2-6 DCI: MS-ESS2-6	BBK
amino acid	HS-LS1-6 DCI: HS-LS1-6 DCI: HS-LS4-1	BBK
amino acid sequence	BBK	BBK
ammonia	MS-PS1-1	BBK
ammonium chloride	MS-PS1-6	BBK
amplitude	BBK 4-PS4-1 MS-PS4-1 DCI: 4-PS4-1 DCI: MS-PS4-1	HS-LS4-5 HS-PS1-6 HS-PS1-7
anaerobic	HS-LS2-3 DCI: HS-LS2-3	BBK
analog	MS-PS4-3	CC: HS-PS3-1

area	K-ESS3-1 K-PS3-2 2-ESS2-2 3-LS4-1 DCI: 2-ESS2-2 DCI: 2-LS4-1 DCI: 3-ESS2-1 DCI: 3-ESS2-2 DCI: 4-ESS2-2 DCI: MS-ESS1-1 SP: 5-ESS2-2	atmosphere	BBK 5-ESS2-1 5-ESS2-2 MS-ESS1-3 HS-ESS2-6 HS-ESS2-7 HS-ESS3-4 HS-ESS3-5 HS-ESS3-6 HS-LS2-5 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: MS-ESS2-4 DCI: MS-ESS2-5 DCI: MS-ESS2-6 DCI: MS-ESS3-1 DCI: MS-LS1-6 DCI: HS-ESS2-2 DCI: HS-ESS2-4 DCI: HS-ESS2-6 DCI: HS-ESS3-6 DCI: HS-LS2-4 DCI: HS-LS2-5	atom	BBK MS-PS1-1 MS-PS1-4 MS-PS1-5 HS-LS2-4 HS-PS1-1 HS-PS1-2 HS-PS1-3 HS-PS1-7 HS-PS1-8 CC: MS-LS1-7 CC: MS-PS1-5 CC: HS-ESS1-3 CC: HS-PS1-8 DCI: MS-LS2-3 DCI: MS-PS1-1 DCI: MS-PS1-2 DCI: MS-PS1-3 DCI: MS-PS1-4 DCI: MS-PS1-5 DCI: HS-ESS1-2 DCI: HS-PS1-1 DCI: HS-PS1-2 DCI: HS-PS1-3 DCI: HS-PS1-4 DCI: HS-PS1-5 DCI: HS-PS1-6 DCI: HS-PS1-7 DCI: HS-PS2-6 DCI: HS-PS4-4
arise	DCI: MS-LS3-1 DCI: MS-LS3-2 SP: HS-LS3-1	atmospheric	MS-ESS3-5 HS-ESS2-4 HS-ESS3-6 DCI: MS-ESS2-6 DCI: HS-ESS2-6 DCI: HS-ESS3-6 DCI: HS-LS2-4 DCI: HS-LS2-5	atomic	MS-PS1-1 DCI: HS-ESS1-2 DCI: HS-ESS1-3
artificial selection	MS-LS4-5 DCI: MS-LS4-5	atmospheric change	BBK	atomic arrangement	BBK
asexual reproduction	BBK MS-LS3-2	atmospheric circulation	MS-ESS2-6	atomic bomb	BBK
aspect	3-T-ETS1-3 CC: HS-ESS2-2 CC: HS-ESS3-2 CC: HS-ETS1-1 CC: HS-ETS1-3 SP: HS-ESS1-2 SP: HS-ESS1-6 SP: HS-LS4-1 SP: HS-PS4-3	atmospheric composition	BBK	atomic bonding principles	BBK
asteroid	BBK DCI: MS-ESS1-2 DCI: MS-ESS1-3 DCI: HS-ESS1-6	atmospheric layers	BBK	atomic configuration	BBK
asteroid impact	BBK	atmospheric pressure	BBK	atomic energy	BBK
asteroid movement patterns	BBK			atomic-level	CC: MS-PS1-2 CC: MS-PS1-5
astronomical	HS-ESS1-2			atomic mass	BBK
astronomical distance	BBK			atomic motion	BBK
astronomical object	BBK			atomic nucleus	BBK
astronomical size	BBK			atomic number	BBK
astronomy	BBK				

atomic reaction	BBK	battery	BBK DCI: HS-PS2-5	best	2-PS1-2 MS-ETS1-3 SP: 4 SP: 6 SP: 7 DCI: 3-5-ETS1-3 DCI: 4-PS4-3 DCI: MS-ETS1-3 DCI: MS-PS1-6
atomic scale	DCI: HS-PS2-6	beam	1-PS4-3 DCI: 1-PS4-3	best practice	HS-ESS3-2
atomic theory	BBK	bedrock	BBK	Big Bang theory	HS-ESS1-2 DCI: HS-ESS1-2 DCI: HS-ESS1-3
atomic weight	BBK		1-LS1-2 4-LS1-1 MS-LS1-4 MS-LS1-8 HS-LS2-8 HS-LS4-2 HS-PS4-5 SP: 5 CC: HS-PS3-1 DCI: 1-LS1-1 DCI: 3-LS2-1 DCI: 4-LS1-1 DCI: MS-ESS3-5 DCI: MS-LS1-4 DCI: MS-LS1-8 DCI: HS-LS1-3 DCI: HS-LS2-8 DCI: HS-PS3-1	binary	MS-PS4-3
attract	MS-LS1-4	behavior		biochemical characteristics	BBK
attraction	DCI: HS-PS1-1 DCI: HS-PS1-3 DCI: HS-PS2-6			biodiversity	MS-LS2-5 HS-ESS3-3 HS-LS2-2 HS-LS2-7 HS-LS4-6 DCI: MS-LS2-5 DCI: HS-ESS3-3 DCI: HS-LS2-7 DCI: HS-LS4-6
attractive	MS-PS2-4 HS-PS2-6 DCI: MS-PS2-3 DCI: MS-PS2-4			biogeochemical	HS-ESS2-6
available	MS-LS2-1 HS-ESS1-6 DCI: 1-PS4-2 DCI: 3-5-ETS1-1 DCI: 4-PS3-4 DCI: 5-ESS2-2 SP: MS-PS2-3	behavior patterns	BBK	biogeology	DCI: K-ESS2-2 DCI: 4-ESS2-1 DCI: HS-ESS2-7
average (adjective)	3-ESS2-1 MS-PS3-4 DCI: MS-PS1-4 DCI: MS-PS3-3 DCI: MS-PS3-4 DCI: HS-ESS3-6	behavioral	DCI: HS-LS4-3 DCI: HS-LS4-4	biological	BBK MS-LS2-4 HS-LS2-6 HS-LS4-1 DCI: MS-LS2-4 DCI: HS-LS2-2 DCI: HS-LS2-5 DCI: HS-LS2-6 DCI: HS-LS4-1
average (noun)	HS-LS2-2	behavioral change in organisms	BBK	biological evolution	BBK
Avogadro's hypothesis	BBK	behavioral response to stimuli	BBK	biological molecule	BBK
axis	HS-ESS2-4 DCI: 5-ESS1-2 DCI: MS-ESS1-1 DCI: HS-ESS2-4	beneficial	MS-LS2-2 MS-LS3-1 DCI: MS-LS3-1	biomass	HS-ESS3-4 HS-ESS3-6 HS-LS2-4
backbone	DCI: HS-LS1-6	beneficial change	BBK		
bacteria	DCI: 5-LS2-1	Bernoulli's principle	BBK		
baking soda	5-PS1-3				
balance	BBK				
balanced force	BBK 3-PS2-1 MS-PS2-2 DCI: HS-PS2-2 DCI: HS-PS2-3				
band	DCI: 4-ESS2-2				
barrier	3-ESS3-1 HS-LS4-4				
base	BBK				

biosphere	5-ESS2-1 HS-ESS2-6 HS-ESS2-7 HS-ESS3-6 HS-LS2-5 DCI: 5-ESS2-1 DCI: MS-ESS3-1 DCI: MS-ESS3-3 DCI: HS-ESS2-7 DCI: HS-ESS3-6 DCI: HS-LS2-5	brain 4-LS1-1 4-LS1-2 MS-LS1-8 DCI: 4-LS1-2 DCI: MS-LS1-8 branch (noun) 1-LS1-1 branch (verb) DCI: HS-LS4-1 break down DCI: 5-LS2-1 DCI: MS-LS1-7 DCI: HS-ETS1-2 DCI: HS-PS1-6 DCI: HS-PS2-3 breakdown of food molecules BBK breed 1-LS3-1 MS-LS1-4 MS-LS1-5 DCI: MS-LS4-5 brightness 5-ESS1-1 DCI: MS-PS4-2 DCI: HS-ESS1-2 DCI: HS-ESS1-3 building block DCI: MS-PS1-4 bulk scale HS-PS1-3 DCI: HS-PS1-3 DCI: HS-PS2-6 buoyancy BBK burn BBK 4-ESS3-1 MS-PS1-2 DCI: MS-ESS3-5 DCI: HS-ESS1-1 calcium chloride MS-PS1-6 calculator BBK camouflage 3-LS4-2 canopy K-PS3-2 canyon 4-ESS1-1 capability DCI: MS-ESS3-5 capacity HS-LS2-1 CC: MS-PS4-3 DCI: MS-LS4-5 DCI: HS-ESS2-5 DCI: HS-LS2-1 DCI: HS-LS2-2	carbon HS-ESS2-6 HS-LS1-6 HS-LS2-4 HS-LS2-5 HS-PS1-2 DCI: MS-LS1-6 DCI: MS-LS1-7 DCI: HS-LS1-6 DCI: HS-LS2-5 carbon atom BBK carbon cycle BBK carbon dioxide BBK MS-ESS3-5 MS-PS1-4 HS-ESS3-6 DCI: MS-LS1-6 DCI: MS-LS1-7 DCI: HS-ESS2-4 DCI: HS-ESS2-6 DCI: HS-ESS2-7 DCI: HS-LS1-5 carrying capacity BBK HS-LS2-1 DCI: HS-LS2-1 DCI: HS-LS2-2 catalyst BBK catastrophic MS-ESS2-2 MS-ESS3-2 celestial body BBK cell BBK MS-LS1-1 MS-LS1-2 HS-LS1-1 DCI: MS-LS1-1 DCI: MS-LS1-2 DCI: HS-LS1-4 DCI: HS-LS3-1 cell division BBK DCI: HS-LS3-2 cell function BBK cell growth BBK cell membrane BBK MS-LS1-2 DCI: MS-LS1-2 cell organelle BBK
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cell phone	CC: 3-ESS3-1 DCI: 4-PS4-3		
cell wall	BBK MS-LS1-2		
cellular communication	BBK		
cellular differentiation	BBK		
cellular division	HS-LS1-4 DCI: HS-LS1-4		
cellular energy conversion	BBK		
cellular regulation	BBK		
cellular respiration	HS-LS1-7 HS-LS2-5 DCI: MS-LS1-7 DCI: HS-LS1-7 DCI: HS-LS2-4 DCI: HS-LS2-5		
cellular response	BBK		
cellular waste disposal	BBK		
Celsius	Marzano Research		
chained molecules	HS-PS2-6		
challenge	HS-ETS1-1 DCI: HS-ETS1-1 DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-LS2-6 SP: HS-PS4-2		
change of direction	BBK		
change of motion	BBK		
change of speed	BBK		
change of state	MS-PS1-4		
changes in the Earth's surface	BBK		
		characteristic	3-LS4-2 3-LS4-3 3-LS4-4 MS-ETS1-3 MS-LS1-4 HS-LS3-1 DCI: 3-LS3-1 DCI: 3-LS3-2 DCI: 3-LS4-2 DCI: 3-LS4-4 DCI: 4-ESS2-1 DCI: MS-ETS1-3 DCI: MS-LS1-4 DCI: MS-LS2-4 DCI: MS-LS4-5 DCI: MS-PS1-2 DCI: MS-PS1-3 DCI: MS-PS1-5 DCI: MS-PS1-6 DCI: HS-ESS1-2 DCI: HS-ESS1-5 DCI: HS-ESS1-6 DCI: HS-LS3-1
		characteristics of air	BBK
		characteristics of life	BBK
		charge	HS-PS3-5 DCI: MS-PS2-3 DCI: HS-PS1-1 DCI: HS-PS2-3 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-5 DCI: HS-PS2-6
		charge attraction	BBK
		charge repulsion	BBK
		charged	DCI: HS-PS1-1 DCI: HS-PS3-1
		charged object	BBK DCI: MS-PS2-5
		charged rod	3-PS2-3
		Charles Darwin	BBK
		Charles Lyell	BBK
		chemical	HS-ESS2-5 HS-PS1-6 DCI: MS-LS1-8 DCI: MS-PS1-2 DCI: MS-PS1-3 DCI: MS-PS1-5 DCI: HS-LS2-5
		chemical bond	BBK
		chemical change	BBK DCI: MS-ESS2-1
		chemical compound	BBK
		chemical element	BBK
		chemical energy	BBK
		chemical equation	HS-LS1-5
		chemical organization of organisms	BBK
		chemical process	MS-PS1-3 MS-PS1-6 HS-LS1-7 CC: MS-LS1-7 CC: MS-PS1-5 DCI: 5-PS3-1 DCI: MS-PS1-2 DCI: MS-PS1-3 DCI: MS-PS1-5 DCI: HS-ESS1-1 DCI: HS-ESS2-3 DCI: HS-LS2-5 DCI: HS-PS1-2 DCI: HS-PS1-4 DCI: HS-PS1-5 DCI: HS-PS1-7
		chemical properties	BBK DCI: MS-PS1-2 DCI: MS-PS1-3 DCI: HS-ESS2-5 DCI: HS-PS1-1 DCI: HS-PS1-2

chemical reaction	BBK MS-LS1-7 MS-PS1-2 MS-PS1-5 HS-PS1-2 HS-PS1-4 HS-PS1-7 DCI: MS-LS1-7 DCI: MS-PS1-6 DCI: HS-LS1-7	climate	BBK 3-ESS2-2 5-ESS2-1 MS-ESS2-6 HS-ESS2-2 HS-ESS2-4 HS-ESS3-1 HS-ESS3-5 HS-LS2-1 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 CC: MS-ETS1-1 DCI: 3-ESS2-1 DCI: 5-ESS2-1 DCI: MS-ESS2-6 DCI: HS-ESS2-2 DCI: HS-ESS2-4 DCI: HS-ESS2-6 DCI: HS-ESS3-6	coastal	HS-ESS2-1 HS-ESS2-2
chemical reaction rate	BBK			coastline	HS-ESS2-7
chemical reaction system	HS-PS1-4 HS-PS1-6			code (noun)	DCI: HS-LS3-1
chemical system	HS-PS1-6			code (verb)	DCI: HS-LS1-1 DCI: HS-LS3-1
chlorine	HS-PS1-2			coded	4-PS4-3
chloroplast	BBK MS-LS1-2			coevolution	HS-ESS2-7
chromatography	BBK			cold	MS-LS1-4 DCI: MS-PS3-3
	BBK MS-LS3-1 HS-LS3-1 DCI: MS-LS3-1 DCI: MS-LS3-2				SP: 1-PS4-1 SP: 1-PS4-3 SP: 2-LS2-1 SP: 2-PS1-1 SP: 3-5-ETS1-3 SP: 3-PS2-1 SP: 5-PS1-4 SP: MS-PS2-2 SP: MS-PS3-4 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4
chromosome	BBK MS-LS3-1 HS-LS3-1 DCI: MS-LS3-1 DCI: MS-LS3-2			collaboratively	DCI: MS-ESS1-2 DCI: MS-ESS1-3 DCI: MS-LS4-1 SP: 4
chromosome pair	BBK			collection	4-PS3-3 MS-ESS2-5 DCI: K-PS2-1 DCI: 4-PS3-2 DCI: 4-PS3-3
chronological order	MS-LS4-1 DCI: MS-LS4-1			collide	DCI: MS-ESS2-3 DCI: MS-PS1-4
circular motion	BBK			closed system	MS-PS2-1 HS-PS1-5 HS-PS2-3 DCI: 4-PS3-2 DCI: 4-PS3-3
circulatory system	BBK HS-LS1-2			cloud	DCI: HS-ESS1-4 DCI: HS-PS1-4 DCI: HS-PS1-5
civilization	CC: HS-ESS3-1 CC: HS-ESS3-3 CC: HS-PS3-3 CC: HS-PS4-2 CC: HS-PS4-5			cloudy	K-ESS2-1
				coal	HS-ESS3-2

color	BBK 2-PS1-1 4-LS1-1 4-PS4-2 5-PS1-3 DCI: MS-PS4-2
color of light	BBK
coloration	3-LS4-2
combination	HS-LS3-2 HS-PS3-2 DCI: K-ESS2-1 DCI: HS-ESS2-5 DCI: HS-LS3-2 DCI: HS-PS3-2
combustion	MS-ESS3-5
comet	BBK
comet impact	BBK
comet movement patterns	BBK
comfort	1-LS1-2 DCI: K-ESS2-2 DCI: K-ESS3-3
common ancestry	BBK HS-LS4-1

communicate	K-ESS3-3 1-PS4-4 HS-ESS1-3 HS-LS4-1 HS-PS1-7 HS-PS2-6 HS-PS4-5 CC: 5-ESS1-2 DCI: 1-PS4-4 DCI: 2-LS2-2 DCI: K-2-ETS1-2 DCI: 3-5-ETS1-2 SP: K-ESS3-2 SP: K-ESS3-3 SP: 1-LS1-2 SP: 2-ESS2-3 SP: 3-ESS2-2 SP: 4-ESS3-1 SP: 5-ESS3-1 SP: MS-LS1-8 SP: MS-LS4-5 SP: MS-PS1-3 SP: MS-PS4-3 SP: HS-ESS1-3 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-4 SP: HS-PS4-5
communication	MS-PS4-3 HS-PS4-5 SP: 8 DCI: HS-PS4-5
competition	BBK HS-LS2-1 HS-LS4-2 DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-LS4-2
competitive	MS-LS2-2 DCI: MS-LS2-2
composition of matter	BBK
composition of the universe	BBK

compound	HS-LS1-7 DCI: HS-LS1-7
compress	5-PS1-1
compression	DCI: HS-PS3-1
computational	HS-ESS1-4
	HS-ESS3-3
	HS-ESS3-6
	HS-LS2-1
	HS-PS3-1
	CC: MS-PS4-3
	SP: 5-ESS2-2
	SP: 5-PS1-2
	SP: MS-LS4-6
	SP: MS-PS4-1
	SP: HS-ESS1-4
	SP: HS-ESS2-2
	SP: HS-ESS3-3
	SP: HS-ESS3-5
	SP: HS-ESS3-6
	SP: HS-ETS1-4
	SP: HS-LS2-1
	SP: HS-LS2-2
	SP: HS-LS2-4
	SP: HS-LS4-6
	SP: HS-PS1-7
	SP: HS-PS2-1
	SP: HS-PS2-2
	SP: HS-PS2-4
	SP: HS-PS2-4(a)
	SP: HS-PS2-4(b)
	SP: HS-PS3-1
	SP: HS-PS4-1

computer	BBK	conceptual	MS-ESS1-1	consequence	MS-ESS3-4
	MS-ESS1-2		MS-ESS1-2		CC: MS-ESS3-1
	MS-PS1-1		MS-ESS2-4		CC: MS-ESS3-4
	HS-ETS1-4		MS-LS1-3		CC: MS-LS2-5
	HS-PS3-2		MS-LS3-1		CC: MS-LS4-5
	HS-PS4-2		HS-LS1-5		CC: MS-ETS1-1
	CC: HS-ETS1-4		HS-LS1-7		DCI: HS-LS4-2
	CC: HS-LS1-2		HS-LS2-3		MS-LS2-3
	CC: HS-LS1-4		HS-LS4-1		MS-PS1-5
	CC: HS-LS2-5		HS-PS2-4(a)		HS-ESS3-2
	CC: HS-PS4-3		HS-PS2-4(b)		HS-ESS3-3
	DCI: 4-PS4-3		HS-PS3-4		HS-PS2-2
	DCI: HS-ESS3-6		DCI: 3-PS2-1		DCI: HS-PS3-1
	DCI: HS-ETS1-4		SP: MS-LS4-1		BBK
	DCI: HS-LS4-6		SP: MS-PS1-2		BBK
	DCI: HS-PS4-2		SP: MS-PS2-2		BBK
	DCI: HS-PS4-5		SP: MS-PS2-4		BBK
	SP: HS-ETS1-4		SP: MS-PS3-4		BBK
computer screen	MS-PS4-3		SP: MS-PS3-5	conserve	5-PS1-2
concentration	MS-PS1-6		SP: MS-PS4-1		MS-PS1-5
	HS-ESS3-1		SP: HS-ESS2-5		HS-LS2-4
	HS-PS1-5		SP: HS-LS1-3		HS-PS1-4
	DCI: HS-ESS2-4		SP: HS-PS1-3		HS-PS1-7
	DCI: HS-ESS2-6		SP: HS-PS2-5		HS-PS2-2
concentration of reactants	BBK		SP: HS-PS3-4		CC: MS-LS1-7
concrete	SP: K-2-ETS1-2	condensation	SP: K-ESS3-1		CC: MS-PS1-5
	SP: 2-ESS2-2		SP: 2-LS2-2		CC: HS-ESS1-3
	SP: 2-LS2-2		BBK		CC: HS-ESS2-6
	BBK		MS-ESS2-5		CC: HS-PS1-7
condensation	MS-ESS2-5		DCI: 5-PS1-3		CC: HS-PS1-8
	DCI: 5-PS1-3		DCI: MS-ESS2-4		DCI: 5-PS1-2
	DCI: MS-ESS2-4		DCI: MS-PS1-5		DCI: HS-LS2-4
condition-dependent	DCI: HS-PS1-6	conductive	DCI: HS-PS1-2		DCI: HS-PS1-2
conduction	BBK		DCI: HS-PS1-7		DCI: HS-PS1-7
conductive	HS-PS2-6		DCI: HS-PS3-1		DCI: HS-PS3-1
conductivity	BBK	conductor	DCI: HS-PS3-2		DCI: HS-PS3-2
conductor	BBK		SP		SP
configuration	SP		DCI: HS-PS3-1		DCI: HS-PS3-1
	DCI: HS-PS3-1		DCI: HS-PS3-2		DCI: HS-PS3-2
	DCI: HS-PS3-2				

consideration	MS-LS2-5 DCI: MS-ETS1-1 DCI: MS-PS3-3 SP: HS-ESS3-2 SP: HS-ESS3-4 SP: HS-ETS1-2 SP: HS-ETS1-3 SP: HS-LS2-7 SP: HS-PS1-6 SP: HS-PS3-3	continental	MS-ESS2-3 HS-ESS1-5 HS-ESS2-1 DCI: HS-ESS1-5 DCI: HS-ESS2-1	convert	4-PS3-4 HS-PS3-3 HS-PS4-5 DCI: 4-PS4-3 DCI: HS-LS1-5 DCI: HS-PS3-4 DCI: HS-PS3-4 DCI: HS-PS4-4
consistency	SP: HS-ESS2-2 SP: HS-ESS3-5 SP: HS-LS3-3 SP: HS-LS4-3 SP: HS-PS2-1	continental boundary	4-ESS2-2	convincing	SP: MS-ESS3-4 SP: MS-ETS1-2 SP: MS-LS1-3 SP: MS-LS1-4 SP: MS-LS2-4 SP: MS-LS2-5 SP: MS-PS2-4 SP: MS-PS3-5
constant force	HS-PS2-1	continental crust	MS-ESS2-3 HS-ESS1-5	cook	2-PS1-4
constant speed	BBK	continental shelf	MS-ESS2-3	cool (adjective)	BBK K-ESS2-1
constellation	BBK	continuation of species	BBK	cool (verb)	BBK 2-PS1-4 4-ESS2-1 5-PS1-2 MS-PS3-4 DCI: 2-PS1-4 DCI: HS-PS3-4
constrain	MS-ESS2-6 DCI: MS-LS2-1	contribute	MS-LS1-2 HS-LS4-4 DCI: MS-LS3-2 DCI: HS-ESS3-4 DCI: HS-LS4-5 DCI: HS-LS4-6	cooperative	HS-LS2-8
construction	SP: 2 SP: 6 MS-ESS3-3	control [variable]	3-5-ETS1-3 MS-PS1-6 SP: 3-5-ETS1-3 SP: 3-PS2-1 SP: 4-ESS2-1 SP: 4-PS3-2 SP: 5-PS1-3 SP: 5-PS1-4	cope	DCI: 3-LS2-1
consume	DCI: HS-LS2-4	control of variables	BBK SP: 3	Copernican revolution	BBK
consumer	DCI: MS-LS2-3	controlled	3-5-ETS1-3 HS-ESS2-3 SP: 3-5-ETS1-3 SP: 3-PS2-1 SP: 5-PS1-4	Copernicus	BBK
consumption	MS-ESS3-4 HS-ESS3-3 DCI: MS-ESS3-3 DCI: MS-ESS3-4	controlled experiment	BBK	coral reef	HS-ESS2-7
contact	3-PS2-3 MS-PS2-5 DCI: 3-PS2-1 DCI: 3-PS2-3 DCI: 3-PS2-4 DCI: MS-PS1-4	convection	BBK HS-ESS2-3 DCI: HS-ESS2-3	core	BBK HS-ESS1-1 HS-ESS1-5 HS-ESS2-3 DCI: HS-ESS2-3
contact force	DCI: 4-PS3-3 DCI: HS-PS1-1 DCI: HS-PS1-3 DCI: HS-PS2-6	convection current	BBK	Coriolis effect	MS-ESS2-6
content	HS-ESS2-5 DCI: HS-LS3-1 SP: 2-ESS2-3	convention cycle	MS-ESS2-6	correlation coefficient	SP: HS-LS3-3 SP: HS-LS4-3
continent	MS-ESS2-3 MS-ESS2-6 DCI: 4-ESS2-2	conversion	MS-PS4-3 HS-PS1-7 HS-PS3-2 DCI: 4-PS3-4	cosmic microwave background	HS-ESS1-2 DCI: HS-ESS1-2

cost	3-5-ETS1-1 4-PS3-4 HS-ESS3-3 HS-ETS1-3 CC: HS-ESS2-2 CC: HS-ESS3-2 CC: HS-ESS3-4 CC: HS-ETS1-1 CC: HS-ETS1-3 CC: HS-PS3-3 CC: HS-PS4-2 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ETS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6 SP: 3-5-ETS1-1 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4	criteria	BBK 3-5-ETS1-1 3-5-ETS1-2 MS-ETS1-1 MS-ETS1-2 MS-ETS1-3 HS-ETS1-4 HS-ETS1-1 HS-ETS1-3 HS-ETS1-4 DCI: 3-5-ETS1-1 DCI: 3-5-ETS1-3 DCI: 4-PS3-4 DCI: 4-PS4-3 DCI: MS-ETS1-1 DCI: MS-ETS1-2 DCI: MS-ETS1-3 DCI: MS-LS2-5 DCI: MS-PS3-3 DCI: HS-ETS1-1 DCI: HS-ETS1-2 DCI: HS-PS1-6 DCI: HS-PS2-3 DCI: HS-PS3-3 SP: 3-5-ETS1-1 SP: 3-5-ETS1-2 SP: 3-ESS3-1 SP: 3-LS4-4 SP: 4-ESS3-2 SP: 4-PS4-3 SP: MS-ETS1-1 SP: MS-ETS1-2 SP: MS-LS2-5 SP: MS-PS1-6 SP: HS-ESS3-4 SP: HS-ETS1-1 SP: HS-ETS1-2 SP: HS-ETS1-3 SP: HS-LS2-7 SP: HS-PS1-6 SP: HS-PS3-3	critical crops crust crustal deformation crustal plate movement cryosphere crystal crystalline solid crystallization crystallize cultural current	SP: 7 CC: HS-ESS2-2 CC: HS-ESS3-2 CC: HS-ETS1-1 CC: HS-ETS1-3 HS-ESS3-1 MS-ESS1-3 HS-ESS1-5 DCI: HS-ESS2-1 DCI: HS-ESS2-3 BBK BBK HS-ESS3-6 BBK BBK MS-ESS2-1 DCI: MS-ESS2-4 Marzano Research HS-ETS1-3 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ETS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6 HS-ESS1-2 HS-ESS1-5 HS-ESS3-5 DCI: MS-ESS3-1 DCI: HS-ESS1-5 DCI: HS-ESS2-1 DCI: HS-ESS3-5 DCI: HS-ESS3-6 SP: HS-ESS1-5 SP: HS-ESS2-3 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-LS2-6 SP: HS-LS2-8 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS4-3
cost-benefit	HS-ESS3-2				
Coulomb's law	BBK				
	HS-PS2-4 DCI: HS-PS2-4				
crater	HS-ESS1-6				

cycle (noun)	4-ESS2-1 HS-ESS1-1 CC: HS-ESS1-2 CC: HS-ESS1-4 CC: HS-ESS2-3 CC: HS-PS4-5 DCI: MS-ESS2-4 DCI: HS-ESS2-4 DCI: HS-LS2-5 SP: MS-PS1-6	decomposer decomposition	BBK 5-LS2-1 DCI: 5-LS2-1 DCI: MS-LS2-3 DCI: 5-LS2-1	derive	4-ESS3-1 SP: 4 SP: 8 CC: 1-LS1-1 CC: 2-PS1-2 DCI: 4-ESS3-1 DCI: MS-ESS2-1
cycle (verb)	MS-ESS2-4 MS-LS1-6 MS-LS2-3 HS-ESS2-6 HS-LS2-3 HS-LS2-4 HS-LS2-5 DCI: 5-LS2-1 DCI: MS-ESS2-1 DCI: MS-LS2-3	decrease	MS-LS1-5 MS-LS4-6 MS-PS1-4 HS-ESS2-2 CC: 3-5-ETS1-2 CC: 3-ESS3-1 CC: 4-ESS3-2 CC: HS-ESS3-2 CC: HS-ESS3-4 CC: HS-PS3-3 CC: HS-PS4-2 DCI: HS-ESS2-1 DCI: HS-ESS2-2 DCI: HS-LS2-7 DCI: HS-LS4-3 DCI: HS-LS4-4	descent	DCI: MS-LS4-2 DCI: HS-LS4-1
cyclic	MS-ESS1-1			descriptive	MS-PS3-1 SP: K-2-ETS1-1 SP: K-ESS3-2
cyclical	DCI: HS-ESS2-4				2-ESS2-1 MS-ESS3-3 MS-ETS1-4 MS-PS1-6 MS-PS2-5 MS-PS3-3 HS-PS1-6 HS-PS2-3
cytoplasm	BBK				CC: HS-PS3-3 CC: HS-PS4-2 DCI: K-2-ETS1-2 DCI: K-2-ETS1-3 DCI: K-ESS3-3 DCI: 2-ESS2-1 DCI: 2-LS2-2
daily weather pattern	BBK			design (noun)	DCI: 3-5-ETS1-2 DCI: 3-5-ETS1-3 DCI: MS-ETS1-1 DCI: MS-PS1-6 DCI: HS-ETS1-1 DCI: HS-ETS1-4 DCI: HS-LS4-6 DCI: HS-PS2-3 DCI: HS-PS3-3 SP: MS-ETS1-1 SP: MS-ETS1-3 SP: MS-PS1-1 SP: MS-PS1-4 SP: MS-PS1-5 SP: MS-PS1-6 SP: HS-ESS1-2
dam	4-ESS3-1 MS-ESS3-3 HS-ESS2-2 HS-LS2-7				
data analysis	BBK				
data interpretation	BBK				
data presentation	BBK				
daughter cell	DCI: HS-LS1-4				
daylight	1-ESS1-2				
death	BBK 3-LS1-1				
debris	BBK				
decay	DCI: HS-ESS1-5 DCI: HS-ESS1-6				
decay rate	BBK				
deceleration	BBK				
decode	DCI: 4-PS4-3				
decompose	5-LS2-1				
		decrease			
		deforestation	HS-LS4-5		
		deform	MS-ESS2-1		
		degradation	DCI: 4-PS4-3 DCI: HS-ESS3-4		
		degree of kinship	BBK		
		density	BBK 5-PS1-3 MS-PS1-2 HS-ESS2-3 DCI: MS-ESS2-6		
		dependent	CC: HS-ESS1-1 CC: HS-LS2-1 DCI: MS-LS2-1 DCI: MS-PS4-2 DCI: HS-PS1-6		
		dependent variable	SP: 3 SP: MS-PS2-2 SP: MS-PS3-4		
		deposition	4-ESS2-1 MS-ESS2-2 MS-ESS3-1 HS-ESS2-5 HS-ESS2-7		

design (noun) (cont'd)	SP: HS-ESS1-3	design problem	3-5-ETS1-1	design solution	SP: 3-PS2-1
	SP: HS-ESS1-6		3-PS2-4		SP: 3-PS2-2
	SP: HS-ESS2-5		MS-ETS1-1		SP: 4-ESS2-1
	SP: HS-ESS3-1		SP: 3-5-ETS1-2		SP: 4-ESS3-2
	SP: HS-ESS3-2		SP: 3-LS3-2		SP: 4-LS1-2
	SP: HS-ESS3-4		SP: 3-LS4-2		SP: 4-PS3-2
	SP: HE-ETS1-2		SP: 4-ESS1-1		SP: 4-PS4-1
	SP: HE-ETS1-3		SP: 4-ESS3-2		SP: 4-PS4-2
	SP: HS-LS1-1		SP: 4-PS3-1		SP: 4-PS4-3
	SP: HS-LS1-3		SP: 4-PS3-4		SP: 5-ESS2-1
	SP: HS-LS1-6	design process	SP: 4-PS4-3		SP: 5-LS2-1
	SP: HS-LS2-3		SP: 5-ESS3-1		SP: 5-PS1-1
	SP: HS-LS2-7		SP: MS-ETS1-1		SP: 5-PS1-2
	SP: HS-LS4-1		SP: HS-ETS1-1		SP: 5-PS1-3
	SP: HS-LS4-2		SP: HS-LS3-1		SP: 5-PS1-4
	SP: HS-LS4-4		SP: HS-PS1-5		SP: 5-PS3-1
	SP: HS-PS1-2		SP: HS-PS2-3		SP: MS-ESS2-5
	SP: HS-PS1-3		SP: HS-PS4-2		SP: MS-ETS1-2
	SP: HS-PS1-5		MS-ESS3-3		SP: MS-LS2-5
	SP: HS-PS1-6		SP: 7		SP: MS-LS4-6
	SP: HS-PS2-3	design solution	CC: 3-PS2-4		SP: MS-PS2-2
	SP: HS-PS2-5		DCI: 3-5-ETS1-2		SP: MS-PS2-5
	SP: HS-PS2-6		DCI: HS-ETS1-4		SP: MS-PS3-4
	SP: HS-PS3-3		DCI: HS-LS4-6		SP: MS-PS4-1
	SP: HS-PS3-4		K-PS2-2		SP: HS-ESS2-2
	SP: HS-PS4-2		3-ESS3-1		SP: HS-ESS3-2
	SP: HS-PS4-4		MS-ETS1-2		SP: HS-ESS3-6
	SP: HS-PS4-5		MS-ETS1-3		SP: HS-ETS1-4
			MS-LS2-5		SP: HS-LS2-1
			HS-ESS3-2		SP: HS-LS2-2
			HS-ESS3-4		SP: HS-LS2-4
			SP: K-2-ETS1-2		SP: HS-PS2-1
			SP: K-ESS3-1		SP: HS-PS4-1
			SP: K-PS2-1		
			SP: K-PS3-1		
			SP: 1-ESS1-2		
			SP: 1-PS4-1		
			SP: 1-PS4-3		
			SP: 2-ESS2-2		
			SP: 2-LS2-1		
			SP: 2-LS2-2		
			SP: 2-LS4-1		
			SP: 2-PS1-1		
			SP: 3-5-ETS1-3		
			SP: 3-LS1-1		

design system	SP: MS-ESS1-1 SP: MS-ESS1-2 SP: MS-ESS2-1 SP: MS-ESS2-4 SP: MS-ESS2-6 SP: MS-ETS1-4 SP: MS-LS1-2 SP: MS-LS1-7 SP: MS-LS2-3 SP: MS-LS3-1 SP: MS-LS3-2 SP: MS-PS1-1 SP: MS-PS1-4 SP: MS-PS1-5 SP: MS-PS3-2 SP: MS-PS4-2	designed world	SP: MS-LS1-4 SP: MS-LS2-4 SP: MS-LS2-5 SP: MS-PS2-4 SP: MS-PS3-5 SP: HS-LS1-2 SP: HS-ESS1-1 SP: HS-ESS1-5 SP: HS-ESS2-1 SP: HS-ESS2-3 SP: HS-ESS2-4 SP: HS-ESS2-6 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-LS1-4 SP: HS-LS1-5	development	K-2-ETS1-1 MS-ESS3-2 MS-ESS3-3 MS-LS4-3 HS-ESS3-3 HS-ESS3-4 HS-LS1-3 HS-LS4-1 SP: 5 CC: MS-ESS1-3 CC: MS-LS1-1 CC: MS-LS4-5 CC: MS-PS1-3 CC: HS-ESS1-2 CC: HS-ESS1-4 CC: HS-ESS2-3 CC: HS-PS4-5 DCI: MS-LS4-3 DCI: HS-ESS3-1 SP: K-2-ETS1-1 SP: 3-5-ETS1-1 SP: 3-PS2-4 SP: MS-ETS1-1 SP: HS-ESS1-3 SP: HS-ESS1-6 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-5
	DCI: MS-ETS1-1 DCI: MS-PS3-3		SP: HS-LS1-7 SP: HS-LS2-5		DCI: HS-ESS3-1 SP: K-2-ETS1-1 SP: 3-5-ETS1-1 SP: 3-PS2-4 SP: MS-ETS1-1 SP: HS-ESS1-3 SP: HS-ESS1-6 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-5
	HS-PS2-6 CC: K-2-ETS1-2 CC: 1-LS1-1 CC: 2-LS2-2 CC: HS-ESS2-5 SP: HS-ESS3-3 SP: HS-LS4-6 SP: HS-PS3-1		SP: HS-LS2-8 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS1-1 SP: HS-PS1-4 SP: HS-PS1-8 SP: HS-PS3-2 SP: HS-PS3-5		DCI: HS-ESS3-1 SP: K-2-ETS1-1 SP: 3-5-ETS1-1 SP: 3-PS2-4 SP: MS-ETS1-1 SP: HS-ESS1-3 SP: HS-ESS1-6 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-5
	CC: K-ESS2-2 CC: K-ESS3-1 CC: K-LS1-1 CC: 2-PS1-1 SP: K-2-ETS1-1 SP: K-ESS2-2 SP: K-ESS3-2 SP: 2-PS1-4 SP: 3-ESS3-1 SP: 3-LS2-1 SP: 3-LS4-3 SP: 3-LS4-4 SP: 4-LS1-1 SP: 5-ESS1-1 SP: 5-LS1-1 SP: 5-PS2-1 SP: MS-ESS3-4 SP: MS-ETS1-2 SP: MS-LS1-3		SP: HS-PS4-3 destabilize CC: HS-ESS2-2 CC: HS-ESS3-4 CC: HS-LS1-3		SP: HS-PS2-6 destruction DCI: HS-LS2-7 DCI: HS-LS4-6
			 destructive HS-ESS2-1		 detect 1-LS1-1 DCI: 5-PS1-1
					 determinant DCI: MS-ESS2-5
					 detrimental change BBK

device	1-PS4-4 3-PS2-4 4-PS3-4 MS-PS1-6 MS-PS2-3 MS-PS3-3 MS-PS4-3 HS-PS2-3 HS-PS3-3 HS-PS4-5 DCI: 1-PS4-4 DCI: 4-PS4-3 DCI: HS-PS4-5 SP: K-PS3-2 SP: 1-LS1-1 SP: 1-PS4-4 SP: HS-ESS3-3 SP: HS-LS4-6 SP: HS-PS3-1	digital	MS-ESS2-6 MS-PS1-5 MS-PS2-4 HS-PS4-2 SP: 3-ESS2-1 SP: 3-LS3-1 SP: 3-LS4-1 SP: 4-ESS2-2 SP: 5-ESS1-2 SP: HS-LS3-3 SP: HS-LS4-3	display	3-ESS2-1 5-ESS1-2 MS-LS4-3 MS-PS2-4 MS-PS3-1 SP: 3-ESS2-1 SP: 5-ESS1-2 SP: MS-LS4-3 SP: MS-PS3-1 SP: MS-PS4-3
			MS-PS4-3 DCI: 4-PS4-3 DCI: HS-PS4-2 DCI: K-PS3-2 SP: 1-LS1-1 SP: 1-PS4-4 SP: HS-ESS3-3 SP: HS-LS4-6 SP: HS-PS3-1		SP: 3-ESS2-1 SP: 5-ESS1-2 SP: MS-LS4-3 SP: MS-PS3-1 SP: MS-PS4-3
			DCI: MS-PS4-3 DCI: HS-PS4-2 DCI: HS-PS4-5		DCI: MS-LS2-4
			dike		BBK
			dinosaur		5-PS1-1
			diorama		5-PS1-2
			SP: K-2-ETS1-2 SP: K-ESS3-1 SP: 2-ESS2-2 SP: 2-LS2-2		MS-PS1-6
			SP: 2-LS2-2		DCI: HS-ESS2-5
			direction of a force		DCI: MS-LS3-1
			direction of motion		DCI: HS-LS4-5
diagram	4-PS4-1 5-PS3-1 MS-ESS2-5 MS-ESS2-6 MS-LS3-2 MS-LS4-3 MS-PS1-4 MS-PS3-2 HS-LS1-5 HS-PS1-4 HS-PS1-8 HS-PS3-2 HS-PS3-5 SP: K-2-ETS1-2 SP: K-ESS3-1 SP: 2-ESS2-2 SP: 2-LS2-2	discovery	SP: K-ESS3-1 SP: 2-ESS2-2 SP: 2-LS2-2	distribution	DCI: HS-LS4-6
			SP: 2-LS2-2		DCI: HS-ESS2-1
			MS-LS4-5 CC: 3-PS2-4 CC: MS-ESS1-3		DCI: HS-ESS2-4
			CC: MS-LS1-1 CC: MS-LS4-5 CC: MS-PS1-3		DCI: HS-LS3-3
			DCI: HS-ESS3-6		HS-LS4-2
			BBK		HS-LS4-3
			DCI: HS-LS2-1		HS-LS4-5
			DCI: HS-LS2-2		HS-PS3-4
			disease		DCI: MS-LS4-6
			disk		DCI: HS-ESS2-1
diet	DCI: 3-LS3-2	disperse	DCI: HS-ESS1-2	disturb	DCI: HS-ESS2-4
differentiation	HS-LS1-4 DCI: HS-LS1-4		2-LS2-2		DCI: HS-LS3-2
difficulty	DCI: 3-5-ETS1-3			disturbance	DCI: HS-LS3-3
diffraction	HS-PS4-3				DCI: HS-LS4-5
digestive system	BBK MS-LS1-3				DCI: HS-LS4-6
					DCI: HS-PS3-4
				diverge	CC: MS-ESS3-5
					DCI: 4-PS4-1
					DCI: HS-LS2-2
					DCI: HS-LS2-6
					DCI: HS-LS4-5
					DCI: HS-LS4-6

electrically neutral	BBK		
electricity	BBK HS-PS4-5		
electromagnet	3-PS2-3 MS-PS2-3		
electromagnetic	DCI: MS-LS1-8 DCI: MS-PS2-3		
electromagnetic energy	DCI: HS-ESS1-2 DCI: HS-ESS1-3		
electromagnetic field	BBK		
electromagnetic force	BBK		
electromagnetic radiation	BBK HS-ESS1-2 HS-PS4-1 HS-PS4-3 HS-PS4-4 DCI: HS-ESS2-2 DCI: HS-ESS2-4 DCI: HS-PS4-3 DCI: HS-PS4-4	element element stability elementary particle elements of matter elliptical orbit embryo embryo formation embryological	HS-ESS1-3 HS-LS1-6 HS-PS1-1 DCI: 3-5-ETS1-3 DCI: HS-ESS1-1 DCI: HS-ESS1-2 DCI: HS-ESS1-3 DCI: HS-LS1-6 DCI: HS-LS1-7 DCI: HS-LS2-4 DCI: HS-PS1-1 DCI: HS-PS1-2 DCI: HS-PS1-7 BBK BBK BBK BBK MS-LS4-3 BBK MS-LS4-3 HS-LS4-1 DCI: MS-LS4-3 DCI: HS-LS4-1 HS-LS4-5 DCI: HS-LS4-5 DCI: HS-LS4-6 BBK DCI: HS-ESS1-2 DCI: HS-PS4-5 MS-PS4-3 DCI: MS-PS4-3 HS-LS4-6 BBK DCI: MS-ESS3-5 DCI: HS-ETS1-1 DCI: HS-ETS1-4
	electromagnetic spectrum	BBK	
	electromagnetic wave	BBK	
	electron	BBK MS-PS1-1 HS-PS1-1 DCI: HS-PS1-1 DCI: HS-PS1-2 DCI: HS-PS4-5	emergence emergence of life forms emit encode
			HS-LS4-5 DCI: HS-LS4-5 DCI: HS-LS4-6 BBK DCI: HS-ESS1-2 DCI: HS-PS4-5 MS-PS4-3 DCI: MS-PS4-3
			endangered species endothermic reaction
			DCI: MS-LS2-3 DCI: MS-PS1-6 DCI: MS-PS3-3 DCI: MS-LS2-3 3-LS3-2 3-LS4-1 3-LS4-4 4-ESS3-1 5-ESS3-1 5-LS2-1 MS-ESS3-3
electron configuration	BBK		
electron sharing	BBK		
electron state	HS-PS1-2		
electron transfer	BBK		
electrostatic force	HS-PS2-4 DCI: HS-PS2-4		
		energy transfer engineer (noun) engineering Enrico Fermi entropy environment	BBK MS-PS3-3 HS-ESS1-1 DCI: MS-PS3-4 DCI: HS-LS1-7 SP: 1 SP: 3 SP: 4 SP: 5 SP: 7 SP: 8 DCI: MS-ESS3-3 DCI: MS-ESS3-4 BBK HS-ETS1-2 HS-PS2-3 CC: 3-LS4-3 CC: 4-ESS3-1 CC: 4-PS4-3 CC: HS-ESS1-2 CC: HS-ESS1-4 CC: HS-ESS2-3 CC: HS-ESS3-2 CC: HS-ESS3-4 CC: HS-LS3-3 CC: HS-PS3-3 CC: HS-PS4-2 CC: HS-PS4-5 DCI: K-2-ETS1-1 DCI: K-PS2-2 DCI: MS-ESS3-5 DCI: HS-ETS1-1 DCI: HS-ETS1-4 BBK BBK BBK K-ESS2-2 K-ESS3-3 3-LS3-2 3-LS4-1 3-LS4-4 4-ESS3-1 5-ESS3-1 5-LS2-1 MS-ESS3-3

exert	3-PS2-3 5-PS2-1 MS-PS2-5 DCI: 3-PS2-1 DCI: MS-ESS2-6 DCI: MS-PS2-1 DCI: MS-PS3-2	exponential	CC: HS-ESS1-4 CC: HS-LS3-3 DCI: HS-ESS1-5 DCI: HS-ESS1-6 SP: HS-ESS1-4 SP: HS-ESS3-3 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS4-6 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1	extinction	BBK MS-ESS1-4 MS-LS4-1 HS-LS4-5 DCI: MS-ESS3-3 DCI: MS-LS4-1 DCI: HS-LS2-7 DCI: HS-LS4-5 DCI: HS-LS4-6
exist	3-LS3-1 MS-PS2-5 CC: 3-LS4-1 CC: 5-ESS1-1 CC: 5-PS1-1 DCI: 2-ESS2-3 DCI: 2-LS4-1 DCI: 2-PS1-1 DCI: 5-PS1-1 DCI: HS-ESS2-7			extract	HS-ESS3-3 DCI: HS-ESS3-2
existence	MS-LS4-1 DCI: 3-LS1-1 DCI: MS-LS4-1 SP: HS-LS2-2 SP: HS-LS2-3			extreme	HS-LS2-6 DCI: HS-LS2-2 DCI: HS-LS2-6
existing	CC: 3-5-ETS1-2 CC: 3-ESS3-1 CC: 4-ESS3-2 CC: 4-PS3-4	expression	HS-LS3-3 HS-PS3-1 DCI: 4-PS3-4 DCI: HS-ESS2-3 DCI: HS-LS3-2 DCI: HS-LS3-3 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-PS3-1	facility	SP: MS-PS2-3
exothermic reaction	BBK	extended structure	MS-PS1-1 DCI: MS-PS1-1	Fahrenheit	BBK
exploration	CC: MS-PS4-3	extent	HS-ESS2-2 DCI: 3-ESS2-2 DCI: HS-ETS1-1 DCI: HS-PS2-3 DCI: HS-PS3-3 SP: HS-ESS1-6	failure point	3-5-ETS1-3 DCI: 3-5-ETS1-3
		external	1-LS1-1 1-PS4-2 4-LS1-1 DCI: 1-LS1-1 DCI: 4-LS1-1 DCI: HS-LS1-3	fall [autumn]	1-ESS1-2
		external cue	BBK	feature	1-LS3-1 4-ESS2-2 MS-ESS1-3 MS-ESS2-2 HS-ESS2-1 SP: 4 SP: 6 DCI: 3-5-ETS1-1 DCI: 4-ESS2-2 DCI: 4-PS3-4
		external feature	BBK		DCI: MS-LS1-4 DCI: HS-ESS1-4 DCI: HS-ESS2-1 DCI: HS-PS4-3 SP: 2-ESS2-3
		extinct	3-LS4-1 DCI: HS-LS4-5	feedback effect	DCI: HS-ESS2-1 DCI: HS-ESS2-2
				feedback mechanism	HS-LS1-3 DCI: HS-LS1-3
				fertile	HS-ESS3-1
				fertilize	DCI: HS-LS1-4
				fertilizer	MS-LS1-5 HS-LS4-5

field	MS-ESS1-2 MS-PS2-5 SP: 3 SP: 7 CC: MS-ESS1-3 CC: MS-LS1-1 CC: MS-LS4-5 CC: MS-PS1-3 CC: MS-PS3-5 CC: HS-ESS1-2 CC: HS-LS1-7 CC: HS-LS2-4 CC: HS-PS3-2 DCI: MS-PS2-5 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-5 DCI: HS-PS3-2 DCI: HS-PS3-5 DCI: HS-PS4-3	flow (noun)	4-ESS2-1 MS-ESS2-1 MS-LS1-6 MS-LS2-3 HS-ESS2-4 HS-LS2-3 HS-LS2-4 DCI: HS-ESS2-3 DCI: HS-LS1-5 DCI: HS-LS1-6 DCI: HS-LS1-7	food	BBK K-ESS2-2 K-LS1-1 3-LS3-2 3-LS4-4 5-LS2-1 5-PS3-1 MS-ESS3-4 MS-LS1-5 MS-LS1-7 MS-PS1-3	
			MS-ESS2-5 HS-LS2-4 HS-LS2-8 HS-PS3-1 CC: MS-ESS2-6 CC: MS-LS2-3 CC: MS-PS2-1 CC: MS-PS2-4 CC: MS-PS3-2 CC: MS-PS3-3 CC: HS-ETS1-4 CC: HS-LS1-2 CC: HS-LS1-4 CC: HS-LS2-5 CC: HS-PS1-4 CC: HS-PS3-3 CC: HS-PS4-3 DCI: HS-LS1-6 DCI: HS-LS1-7 DCI: HS-PS3-4 SP: HS-PS1-4		HS-LS1-7 DCI: K-LS1-1 DCI: 1-LS1-1 DCI: 3-LS2-1 DCI: 5-LS2-1 DCI: 5-PS3-1 DCI: MS-LS1-6 DCI: MS-LS1-7 DCI: MS-LS2-1 DCI: MS-LS2-5 DCI: HS-ETS1-1 DCI: HS-LS1-7	
			flow (verb)			
			5-PS3-1			
			food chain		BBK	
			food oxidation		BBK	
			food web		BBK	
					DCI: 5-LS2-1	
					DCI: MS-LS2-3	
					DCI: HS-LS2-4	
			foot pound		BBK	
flood	3-ESS3-1 MS-ESS3-2 HS-ESS3-1 HS-LS2-6 HS-LS4-5	flow chart	BBK	food web		
		flow of matter	BBK			
		flower	MS-LS1-4 DCI: 1-LS1-1			
		fluctuation	DCI: HS-LS2-2 DCI: HS-LS2-6			
		fluid resistance	BBK			

force	3-PS2-1 3-PS2-3 4-PS3-3 MS-ESS1-2 MS-ESS2-4 MS-PS2-2 MS-PS2-5 HS-ESS2-1 HS-PS1-3 HS-PS2-3 HS-PS2-6 HS-PS3-5 CC: MS-PS2-2 DCI: 3-PS2-1 DCI: 3-PS2-3 DCI: 3-PS2-4 DCI: MS-PS2-1 DCI: MS-PS2-2 DCI: MS-PS3-2	form (noun) K-ESS3-2 4-PS3-4 MS-PS1-5 MS-PS3-5 HS-ESS1-1 HS-ESS1-6 HS-ESS2-7 HS-PS3-3 CC: MS-PS3-5 DCI: 2-ESS2-3 DCI: 4-PS3-4 DCI: 4-PS4-3 DCI: 5-PS1-3 DCI: MS-ESS2-4 DCI: HS-ESS3-2 DCI: HS-LS1-1 DCI: MS-LS3-1 DCI: HS-PS3-1 DCI: HS-PS3-2 DCI: HS-PS3-3 DCI: HS-PS3-4 DCI: HS-PS4-2 DCI: HS-PS4-5 SP: K-ESS3-3	fossil BBK 3-LS4-1 4-ESS1-1 MS-ESS1-4 MS-ESS2-3 MS-LS4-1 MS-LS4-2 DCI: 3-LS4-1 DCI: 4-ESS1-1 DCI: MS-ESS2-3 DCI: MS-LS4-1
force strength	BBK		fossil evidence BBK
forecast	K-ESS3-2 MS-ESS3-2 HS-ESS3-5 DCI: K-ESS3-2 DCI: MS-ESS3-2		fossil fuel BBK 4-ESS3-1 MS-ESS3-5 HS-ESS3-1 DCI: MS-ESS3-5
forest fire	MS-ESS3-2		
forested	K-ESS3-1		
		format SP: HS-ESS1-3 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-5	fossil record BBK MS-LS4-1 DCI: MS-ESS1-4 DCI: MS-LS4-1 DCI: MS-LS4-2
		formation MS-ESS1-4 HS-ESS2-1 HS-ESS2-7 HS-PS1-6 DCI: MS-ESS2-2 DCI: HS-LS1-1 DCI: HS-LS2-7 DCI: HS-LS3-1	foundation HS-ESS2-6 DCI: HS-ESS2-2 DCI: HS-ESS2-4
		formation of polymers BBK	fracture zone MS-ESS2-3
		forms of energy BBK	frame of reference MS-PS2-2 DCI: HS-PS2-2
		forms of matter BBK	
		forms of water BBK	freeze BBK 2-PS1-4 4-ESS2-1 HS-ESS2-5 DCI: HS-ESS2-5
			frequency MS-ESS3-2 HS-LS4-4 HS-PS4-1 HS-PS4-4 DCI: MS-PS4-1 DCI: MS-PS4-2 DCI: HS-ESS1-2 DCI: HS-PS4-1 DCI: HS-PS4-5

fresh water	BBK 5-ESS2-2 HS-ESS3-1 DCI: 5-ESS2-2 DCI: MS-ESS3-1		fundamental unit of life	BBK
friction	BBK		fungi	BBK DCI: 5-LS2-1
frost	HS-ESS2-5		fusion	HS-PS1-8 DCI: HS-PS1-8
fruit	DCI: 1-LS1-1		future motion	3-PS2-2 DCI: 3-PS2-2
fuel	4-ESS3-1 MS-PS1-3 DCI: 4-ESS3-1			BBK MS-ESS1-2 HS-ESS1-2 DCI: MS-ESS1-2 DCI: HS-ESS1-2
		function (noun)	Galileo	BBK
			gamma ray	BBK DCI: HS-PS4-4
			gas	BBK MS-ESS3-5 MS-PS1-4 HS-ESS1-2 DCI: 5-LS2-1 DCI: 5-PS1-1 DCI: MS-ESS1-2 DCI: MS-PS1-4 DCI: HS-ESS1-2 DCI: HS-ESS3-6
			gases of the atmosphere	BBK
			gene	BBK MS-LS3-1 MS-LS3-2 HS-LS4-4 DCI: MS-LS3-1 DCI: MS-LS3-2 DCI: MS-LS4-5 DCI: HS-LS1-1 DCI: HS-LS3-1 DCI: HS-LS3-2
			gene encoding	BBK
			gene expression	BBK
			gene therapy	MS-LS4-5
			general theory of relativity	BBK
		function (verb)		
		functional		

generation	HS-ESS2-5 DCI: MS-LS4-6 DCI: HS-LS4-3 DCI: HS-LS4-4	geoengineering	HS-ESS3-4 MS-ESS2-2 MS-ESS2-6 HS-ESS2-1 HS-LS4-4	glacial movement	BBK
generator	BBK MS-PS2-3 HS-PS3-3	geographic	DCI: MS-ESS2-6 MS-ESS1-4 DCI: MS-ESS3-1 DCI: MS-ESS3-2 DCI: HS-ESS1-5 DCI: HS-ESS2-1 DCI: HS-ESS3-1	glacier	BBK DCI: 5-ESS2-2 DCI: HS-ESS2-4
	MS-LS1-5 MS-LS1-5 MS-LS3-1 MS-LS3-2 MS-LS4-4 MS-LS4-5 MS-LS3-2 HS-LS3-2 HS-LS3-3 HS-LS4-2 HS-LS4-6	geologic	BBK DCI: MS-ESS3-1 DCI: MS-ESS3-2 DCI: HS-ESS1-5 DCI: HS-ESS2-1 DCI: HS-ESS3-1	global	MS-ESS2-6 MS-ESS3-2 HS-ESS3-5 HS-ETS1-1 DCI: 4-ESS1-1 DCI: MS-ESS2-2 DCI: MS-ESS2-4 DCI: MS-ESS2-6 DCI: HS-ESS2-2 DCI: HS-ESS2-4 DCI: HS-ESS3-6 DCI: HS-ETS1-1
genetic	DCI: MS-LS1-5 DCI: MS-LS3-1 DCI: MS-LS3-2 DCI: HS-LS1-1 DCI: HS-LS1-4 DCI: HS-LS2-8 DCI: HS-LS3-1 DCI: HS-LS3-2 DCI: HS-LS3-3 DCI: HS-LS4-1 DCI: HS-LS4-2 DCI: HS-LS4-3	geologic evidence	BBK	global climate change	HS-ESS3-5 DCI: MS-ESS3-5 DCI: HS-ESS3-5
		geologic force	BBK DCI: MS-ESS3-2	global temperature	MS-ESS3-5 HS-ESS2-2 HS-ESS3-4 DCI: HS-ESS3-6
		geologic process	DCI: MS-ESS3-1 DCI: HS-ESS1-6	global warming	DCI: MS-ESS3-5
		geologic time	BBK	Golgi apparatus	BBK
		geologic time scale	BBK DCI: MS-ESS1-4		MS-ESS2-2 CC: MS-ESS3-5 DCI: HS-ESS2-4 DCI: HS-ESS2-6 DCI: HS-ESS2-7
		geologic trap	MS-ESS3-1	gradual	
		geological	DCI: HS-ESS2-4 DCI: HS-LS2-5	graduated cylinder	BBK
		geological dating	BBK	graphite	HS-PS1-3
		geological shift	BBK	grasp	DCI: 1-LS1-1
		geologist	DCI: HS-ESS2-3	grass	K-ESS3-1 2-ESS2-1 MS-LS1-5
		geopolitical	DCI: HS-ESS3-2		MS-PS2-4 HS-ESS1-4
			MS-ESS2-2 MS-ESS3-1 HS-ESS2-2 HS-ESS2-7 HS-ESS3-5	gravitational	DCI: MS-PS2-5 DCI: HS-ESS1-4 DCI: HS-ESS2-3
			5-ESS2-1 HS-ESS2-6 HS-ESS3-6 HS-LS2-5 DCI: 5-ESS2-1 DCI: HS-LS2-5	gravitational energy	BBK
		geosphere			
		germ theory	BBK		
		germination	MS-LS1-4		
		glacial	HS-ESS2-2 HS-ESS2-4 HS-ESS3-5		
genetic diversity	BBK				
genetic modification	MS-LS4-5				
genetic mutation	BBK				
genetic variation	BBK MS-LS3-2 MS-LS4-4 HS-LS3-2 HS-LS4-2 HS-LS4-6 DCI: HS-LS3-2 DCI: HS-LS4-2				
geochemical cycle	BBK				
geochemical reaction	MS-ESS2-2				

gravitational field	HS-PS2-4 DCI: HS-PS2-4 DCI: HS-PS2-5		BBK 3-LS1-1 4-LS1-1 5-LS1-1 5-PS3-1 MS-LS1-4 MS-LS1-5 MS-LS1-7 MS-LS2-1		HS-ESS3-6 CC: MS-ESS3-1 CC: MS-ESS3-4 CC: MS-ETS1-1 DCI: 5-LS2-1 DCI: MS-LS2-5
gravitational force	BBK 5-PS2-1 HS-PS2-4 DCI: 5-PS2-1 DCI: MS-PS2-4 DCI: HS-PS2-4				
gravitational pull	DCI: MS-ESS1-2 DCI: MS-ESS1-3	growth	CC: HS-LS3-3 CC: HS-ESS1-4 DCI: 1-LS1-1 DCI: 4-LS1-1 DCI: 5-LS1-1 DCI: 5-PS3-1 DCI: MS-LS1-5 DCI: MS-LS1-7		BBK 4-PS3-2 4-PS3-4 MS-ESS2-6 DCI: 4-PS3-2 DCI: 4-PS3-3 DCI: MS-PS1-4 DCI: HS-ESS2-3 DCI: HS-PS4-4
gravity	5-PS2-1 MS-ESS1-2 MS-ESS2-4 DCI: 4-ESS2-1 DCI: MS-ESS1-2 DCI: MS-ESS2-4		DCI: MS-LS2-1 DCI: HS-LS2-4		
greenhouse gas	BBK HS-ESS2-2 DCI: MS-ESS3-5 DCI: HS-ESS3-6	habit	CC: MS-LS1-3		BBK 2-PS1-4 4-ESS2-1 5-PS1-2 MS-ESS2-6 MS-PS3-4 DCI: 2-PS1-4 DCI: 4-PS3-2 DCI: 4-PS3-3 DCI: MS-PS1-4
Gregor Mendel	BBK				
groundwater	BBK 5-ESS2-2 MS-ESS3-1 HS-ESS2-2 HS-ESS3-1	habitat	BBK 2-LS4-1 3-LS4-3 4-ESS3-1 HS-ESS2-7 DCI: 3-LS4-4 DCI: MS-ESS3-3		
group behavior	HS-LS2-8 DCI: HS-LS2-8		DCI: HS-LS2-2 DCI: HS-LS2-6 DCI: HS-LS2-7 DCI: HS-LS4-6		
grow	K-ESS3-1 1-LS1-1 2-LS2-1 3-LS3-2 MS-LS1-5 DCI: K-LS1-1 DCI: 2-LS1-1 DCI: MS-PS3-1 DCI: HS-LS1-4	Halley's comet	BBK		
		hardness	2-PS1-1 2-PS1-2 5-PS1-3		
		harmful	MS-LS3-1 DCI: MS-LS3-1		
		harvesting of resources	BBK		
		hazard	3-ESS3-1 DCI: 3-ESS3-1 DCI: 4-ESS3-2		
		helium		MS-PS1-4 HS-ESS1-2 DCI: HS-ESS1-2 DCI: HS-ESS1-3	
		herbivore	BBK		
		herd		MS-LS1-4 HS-LS2-8	
		hereditary information		BBK	

heritable	HS-LS4-2 HS-LS4-3 DCI: HS-LS4-3 DCI: HS-LS4-4	K-ESS2-2 K-ESS3-1 K-ESS3-3 K-LS1-1 1-LS1-1 3-LS3-1 4-ESS3-2 MS-ESS3-1 MS-LS4-5 HS-ESS2-6 HS-ESS3-3 CC: K-ESS3-2 CC: K-LS1-1 CC: 1-PS4-4 CC: 2-PS1-1 CC: HS-ESS3-3 CC: HS-PS3-5 CC: HS-PS4-4 DCI: K-ESS3-1 DCI: 3-ESS3-1 DCI: 4-ESS3-1 DCI: 4-ESS3-2 DCI: 5-ESS2-1 DCI: 5-ESS3-1 DCI: MS-ESS3-1 DCI: MS-ESS3-5 DCI: MS-LS2-5 DCI: MS-LS4-5 DCI: HS-ESS3-1 DCI: HS-ESS3-3 DCI: HS-ESS3-5 DCI: HS-ESS3-6 DCI: HS-LS2-7 DCI: HS-LS4-6	MS-ESS3-5 HS-ESS2-4 HS-ESS3-1 HS-ESS3-4 HS-ESS3-6 HS-LS2-7 HS-LS4-6 CC: MS-ESS3-1 CC: MS-ESS3-4 CC: MS-ETS1-1 DCI: MS-ESS3-3 DCI: MS-ESS3-5 DCI: HS-ESS2-4 DCI: HS-ESS2-6 DCI: HS-LS2-7 DCI: HS-LS4-6
historical	HS-LS2-1 DCI: HS-ESS2-3 SP: HS-ESS1-5 SP: HS-ESS2-7 SP: HS-ESS3-2 SP: HS-LS2-6 SP: HS-LS2-8 SP: HS-LS3-2 SP: HS-LS4-5 SP: HS-PS4-3	CC: K-ESS3-2 CC: K-LS1-1 CC: 1-PS4-4 CC: 2-PS1-1 CC: HS-ESS3-3 CC: HS-PS3-5 CC: HS-PS4-4 DCI: K-ESS3-1 DCI: 3-ESS3-1 DCI: 4-ESS3-1 DCI: 4-ESS3-2 DCI: 5-ESS2-1 DCI: 5-ESS3-1 DCI: MS-ESS3-1 DCI: MS-ESS3-5 DCI: MS-LS2-5 DCI: MS-LS4-5 DCI: HS-ESS3-1 DCI: HS-ESS3-3 DCI: HS-ESS3-5 DCI: HS-ESS3-6 DCI: HS-LS2-7 DCI: HS-LS4-6	CC: MS-ESS3-1 DCI: MS-ESS3-3 DCI: MS-ESS3-5 DCI: HS-ESS2-4 DCI: HS-ESS2-6 DCI: HS-LS2-7 DCI: HS-LS4-6
history	MS-ESS1-4 HS-ESS1-6 DCI: 4-ESS1-1 DCI: MS-ESS2-2 DCI: MS-ESS3-2 DCI: MS-LS4-2 DCI: HS-ESS1-5 DCI: HS-ESS1-6 DCI: HS-ESS2-1 DCI: HS-ESS3-1	DCI: 5-ESS2-1 DCI: 5-ESS3-1 DCI: MS-ESS3-1 DCI: MS-ESS3-5 DCI: MS-LS2-5 DCI: MS-LS4-5 DCI: HS-ESS3-1 DCI: HS-ESS3-3 DCI: HS-ESS3-5 DCI: HS-ESS3-6 DCI: HS-LS2-7 DCI: HS-LS4-5 DCI: HS-LS4-6	BBK
history of life	MS-LS4-1 DCI: MS-LS4-1	BBK	K-ESS3-3 MS-ESS3-3 DCI: HS-ESS3-5
history of the universe	BBK	BBK	BBK
homeostasis	BBK HS-LS1-3	BBK	MS-ESS3-4 HS-ESS3-3 DCI: MS-ESS3-3 DCI: MS-ESS3-4 DCI: HS-ESS3-1
homo sapien	MS-ESS1-4	BBK	DCI: HS-ETS1-1
host	BBK	BBK	DCI: HS-LS2-7 DCI: HS-LS4-6
hot	DCI: MS-ESS2-1 DCI: MS-PS3-3 DCI: HS-ESS2-3 DCI: HS-PS3-4	BBK	HS-ESS1-4 CC: 1-LS1-1 CC: 2-PS1-2 DCI: HS-PS4-5
			MS-ESS2-5 HS-ESS2-2
			HS-LS2-6 HS-LS2-8
			MS-ESS3-2 HS-ESS3-1
			DCI: HS-LS1-6

hydrogen	HS-ESS1-2 HS-LS1-6 HS-LS2-4 HS-PS1-2 DCI: HS-ESS1-2 DCI: HS-ESS1-3 DCI: HS-LS1-6	K-ESS3-3 3-ESS3-1 4-ESS3-2 MS-ESS2-2 MS-ESS3-3 MS-ESS3-4 MS-ETS1-1	K-PS2-2 MS-ESS3-4 MS-LS1-5 MS-LS4-4 MS-LS4-6 MS-PS1-4 MS-PS2-3
hydrogen bomb	BBK	MS-LS4-5	HS-ESS1-5
hydrogen ion	BBK	MS-PS1-3	HS-ESS2-2
hydrologic cycle	MS-ESS2-4 HS-ESS2-5	MS-PS2-1 HS-ESS1-6	HS-ESS2-7 HS-ESS3-5
hydrosphere	BBK 5-ESS2-1 HS-ESS2-6 HS-ESS3-6 HS-LS2-5 DCI: 5-ESS2-1	HS-ESS3-2 HS-ESS3-4 HS-ESS3-5 HS-ETS1-3 HS-ETS1-4 HS-LS2-7	HS-LS4-2 HS-LS4-3 HS-LS4-5 HS-PS1-6
hydrothermal	MS-ESS3-1	HS-LS4-6 CC: 2-ESS2-1 CC: HS-ESS3-3 CC: HS-ETS1-1 CC: HS-ETS1-3 DCI: K-ESS2-2 DCI: K-ESS3-3 DCI: 3-ESS3-1 DCI: 4-ESS3-2 DCI: MS-ESS3-3 DCI: MS-ESS3-4 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ESS3-3 DCI: HS-ESS3-4 DCI: HS-ETS1-3 DCI: 3-ESS3-1 DCI: 4-ESS3-2 DCI: MS-ESS3-3 DCI: MS-ESS3-4 DCI: HS-ESS2-1 DCI: HS-ESS2-2 DCI: HS-ESS2-4	CC: 3-5-ETS1-2 CC: 3-ESS3-1 CC: 4-ESS3-2 CC: HS-ESS3-2 CC: HS-ESS3-4 CC: HS-PS3-3 CC: HS-PS4-2 DCI: MS-ESS3-3 DCI: MS-ESS3-4 DCI: MS-LS1-4 DCI: MS-LS2-1 DCI: HS-ESS2-1 DCI: HS-ESS2-2 DCI: HS-ESS2-4 DCI: HS-ESS2-6 DCI: HS-LS2-7 DCI: HS-LS2-8 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-LS4-4
ice	4-ESS2-1 5-ESS2-2 MS-ESS2-2 MS-PS3-4 HS-ESS2-2 HS-ESS2-4 HS-ESS3-5 DCI: 2-ESS2-3 DCI: 4-ESS2-1 DCI: 5-ESS2-1 DCI: MS-ESS2-6	DCI: 3-ESS3-2 DCI: 4-ESS3-2 DCI: MS-ESS3-3 DCI: MS-ESS3-4 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ETS1-3 DCI: 3-ESS3-1 DCI: 4-ESS3-2 DCI: MS-ESS3-3 DCI: MS-ESS3-4 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ESS3-3 DCI: HS-ESS3-4 DCI: HS-ETS1-3 DCI: 3-ESS3-1 DCI: 4-ESS3-2 DCI: MS-ESS3-3 DCI: MS-ESS3-4 DCI: HS-ESS2-1 DCI: HS-ESS2-2 DCI: HS-ESS2-4	S
ice age	MS-ESS1-4 DCI: HS-ESS2-4	DCI: HS-LS2-7 DCI: HS-LS4-6	
identical	MS-LS3-2 DCI: MS-LS3-2 DCI: HS-LS1-4	K-2-ETS1-1 3-5-ETS1-3 CC: 3-5-ETS1-1 CC: 3-PS2-4 CC: 4-ESS3-1 DCI: 3-5-ETS1-2 DCI: 3-5-ETS1-3	
igneous rock	BBK	SP: K-2-ETS1-1 SP: 3-PS2-4	
illuminate	1-PS4-2 DCI: HS-PS4-2		
immediate	MS-LS1-8 DCI: MS-LS1-6 DCI: MS-LS1-8		
immensely	CC: 5-ESS1-1 CC: 5-PS1-1		
immune system	BBK		

	MS-LS1-3 SP: HS-ESS1-2 SP: HS-ESS1-6 SP: HS-ESS3-1 SP: HS-ESS3-4 SP: HS-ETS1-2 SP: HS-ETS1-3 SP: HS-LS1-1 SP: HS-LS1-6 SP: HS-LS2-3 SP: HS-LS2-7 SP: HS-LS4-2 SP: HS-LS4-4 SP: HS-PS1-2 SP: HS-PS1-5 SP: HS-PS1-6 SP: HS-PS2-3 SP: HS-PS3-3	inherited characteristic BBK		CC: 4-LS1-2 CC: 5-ESS2-1 CC: 5-ESS3-1 CC: 5-LS2-1 CC: MS-ESS1-2 CC: MS-ESS2-6 CC: MS-PS2-1 CC: MS-PS2-4 CC: MS-PS3-2 CC: HS-ETS1-4 CC: HS-LS1-2 CC: HS-LS1-4 CC: HS-LS2-5 CC: HS-PS4-3 DCI: 3-LS3-2 DCI: MS-ESS2-2 DCI: MS-ESS2-6 DCI: MS-LS2-1 DCI: MS-LS2-2 DCI: MS-PS1-4 DCI: HS-ESS2-4 DCI: HS-LS2-2 DCI: HS-LS2-6 DCI: HS-LS4-2 DCI: HS-PS1-3 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-6 DCI: HS-PS3-1 DCI: HS-PS3-2 DCI: HS-PS4-5 SP: 4-LS1-2 SP: HS-ETS1-4
independent variable	SP: 3 SP: MS-PS2-2 SP: MS-PS3-4			
individual differences	BBK			
industry	CC: MS-ESS1-3 CC: MS-LS1-1 CC: MS-LS4-5 CC: MS-PS1-3 DCI: 5-ESS3-1			
inefficiency	DCI: HS-LS2-4			
inert atom	MS-PS1-4 DCI: MS-PS1-4			
inertia	BBK			
inertial frame of reference	BBK			
infection	BBK			
infrared radiation	BBK			
inherent	CC: HS-PS3-1			
inherit	3-LS3-1 DCI: 3-LS3-1 DCI: MS-LS3-2 DCI: HS-LS3-2			
inheritable	HS-LS3-2			
inheritance	3-LS3-2 MS-LS4-5 DCI: 3-LS3-2			
		initial MS-PS3-4 HS-PS3-4 CC: HS-ESS3-6 CC: HS-PS2-2 CC: HS-PS3-4		
		inner core DCI: HS-ESS2-3		
		insect BBK MS-LS1-4		
		inspirational DCI: HS-LS2-7 DCI: HS-LS4-6		
		instruction HS-LS3-1 DCI: HS-LS1-1 DCI: HS-LS3-1		
		instrument MS-ESS1-3		
		instrumentation DCI: 1-PS4-4 DCI: 4-PS4-3 DCI: MS-PS4-3 DCI: HS-PS4-5		
		insufficient 3-LS3-2		
		insulate MS-PS3-3		
		insulator BBK		
		integrity DCI: MS-LS2-5		
		intellectual CC: MS-LS1-3		
		intensity DCI: MS-ESS1-1 DCI: HS-ESS2-4		
			3-PS2-3 MS-ESS2-5 MS-LS1-3 MS-LS2-2 MS-PS2-4 MS-PS2-5 HS-ETS1-4 HS-ESS1-5 HS-ESS2-2 HS-ESS2-5 HS-LS2-6 HS-PS2-2 HS-PS3-5 HS-PS4-5 CC: 3-LS4-4 CC: 4-LS1-1	
		interaction		
				interaction
				interconnected DCI: MS-ESS2-6

interdependence	BBK CC: K-ESS3-2 CC: 3-LS4-3 CC: 3-PS2-4 CC: 4-ESS3-1 CC: 4-PS4-3 CC: MS-ESS1-3 CC: MS-LS1-1 CC: MS-LS4-5 CC: MS-PS1-3 CC: HS-ESS1-2 CC: HS-ESS1-4 CC: HS-ESS2-3 CC: HS-PS4-5	ionize HS-PS1-1 DCI: HS-PS4-4	lake HS-ESS3-1 DCI: 2-ESS2-3 DCI: 5-ESS2-2
interdependent	HS-LS2-1 DCI: MS-LS2-2	iron DCI: HS-ESS1-2 DCI: HS-ESS1-3	K-ESS3-3 2-ESS2-1 2-ESS2-2 3-LS4-1 3-LS4-4 4-ESS1-1 4-ESS2-2
interface	DCI: HS-ESS2-3	irreversible 2-PS1-4 CC: HS-ESS2-1 CC: HS-ESS3-3 CC: HS-ESS3-5	MS-ESS3-3 HS-ESS2-1
interference	HS-PS4-3	Isaac Newton MS-PS2-1 HS-ESS1-4 HS-PS2-1 HS-PS2-4	HS-ESS2-7 HS-ESS3-4
interior (adjective)	MS-ESS3-2 HS-ESS3-1 DCI: HS-ESS2-3	isotope BBK DCI: HS-ESS2-3	HS-ESS3-6 DCI: K-ESS2-2
interior (noun)	HS-ESS2-3 DCI: MS-ESS2-1 DCI: HS-ESS2-3	issue HS-PS4-2 CC: HS-ESS3-2 DCI: HS-ETS1-1 DCI: HS-PS2-3 DCI: HS-PS3-3	DCI: K-ESS3-1 DCI: 2-ESS2-1 DCI: 2-LS4-1 DCI: 4-ESS2-1 DCI: 4-ESS2-2
internal	4-LS1-1 HS-ESS2-1 DCI: 4-LS1-1 DCI: MS-PS1-4 DCI: HS-LS1-3	iterative process DCI: MS-ETS1-4 DCI: MS-PS1-6	DCI: 5-ESS3-1 DCI: MS-ESS2-2 DCI: MS-ESS2-3
internal cue	BBK	Johannes Kepler BBK	DCI: MS-ESS2-4 DCI: MS-ESS3-1
internal energy	DCI: MS-PS1-4	John Dalton BBK	DCI: HS-ESS2-2 DCI: HS-ESS2-4
internal structure	BBK	jointly DCI: MS-PS1-4 SP: MS-ETS1-2 SP: MS-LS2-5	DCI: MS-ESS2-6 DCI: MS-ESS2-3
interstellar	HS-ESS1-2	Kelvin BBK	DCI: HS-ESS2-2 DCI: HS-ESS2-4
intruder	1-LS1-1	Kepler's laws of motion DCI: HS-ESS1-4	land distribution MS-ESS2-6
invasive species	HS-LS2-7 DCI: HS-LS2-7 DCI: HS-LS4-6	kinetic energy BBK MS-PS1-4 MS-PS3-1 MS-PS3-4 MS-PS3-5 HS-PS3-2 DCI: MS-PS3-1 DCI: MS-PS3-3 DCI: MS-PS3-4 DCI: HS-PS1-4 DCI: HS-PS1-5 DCI: HS-PS3-1	land usage MS-ESS3-3
inverse square law	BBK	laboratory MS-ESS2-5 HS-ESS2-3 SP: 3	landform BBK 5-ESS2-1 DCI: 5-ESS2-1 DCI: MS-ESS2-5 DCI: MS-ESS2-6
invertebrate	BBK		landscape 4-ESS1-1 DCI: HS-LS2-7 DCI: HS-LS4-6
ion	BBK HS-PS1-3		landslide MS-ESS2-2
ionic motion	BBK		latitude MS-ESS2-6 DCI: MS-ESS2-6
			latitudinal MS-ESS2-6
			law of conservation of matter MS-PS1-5

layer	MS-ESS1-3 HS-ESS2-3 DCI: MS-LS4-1 DCI: HS-ESS2-3			light wave	MS-PS4-2
Le Chatlier's principle	HS-PS1-6			light wavelength	BBK
leaf	K-ESS3-1 1-LS3-1 2-PS1-4 DCI: 1-LS1-1 MS-LS1-2			light year	BBK
levee	MS-ESS3-3			lightning rod	3-ESS3-1
lever arm	BBK				
	2-LS4-1 MS-ESS1-4 MS-LS4-1 HS-ESS2-7 HS-LS1-1 CC: K-ESS3-2 CC: 1-PS4-4 DCI: 3-LS1-1 DCI: 5-LS2-1 DCI: MS-LS4-1 DCI: HS-ESS2-7 DCI: HS-LS1-1 DCI: HS-LS2-3 DCI: HS-LS2-4 DCI: HS-LS2-7 DCI: HS-LS4-6	light		SP: 2 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 limitation CC: MS-PS2-1 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4	
life	BBK 3-LS1-1 HS-ESS1-3			limited	MS-ESS3-1 HS-LS4-2 CC: 5-ESS3-1 CC: HS-PS3-1 DCI: 3-5-ETS1-1 DCI: 4-PS3-4 DCI: MS-ESS3-1 DCI: MS-LS2-1 DCI: HS-LS4-2
life cycle	BBK 3-LS1-1 HS-ESS1-3				CC: HS-ESS3-5 SP: MS-LS4-3 SP: MS-PS3-1 SP: HS-ESS1-4 SP: HS-ESS3-3 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2
life form	MS-LS4-1 HS-ESS2-7 DCI: MS-LS4-1			linear	SP: HS-LS2-4 SP: HS-LS3-3 SP: HS-LS4-3 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b)
life form change	BBK			light absorption	BBK
life span	HS-ESS1-1 DCI: HS-ESS1-1			light beam	DCI: 1-PS4-3
life-sustaining functions	BBK			light emission	BBK
	HS-ESS1-1 HS-ESS1-3 DCI: MS-ESS3-1 DCI: HS-ESS1-5 DCI: HS-ESS1-6			light pulse	MS-PS4-3
lifetime	HS-ESS1-1 HS-ESS1-3 DCI: MS-ESS3-1 DCI: HS-ESS1-5 DCI: HS-ESS1-6			light reflection	BBK
				light refraction	BBK
				light scattering	BBK
				light source	1-PS4-2 1-PS4-4
				light transmission	BBK
				linear growth	CC: HS-ESS1-4 CC: HS-LS3-3

	BBK 2-ESS2-3 5-PS1-3 MS-PS1-4 HS-PS3-4 DCI: 2-ESS2-3 DCI: 2-PS1-1 DCI: 5-LS2-1 DCI: MS-PS1-4 DCI: HS-ESS2-3 DCI: HS-ESS2-5	K-LS1-1 2-LS4-1 MS-LS1-1 DCI: K-ESS2-2 DCI: K-ESS3-1 DCI: K-ESS3-3 DCI: 2-LS4-1 DCI: 4-ESS2-1 DCI: 5-ESS2-1 DCI: MS-ESS2-6 DCI: MS-ESS3-3 DCI: MS-LS1-1 DCI: MS-LS2-1	longitudinal Marzano Research
liquid	living thing	K-ESS2-1 K-ESS3-1 K-ESS3-2 K-ESS3-3 5-PS2-1 MS-ESS2-2 MS-ESS3-2 MS-LS1-5 HS-ESS2-2 HS-ESS3-4 DCI: 4-ESS1-1 DCI: 4-PS3-2 DCI: 4-PS3-4 DCI: MS-ESS2-5 DCI: MS-ESS2-6 DCI: MS-LS1-5 DCI: HS-ETS1-1	long-term HS-ESS2-4 HS-LS4-4 CC: MS-ESS3-1 CC: MS-ESS3-4 CC: MS-ETS1-1 DCI: HS-ESS2-4
liquid water		SP: HS-ESS1-4 SP: HS-ESS3-3 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS4-6 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1	Louis Pasteur BBK
Lise Meitner			low pressure MS-ESS2-5
lithosphere			lunar phase MS-ESS1-1
livestock			lunar rock DCI: HS-ESS1-6
			lung 4-LS1-1
			machine BBK
			macroscopic MS-LS4-3 HS-PS2-1 HS-PS2-3 CC: MS-PS1-2 DCI: HS-PS2-1
			macroscopic level HS-PS1-6
			macroscopic scale HS-PS1-7 HS-PS3-2 DCI: HS-PS3-2 DCI: HS-PS3-3
			magnet BBK 3-PS2-3 3-PS3-2 3-PS2-4 MS-PS2-3 MS-PS2-5 DCI: 3-PS2-3 DCI: 3-PS2-4 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-5
			magnetic 3-PS2-3 DCI: MS-PS2-3 DCI: MS-PS2-5
			magnetic attraction BBK
	local		longitude Marzano Research
living			
living organism			
living system			

magnetic field	HS-ESS2-3 HS-PS2-5 HS-PS3-5 DCI: HS-ESS2-3 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-5 DCI: HS-PS4-3	mass	BBK MS-ESS2-5 MS-ESS3-2 MS-PS1-5 MS-PS2-2 MS-PS2-4 MS-PS3-1 MS-PS3-4 HS-ESS1-1 HS-ESS1-3 HS-PS1-7 HS-PS2-1 DCI: 5-PS1-3 DCI: MS-PS1-6 DCI: MS-PS2-2 DCI: MS-PS2-4 DCI: MS-PS3-1 DCI: HS-PS2-2 DCI: HS-PS3-1	material (noun)	5-LS2-1 5-PS1-3 MS-ESS2-1 MS-LS3-1 MS-PS1-3 MS-PS3-4 MS-PS4-2 HS-ESS1-6 HS-ESS2-5 HS-PS1-3 HS-PS2-5 HS-PS2-6 HS-PS4-4 CC: 1-LS1-1 CC: 2-ESS2-1 CC: 2-PS1-2 CC: 5-ESS3-1 CC: MS-PS1-3 CC: MS-PS4-2 CC: HS-LS1-1 CC: HS-ESS2-5 CC: HS-PS2-6 DCI: 1-PS4-3 DCI: 3-5-ETS1-1 DCI: 4-PS3-4 DCI: 5-ESS2-1 DCI: 5-LS2-1 DCI: 5-PS3-1 DCI: MS-ESS2-1 DCI: MS-LS1-7 DCI: MS-PS1-4 DCI: MS-PS4-2 DCI: HS-ESS1-5 DCI: HS-ESS1-6 DCI: HS-ESS2-3 DCI: HS-ESS2-5 DCI: HS-LS1-4 DCI: HS-PS4-5 SP: K-PS3-2 SP: 1-LS1-1 SP: 1-PS4-4 SP: 3-5-ETS1-1
magnetic force	3-PS2-3 5-PS1-3 MS-PS2-3 DCI: 3-PS2-3 DCI: 3-PS2-4 DCI: MS-PS2-3 D				
magnetic repulsion	BBK				
magnification	BBK				
magnifier	BBK				
magnitude	MS-ESS3-2 CC: MS-PS3-1 CC: MS-PS3-4 CC: HS-LS2-2 DCI: 3-PS2-2 DCI: MS-PS2-3 DCI: HS-ESS3-5	mass migration	HS-ESS3-1		
mammoth	BBK	mass to energy conversion	BBK		
management	HS-ESS3-3 DCI: HS-ESS3-3	mass wasting	MS-ESS3-2 HS-ESS2-1 HS-ESS3-1		
manifest	DCI: HS-PS3-2 DCI: HS-PS3-3	massive	DCI: HS-ESS1-2 DCI: HS-ESS1-3		
manifestation	DCI: HS-ETS1-1 DCI: HS-PS3-2	mate	3-LS4-2 MS-LS1-4 DCI: 3-LS4-2		
mantle	BBK HS-ESS2-3 DCI: HS-ESS2-3	material (adjective)	DCI: HS-PS1-1 DCI: HS-PS1-3 DCI: HS-PS2-6		
Marie Curie	BBK		K-PS3-2 1-LS1-1 1-PS4-1 1-PS4-3 1-PS4-4		
marine	3-LS4-1 4-ESS1-1 HS-ESS3-6		2-PS1-1 2-PS1-2 2-PS1-4 3-5-ETS1-1 4-ESS3-1 4-PS3-4 5-LS1-1		
marine sediment	MS-ESS3-1	material (noun)		material world	SP: 6 CC: 2-ESS2-1

mathematical model	BBK		
matter	1-PS4-1	DCI: 5-PS3-1 DCI: MS-ESS2-1	melting point BBK HS-PS1-3 DCI: HS-ESS2-5
	5-LS2-1	DCI: MS-LS2-3	membership DCI: HS-LS2-8
	5-PS1-1	DCI: MS-PS1-4	
	5-PS1-2	DCI: MS-PS3-3	
	MS-LS1-6	DCI: MS-PS3-4	
	MS-LS1-7	DCI: HS-ESS2-3	
	MS-LS2-3	DCI: HS-LS1-6	
	MS-PS1-5	DCI: HS-LS1-7	
	MS-PS3-4	DCI: HS-LS2-4	
	HS-ESS1-2	DCI: HS-PS1-1	
	HS-ESS2-3	DCI: HS-PS1-3	
	HS-LS1-5	DCI: HS-PS2-6	
	HS-LS2-3	DCI: HS-PS3-1	
	HS-LS2-4	DCI: HS-PS3-2	
	HS-PS4-4	DCI: HS-PS4-4	
	HS-PS4-5	DCI: HS-PS4-5	
	CC: 5-LS1-1	matter particle DCI: 5-PS1-1	
	CC: MS-ESS2-4	matter wave DCI: MS-PS4-2	
	CC: MS-ESS2-6	mean surface temperature DCI: MS-ESS3-5	
	CC: MS-LS1-6	measurement of motion BBK	
	CC: MS-LS1-7	mechanical HS-ESS2-5 DCI: MS-LS1-8	
	CC: MS-PS1-5	mechanical energy BBK	
	CC: MS-PS2-1	mechanical motion BBK	
	CC: MS-PS2-4	mechanical wave MS-PS4-2	
	CC: MS-PS3-2	mediate DCI: HS-LS1-3 DCI: HS-PS3-2	
	CC: HS-ESS2-3	medical HS-PS4-5 DCI: HS-PS4-5	
	CC: HS-ESS2-6	medicine MS-PS1-3 DCI: MS-LS2-5	
	CC: HS-ETS1-4	meiosis BBK HS-LS3-2 DCI: HS-LS3-2	
	CC: HS-LS1-2	melt MS-ESS2-1 MS-PS3-4 HS-ESS2-2 HS-ESS2-5	
	CC: HS-LS1-4		
	CC: HS-LS1-5		
	CC: HS-LS1-6		
	CC: HS-LS2-3		
	CC: HS-LS2-5		
	CC: HS-PS1-4		
	CC: HS-PS1-7		
	CC: HS-PS3-3		
	CC: HS-PS4-3		
	DCI: 1-PS4-1		
	DCI: 2-PS1-1		
	DCI: 5-LS2-1		
	DCI: 5-PS1-1		
	DCI: 5-PS1-2		

microscopic scale	DCI: HS-PS3-2
microwave	BBK DCI: HS-PS4-3
migrate	HS-LS2-8
	BBK
migration	HS-LS4-2 DCI: HS-ESS3-1
	BBK
Milky Way	MS-ESS1-2 DCI: MS-ESS1-2
mimic	1-LS1-1 2-LS2-2
	BBK
	5-PS1-3
	MS-ESS2-1
	MS-ESS3-1
	MS-ESS3-4
	HS-ESS1-6
	HS-ESS3-1
	HS-ESS3-2
	DCI: MS-ESS3-1
	DCI: HS-ESS2-1
mining	4-ESS3-1 HS-ESS3-2 HS-ESS3-4
mitigation	DCI: HS-ETS1-1 DCI: HS-PS3-3 DCI: HS-PS2-3
mitochondria	BBK MS-LS1-2
	BBK
mitosis	HS-LS1-4 DCI: HS-LS1-4
mixed	DCI: 5-PS1-4 DCI: HS-PS4-3
mixture	BBK
moderate	HS-LS2-6
	MS-LS4-2
	SP: 4
	CC: HS-ESS3-1
	CC: HS-ESS3-3
	CC: HS-PS3-3
	CC: HS-PS4-2
	CC: HS-PS4-5

modern world	DCI: HS-PS4-5
moisture	HS-ESS2-5 HS-LS1-3
molar volume	BBK
mole	BBK HS-PS1-7
molecular	CC: HS-ESS2-5
molecular arrangement	BBK
molecular energy	BBK
	MS-PS1-1
molecular-level (adjective)	MS-PS1-4 HS-PS1-4 HS-PS1-6 HS-PS2-6
molecular level (noun)	HS-PS1-6
molecular motion	BBK
molecular synthesis	BBK

molecule	BBK MS-LS1-7 MS-PS1-1 MS-PS1-4 HS-LS1-6 HS-LS1-7 HS-LS2-4 HS-PS1-3 HS-PS1-5 HS-PS2-6 DCI: MS-LS1-6 DCI: MS-LS1-7 DCI: MS-PS1-1 DCI: MS-PS1-2 DCI: MS-PS1-3 DCI: MS-PS1-4 DCI: MS-PS1-5 DCI: HS-LS1-1 DCI: HS-LS1-6 DCI: HS-LS1-7 DCI: HS-LS2-4 DCI: HS-LS3-1 DCI: HS-PS1-4 DCI: HS-PS1-5 DCI: HS-PS1-6 DCI: 5-ESS2-1 BBK HS-PS2-2 DCI: 3-PS2-2 DCI: HS-PS2-2 DCI: HS-PS2-3 BBK BBK 1-ESS1-1 MS-ESS1-1 DCI: 1-ESS1-1 DCI: 5-ESS1-2 DCI: MS-ESS1-1 HS-ESS1-6 BBK HS-LS4-2 4-PS4-3 4-PS3-4 DCI: MS-PS3-1 DCI: MS-PS3-5
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mountain	4-ESS2-2 HS-ESS2-1						BBK MS-LS4-6 HS-LS4-4 DCI: MS-LS4-4 DCI: MS-LS4-6 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-LS4-4
mountain building	BBK						
mountain chain	MS-ESS1-4 DCI: 4-ESS2-2						
mountain range	5-ESS2-1 MS-ESS2-2 DCI: 4-ESS2-2						
movement	4-ESS2-1 5-LS2-1 MS-ESS2-2 MS-LS1-6 HS-ESS1-5 HS-LS1-2 DCI: MS-ESS2-2 DCI: MS-ESS2-4 DCI: MS-ESS2-5 DCI: HS-ESS1-2 DCI: HS-ESS1-3 DCI: HS-ESS1-5 DCI: HS-ESS2-1 DCI: HS-ESS2-3						SP: 2 SP: 7 CC: 3-LS3-1 CC: 4-PS4-1 CC: 5-ESS1-2 SP: K-PS3-2 SP: 1-LS1-1 SP: 1-LS1-2 SP: 1-LS3-1 SP: 1-PS4-2 SP: 1-PS4-4 SP: 2-ESS1-1 SP: 2-ESS2-1 SP: 2-PS1-3 SP: MS-PS1-5
moving magnet	BBK						
multicellular	BBK HS-LS1-2 DCI: MS-LS1-1 DCI: MS-LS1-3 DCI: HS-LS1-2 DCI: HS-LS1-4						MS-ESS3-5 DCI: 4-ESS3-2
muscle	HS-LS1-2 DCI: HS-LS1-7						
muscular system	BBK MS-LS1-3						
mutation	MS-LS3-1 HS-LS3-2 HS-LS4-2 DCI: MS-LS3-1 DCI: MS-LS3-2 DCI: HS-LS4-2						4-ESS3-1 4-ESS3-2 MS-ESS3-4 MS-PS1-3 HS-ESS3-1 HS-ESS3-3 CC: MS-ESS3-1 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ESS3-4 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 DCI: K-ESS3-1 DCI: MS-ESS3-1 DCI: MS-ESS3-3 DCI: HS-ESS3-3
mutualism	BBK						
mutually beneficial	MS-LS2-2 DCI: MS-LS2-2						
natural gas	HS-ESS3-2						

new gene combinations	BBK	nonrenewable	MS-ESS3-1	BBK 5-ESS2-2 MS-ESS2-3 MS-ESS2-6 HS-ESS2-4 HS-ESS2-6 HS-ESS3-4 HS-ESS3-5 HS-ESS3-6
Newtonian mechanics	BBK	nonrenewable energy	4-ESS3-1	
Newton's first law of motion	BBK MS-PS2-2	North pole	DCI: 5-ESS1-2	
Newton's law of gravitation	HS-ESS1-4 HS-PS2-4 DCI: HS-PS2-4	nuclear	HS-PS1-8 CC: HS-PS1-8 DCI: HS-ESS1-5 DCI: HS-ESS1-6	
Newton's second law of motion	BBK MS-PS2-2 HS-PS2-1 DCI: HS-PS2-1	nuclear fission	BBK	DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-4
Newton's third law of motion	BBK MS-PS2-1 DCI: MS-PS2-1	nuclear fusion	HS-ESS1-1 DCI: HS-ESS1-1 DCI: HS-ESS1-2 DCI: HS-ESS1-3	DCI: MS-ESS2-5 DCI: MS-ESS2-6 DCI: MS-ESS3-1 DCI: HS-ESS2-2 DCI: HS-ESS2-4
night sky	5-ESS1-2	nuclear mass	BBK	
nitrogen	BBK HS-LS2-4	nuclear process	CC: HS-ESS1-3 DCI: HS-PS1-8	
nitrogen cycle	BBK	nuclear reaction	BBK	
nonlinear	SP: MS-LS4-3 SP: MS-PS3-1 SP: HS-ESS1-4 SP: HS-ESS3-3 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS4-6 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1	nucleated cell	BBK	
	HS-ESS1-3	nucleosynthesis	BBK MS-LS1-2 HS-PS1-8 DCI: HS-PS1-1 DCI: HS-PS1-2	DCI: HS-ESS3-6 DCI: HS-LS2-5
	BBK	nucleus	BBK MS-LS1-2 HS-PS1-8 DCI: HS-PS1-1 DCI: HS-PS1-2	MS-ESS1-4
	BBK	nutrient	BBK MS-LS2-5 HS-LS1-2 DCI: MS-LS2-3	HS-ESS2-4 HS-ESS2-6 DCI: HS-ESS2-4
	BBK			
	DCI: MS-LS2-1			
	DCI: MS-LS2-2			
	DCI: MS-LS2-3			
	DCI: HS-LS2-1			
	DCI: HS-LS2-2			
	MS-LS2-3			
	DCI: MS-LS2-1			
	DCI: MS-LS2-2			
	DCI: MS-LS2-3			
nonliving	DCI: HS-LS2-1			
nonmetal reactivity	BBK			
nonreactive gas	BBK			
		ocean		
		ocean basin	BBK DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-4	5-ESS2-2 MS-ESS2-3 MS-ESS2-6 HS-ESS2-4 HS-ESS2-6 HS-ESS3-4 HS-ESS3-5 HS-ESS3-6
		ocean circulation	BBK DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-4	DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-5 DCI: MS-ESS2-6
		ocean current	BBK DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-4	DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-5
		ocean floor	BBK DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-4	4-ESS2-2 HS-ESS2-1 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: HS-ESS1-5 DCI: HS-ESS2-1
		ocean layers	BBK	4-ESS2-2 HS-ESS2-1 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: HS-ESS1-5 DCI: HS-ESS2-1
		ocean ridge	BBK DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-3	MS-ESS2-3 HS-ESS1-5 HS-ESS2-1 DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-3
		ocean trench	BBK DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-3	MS-ESS2-3 HS-ESS2-1 DCI: 2-ESS2-3 DCI: 4-ESS2-2 DCI: 5-ESS2-1 DCI: 5-ESS2-2 DCI: 5-ESS3-1 DCI: MS-ESS2-3

oceanic	MS-ESS2-6 DCI: MS-ESS2-6 DCI: MS-LS2-5	orbit	MS-ESS1-2 HS-ESS1-3 HS-ESS2-4 DCI: 5-ESS1-2 DCI: MS-ESS1-1 DCI: MS-ESS1-2 DCI: MS-ESS1-3 DCI: HS-ESS1-4 DCI: HS-ESS2-4	MS-LS4-2 MS-LS4-3 MS-LS4-5 HS-ESS2-6 HS-ESS3-6 HS-LS1-2 HS-LS1-4 HS-LS1-5 HS-LS2-4 HS-LS2-6 HS-LS4-2 HS-LS4-3 HS-LS4-4 HS-LS4-6 DCI: 1-LS1-1 DCI: 3-LS1-1 DCI: 3-LS3-1 DCI: 3-LS3-2 DCI: 3-LS4-1 DCI: 3-LS4-2 DCI: 3-LS4-3 DCI: 3-LS4-4 DCI: 4-ESS2-1 DCI: 5-ESS2-1 DCI: 5-LS2-1 DCI: 5-PS3-1 DCI: MS-ESS2-1 DCI: MS-LS1-1 DCI: MS-LS1-3 DCI: MS-LS1-4 DCI: MS-LS1-7 DCI: MS-LS2-1 DCI: MS-LS2-2 DCI: MS-LS2-3 DCI: MS-LS3-1 DCI: MS-LS3-2 DCI: MS-LS4-1 DCI: MS-LS4-2 DCI: MS-LS4-3 DCI: MS-LS4-5 DCI: HS-ESS2-6 DCI: HS-ESS2-7 DCI: HS-LS1-1 DCI: HS-LS1-2 DCI: HS-LS1-4 DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-LS2-4
oceanic crust	HS-ESS1-5	orbital	MS-ESS1-2 MS-PS2-4 HS-ESS1-4	
offspring	BBK 1-LS1-2 3-LS3-1 3-LS4-2 MS-LS3-2 HS-LS3-1 DCI: 1-LS1-2 DCI: MS-LS3-2 DCI: MS-LS4-5	orbital radius	MS-ESS1-3	
ohm	BBK	organ	BBK MS-LS1-3 DCI: MS-LS1-3 DCI: HS-LS1-4	
oil	BBK	organic	MS-ESS3-1 DCI: MS-LS1-6	
oil shale	HS-ESS3-2	organic compound synthesis	BBK	
omnivore	BBK	organic matter	BBK	
one-dimensional	HS-ESS2-3		BBK 3-LS1-1 3-LS3-1 3-LS4-1 3-LS4-3 3-LS4-4 5-LS2-1 MS-ESS1-4 MS-LS1-5 MS-LS1-6 MS-LS1-7 MS-LS2-1 MS-LS2-2 MS-LS3-1 MS-LS4-1	
opaque	1-PS4-3	organism		
operate	MS-LS4-1 HS-ESS2-1 CC: HS-ESS1-2 CC: HS-LS4-1 CC: HS-LS4-4 DCI: 5-LS2-1 DCI: MS-ESS2-2 SP: MS-ESS1-4 SP: MS-ESS2-2 SP: MS-ESS3-1 SP: MS-LS1-5 SP: MS-LS1-6 SP: HS-ESS1-2 SP: HS-ESS3-1 SP: HS-LS1-1 SP: HS-LS1-6 SP: HS-LS2-3 SP: HS-LS4-2 SP: HS-LS4-4 SP: HS-PS1-2			
optimal	MS-ETS1-4 SP: 6 DCI: MS-ETS1-4 DCI: MS-PS1-6 SP: HS-ESS2-2 SP: HS-PS2-1			

organism (cont'd)	DCI: HS-LS2-6 DCI: HS-LS3-1 DCI: HS-LS4-1 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-LS4-4	oxygen	BBK HS-ESS2-7 HS-LS1-6 HS-LS1-7 HS-LS2-4 HS-PS1-1 HS-PS1-2 DCI: MS-LS1-6 DCI: MS-LS1-7 DCI: MS-LS2-1 DCI: HS-ESS2-6 DCI: HS-ESS2-7 DCI: HS-LS1-5 DCI: HS-LS1-6	particle	5-PS1-1 MS-PS1-4 MS-PS3-4 HS-PS1-3 HS-PS1-5 HS-PS3-2 HS-PS4-3 DCI: 4-ESS2-1 DCI: 5-PS1-1 DCI: 5-PS1-3 DCI: MS-PS3-3 DCI: MS-PS3-4 DCI: HS-PS3-1 DCI: HS-PS3-2 DCI: HS-PS4-3
organism system failure	BBK				
organization	HS-LS1-2 DCI: HS-LS1-2 DCI: HS-LS1-6 DCI: HS-LS1-7	ozone		particle emission	
organ system	BBK		BBK		BBK
orientation	3-PS2-3 MS-PS3-2 HS-ESS2-4 DCI: 3-PS2-3 DCI: 3-PS2-4	parasite		particle motion	MS-PS1-4
origin of life	BBK		BBK		BBK
origin of the universe	BBK	parent		particle ring	4-PS3-4
original	DCI: MS-PS1-2 DCI: MS-PS1-3 DCI: MS-PS1-5 DCI: HS-ESS2-1 DCI: HS-ESS2-2 DCI: HS-LS2-2 DCI: HS-LS2-6		BBK 1-LS1-2 1-LS3-1 3-LS3-1 MS-LS3-2 HS-LS3-1 DCI: 1-LS1-2 DCI: 1-LS3-1 DCI: 3-LS3-1 DCI: MS-LS3-2 DCI: MS-LS4-5		DCI: 3-PS2-2
outer core	HS-ESS2-3 DCI: HS-ESS2-3	parent cell	DCI: HS-LS1-4	peak	DCI: 4-PS4-1 DCI: HS-PS4-3
outer electron state	DCI: HS-PS1-1 DCI: HS-PS1-2	parental generation	BBK	pebble	BBK
outermost	HS-PS1-1 HS-PS1-2	parent/offspring similarity	BBK	peer review	SP: HS-ESS1-2 SP: HS-ESS3-1 SP: HS-LS1-1 SP: HS-LS1-6 SP: HS-LS2-3 SP: HS-LS4-2 SP: HS-LS4-4 SP: HS-PS1-2
outward	DCI: HS-ESS2-3				SP: 7 SP: 8 DCI: 3-5-ETS1-2 SP: K-PS2-1 SP: 3-ESS3-1 SP: 3-LS2-1 SP: 3-LS4-3 SP: 3-LS4-4 SP: 4-LS1-1 SP: 5-ESS1-1 SP: 5-LS2-1 SP: 5-PS2-1
overexploitation	DCI: HS-LS2-7 DCI: HS-LS4-6			peers	
overpopulation	DCI: HS-LS2-7 DCI: HS-LS4-6				
oxidation	BBK				
oxidation-reduction reaction	BBK				

per-capita	MS-ESS3-4 HS-ESS3-3 DCI: MS-ESS3-3 DCI: MS-ESS3-4	photon	HS-PS4-4 DCI: HS-PS4-3	pinhole box	1-PS4-2
percentage	5-ESS2-2		BBK MS-LS1-6 HS-LS1-5 HS-LS2-5 DCI: MS-LS1-6 DCI: HS-LS1-5 DCI: HS-LS2-3	pixel	DCI: HS-PS4-2 DCI: HS-PS4-5
perception	DCI: 4-LS1-2				BBK HS-ESS1-4 DCI: 5-PS2-1
percolation	BBK				DCI: MS-ESS1-2 DCI: MS-ESS1-3
	K-2-ETS1-3 DCI: 3-5-ETS1-2 DCI: 4-ESS3-2 DCI: MS-ETS1-3 DCI: MS-PS1-6 DCI: HS-LS1-1				DCI: MS-ESS1-3 DCI: MS-ESS2-1
perform	DCI: HS-LS4-2 DCI: HS-LS4-3 SP: HS-ESS1-3 SP: HS-LS4-1 SP: HS-PS2-6 SP: HS-PS4-5	photosynthesizing organism	BBK		DCI: MS-ESS2-2 DCI: MS-ESS3-1
		photosynthetic plants	BBK		DCI: HS-ESS2-3
		phylogenetics	BBK		DCI: HS-ESS2-4
performance		physical change	HS-LS2-6 DCI: MS-ESS2-1		DCI: HS-ESS2-5
		physical characteristic	DCI: 3-LS4-4 DCI: 4-ESS2-1		
			K-2-ETS1-2 4-PS4-1 MS-PS1-5 DCI: K-2-ETS1-3 DCI: K-ESS3-3 DCI: 2-LS2-2 DCI: HS-ETS1-4 DCI: HS-LS4-6		
period [time]	MS-LS2-1 MS-PS2-4 CC: HS-ESS2-1 CC: HS-ESS3-3 CC: HS-ESS3-5 DCI: HS-LS2-2 DCI: HS-LS2-6	physical model			
		physical process	DCI: HS-ESS2-3		
periodic table	BBK HS-PS1-1 HS-PS1-2 DCI: HS-PS1-1 DCI: HS-PS1-2	physical properties	BBK DCI: 5-ESS2-2 DCI: 5-PS1-2 DCI: MS-PS1-2 DCI: MS-PS1-3		
permeate	DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-5				
petal	4-LS1-1	physical replica	SP: K-2-ETS1-2 SP: K-ESS3-1 SP: 2-ESS2-2 SP: 2-LS2-2		
petroleum	MS-ESS3-1 HS-ESS3-2	physiological	DCI: HS-LS4-3 DCI: HS-LS4-4		
pharmaceutical	HS-PS2-6	physiological change	BBK		
phase	MS-ESS1-1 DCI: HS-PS4-3	physiology	HS-LS4-2		
phase change	BBK 5-PS1-2	phytoplankton	DCI: MS-LS1-6		
photoelectric	HS-PS4-3 DCI: HS-PS4-5	Pierre Curie	BBK		
photograph	MS-ESS1-3				

plant	BBK	plant matter	5-LS1-1	population	BBK
	K-ESS2-2	plant organ	BBK		MS-LS2-1
	K-ESS3-1	plant part	DCI: 5-LS2-1		MS-LS2-4
	K-LS1-1	plant product	BBK		MS-LS4-4
	1-LS1-1	plant structure	MS-LS1-4		MS-LS4-6
	1-LS3-1	plate	MS-ESS2-2		HS-ESS3-1
	2-LS2-1		MS-ESS2-3		HS-ESS3-3
	2-LS2-2		HS-ESS1-5		HS-ESS3-6
	2-LS4-1		HS-PS3-2		HS-LS2-1
	2-PS1-4		DCI: MS-ESS2-3		HS-LS2-2
	3-LS3-1		DCI: HS-ESS2-3		HS-LS3-3
	3-LS3-2	plate boundary	BBK		HS-LS4-4
	3-LS4-1	plate collision	BBK		DCI: MS-LS2-1
	3-LS4-2	plate tectonics	BBK		DCI: MS-LS2-2
	3-LS4-4		HS-ESS1-5		DCI: MS-LS2-4
	4-ESS1-1		HS-ESS2-3		DCI: MS-LS4-4
	4-LS1-1		DCI: HS-ESS1-5		DCI: MS-LS4-6
	5-LS1-1		DCI: HS-ESS1-6		DCI: HS-ESS3-1
	5-LS2-1		DCI: HS-ESS2-1		DCI: HS-LS2-1
	MS-LS1-4		DCI: HS-ESS2-3		DCI: HS-LS2-2
	MS-LS1-5	plateau	HS-ESS2-1		DCI: HS-LS2-6
	HS-ESS2-7	plumage	MS-LS1-4		DCI: HS-LS2-7
	HS-LS1-5	polar ice caps	5-ESS2-2		DCI: HS-LS3-2
	DCI: K-ESS2-2	pole	DCI: 5-ESS1-2		DCI: HS-LS3-3
	DCI: K-LS1-1	pollen	MS-LS1-4		DCI: HS-LS3-4
	DCI: 1-LS1-1	pollinate	2-LS2-2		DCI: HS-LS3-5
	DCI: 1-LS1-2	pollination	DCI: 2-LS2-2		DCI: HS-LS3-6
	DCI: 1-LS3-1	pollutant	HS-ESS3-4		DCI: HS-LS4-2
	DCI: 2-LS2-1	pollution	BBK		DCI: HS-LS4-3
	DCI: 2-LS2-2		4-ESS3-1		DCI: HS-LS4-5
	DCI: 3-LS1-1		MS-ESS3-3	population density	BBK
	DCI: 3-LS4-1		DCI: HS-ESS3-4	position over time	BBK
	DCI: 4-LS1-1		DCI: HS-ETS1-1	positive	CC: MS-ESS3-1
	DCI: 5-LS1-1		DCI: HS-LS2-7		CC: MS-ESS3-4
	DCI: 5-LS2-1		DCI: HS-LS4-6		CC: MS-ETS1-1
	DCI: 5-PS3-1	polygenic trait	BBK		CC: HS-ESS2-2
	DCI: MS-LS1-4	pond	MS-LS1-5		CC: HS-ESS3-4
	DCI: MS-LS1-5		DCI: 2-ESS2-3		CC: HS-LS1-3
	DCI: MS-LS1-6	possess	BBK		DCI: MS-ESS3-3
	DCI: MS-LS1-7		4-ESS3-1		DCI: HS-LS1-3
	DCI: MS-LS2-3		MS-ESS3-3		DCI: HS-LS4-3
	DCI: HS-ESS2-6		DCI: HS-ESS3-4		DCI: 4-PS3-1
	DCI: HS-ESS2-7		CC: HS-ESS2-2		CC: HS-LS1-3
	DCI: HS-LS2-4		CC: HS-ESS3-4		DCI: HS-LS4-3
plant growth	BBK	potential (adjective)	MS-ETS1-1		

potential (noun)	HS-LS4-2 DCI: HS-LS4-2	presence	DCI: 4-ESS1-1 DCI: HS-ESS1-2	product	HS-PS1-4 HS-PS1-6 HS-PS1-7 CC: 1-LS1-1 CC: 2-PS1-2 CC: 4-PS4-3 DCI: HS-LS1-6 DCI: HS-LS1-7
potential energy	BBK MS-PS3-2 DCI: MS-PS1-4 DCI: MS-PS3-2	presentation	DCI: HS-ETS1-4 DCI: HS-LS4-6	production	MS-ESS3-5 HS-ESS2-7 HS-ESS3-2 DCI: MS-LS3-1
powder	5-PS1-3	preserve	DCI: HS-LS2-7 DCI: HS-LS4-6	productivity	DCI: HS-LS2-7 DCI: HS-LS4-6
precipitation	BBK 3-ESS2-1 MS-ESS2-5 HS-ESS2-4 HS-ESS3-1 HS-ESS3-5 DCI: MS-ESS2-4	pressure	BBK MS-ESS2-5 HS-ESS2-3 HS-PS1-3 DCI: MS-PS1-4	progress	CC: MS-PS4-3 CC: HS-LS3-3
precise	DCI: MS-ETS1-1 DCI: MS-PS3-3	prey	BBK	proliferation	HS-LS4-2
precision	MS-ETS1-1 CC: HS-PS3-1 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4	primordial	DCI: HS-ESS1-2		
predation	BBK DCI: HS-LS2-1 DCI: HS-LS2-2	priority	DCI: HS-ETS1-2 DCI: HS-PS1-6 DCI: HS-PS2-3		
predator	BBK 3-LS4-2 MS-LS1-4	probabilistic	MS-ESS2-5 DCI: MS-ESS2-5		
predatory	MS-LS2-2 DCI: MS-LS2-2	probability	MS-LS1-4 MS-LS4-4 MS-LS4-6 HS-LS3-3 HS-LS4-3 CC: MS-LS1-4 CC: MS-LS1-5 CC: MS-LS4-4 CC: MS-LS4-5 CC: MS-LS4-6 DCI: HS-LS3-2 DCI: HS-LS3-3 SP: HS-LS3-3 SP: HS-LS4-3F		
prediction	BBK MS-ESS3-2 SP: 2 CC: 3-ESS2-1 CC: 3-ESS2-2 CC: 3-LS1-1 CC: 3-PS2-2 CC: HS-PS3-1 DCI: 3-ESS2-1	probe (noun)	DCI: HS-ESS2-3		
predominance	DCI: MS-LS4-4	probe (verb)	DCI: HS-ESS2-3		
prehistoric animals	BBK	process (verb)	4-LS1-2 DCI: 4-LS1-2 DCI: MS-LS1-8		
prehistoric environment	BBK	producer	DCI: MS-LS2-3		
prehistoric organism	BBK				

properties	2-PS1-1	proportional	MS-LS4-4	push	K-PS2-1
	2-PS1-2		MS-LS4-6		K-PS2-2
	5-PS1-3		HS-LS2-4		3-PS2-1
	MS-ESS1-3		HS-LS4-2		DCI: K-PS2-1
	MS-PS1-2		HS-PS1-7		DCI: K-PS2-2
	HS-ESS2-5		CC: MS-PS3-1		K-ESS2-1
	HS-PS1-1		CC: MS-PS3-4		3-PS2-1
	HS-PS1-2		DCI: MS-PS1-4		MS-PS1-4
	HS-PS1-3		DCI: MS-PS3-1		MS-PS2-2
	CC: MS-PS1-3		DCI: 3-5-ETS1-1		MS-PS4-1
	CC: MS-PS3-1		DCI: 4-PS3-4		MS-PS4-3
	CC: MS-PS3-4		BBK		HS-ETS1-1
	CC: MS-PS4-2		MS-LS3-1		HS-PS1-8
	CC: HS-ESS2-5		HS-LS1-1		HS-PS2-2
	CC: HS-LS1-1		DCI: MS-LS3-1		HS-PS3-3
	CC: HS-PS2-6		DCI: HS-LS1-1		SP: 3-5-ETS1-1
	DCI: 2-PS1-1		DCI: HS-LS1-6		SP: 3-ESS2-1
	DCI: 2-PS1-3		DCI: HS-LS3-1		SP: 3-LS3-1
	DCI: 3-PS2-3		protein		SP: 3-LS4-1
	DCI: 3-PS2-4		BBK		SP: 3-PS2-3
	DCI: 5-PS1-2		MS-LS3-1		SP: 3-PS2-4
	DCI: 5-PS1-3		HS-LS1-1		SP: 4-ESS2-2
	DCI: 5-PS1-4		DCI: HS-LS1-1		SP: 4-PS3-3
	DCI: MS-PS1-1		DCI: HS-LS1-6		SP: 5-ESS1-2
	DCI: MS-PS1-2		DCI: HS-LS3-1		SP: MS-LS2-2
	DCI: MS-PS1-3		protein structure		SP: MS-LS4-4
	DCI: MS-PS1-5		BBK		SP: MS-PS4-3
	DCI: HS-ESS2-5		protein synthesis		
	DCI: HS-PS1-1		BBK		
	DCI: HS-PS1-3		proton		
	DCI: HS-PS2-6		BBK		
	SP: 5-ESS2-2		CC: HS-ESS1-3		
	SP: 5-PS1-2		CC: HS-PS1-8		
	properties of elements		DCI: HS-PS1-1		
	BBK		DCI: HS-PS1-2		
	properties of light		DCI: HS-PS1-8		
	BBK		prototype		
	properties of reactants		3-5-ETS1-3		
	BBK		Ptolemy		
	properties of soil		BBK		
	BBK		pull		
	properties of sound		BBK		
	BBK		BBK		
	properties of water		BBK		
	BBK		BBK		
	properties of waves		BBK		

quantitative	K-ESS2-1	radio	DCI: HS-PS4-3	reaction	5-PS1-2
	MS-PS4-1	radio wave	BBK MS-PS4-3		HS-PS1-1
	HS-ESS2-6	radioactive	DCI: HS-ESS1-5 DCI: HS-ESS1-6		HS-PS1-2
	HS-ETS1-1	radioactive dating	BBK DCI: MS-LS4-1		HS-PS1-4
	HS-LS2-1	radioactive decay	BBK HS-PS1-8 DCI: HS-ESS2-3 DCI: HS-PS1-8		HS-PS1-5
	HS-PS2-2	radioactive isotope	BBK		DCI: 5-PS1-2
	HS-PS2-4	radiometric dating	HS-ESS1-6 DCI: HS-ESS1-5 DCI: HS-ESS1-6		DCI: MS-LS1-6
	HS-PS2-4	rain	DCI: K-ESS2-1		DCI: HS-PS1-2
	HS-PS3-3	rainfall	DCI: 4-ESS2-1		DCI: HS-PS1-6
	HS-PS3-4	rainy	K-ESS2-1		DCI: HS-PS1-7
	DCI: HS-PS3-1	ramp	K-PS2-2 HS-PS2-1		
	DCI: HS-PS3-2	random	DCI: MS-LS3-2		
	SP: 3-ESS2-1	rate of nuclear decay	BBK		
	SP: 3-LS3-1	ratio	HS-ESS3-2 CC: MS-PS3-1 CC: MS-PS3-4		
	SP: 3-LS4-1		MS-PS1-2 HS-PS1-5 DCI: MS-LS1-7		
	SP: 4-ESS2-2		DCI: MS-PS1-2 DCI: MS-PS1-3		
	SP: 5-ESS1-2		DCI: MS-PS1-5 DCI: HS-LS2-4		
	SP: 5-ESS2-2				
	SP: 5-PS1-2				
	SP: MS-ESS1-3				
	SP: MS-ESS2-3				
	SP: MS-ESS3-2				
	SP: MS-ETS1-3				
	SP: MS-LS2-1				
	SP: MS-LS2-2				
	SP: MS-LS4-1				
	SP: MS-LS4-3				
	SP: MS-LS4-4				
	SP: MS-PS1-2				
	SP: MS-PS3-1				
quantum of energy	BBK				
question formulation	BBK				
radial	HS-ESS2-3				
radiation	BBK				
	HS-ESS1-1				
	HS-ESS1-2				
	HS-PS4-4				
	DCI: HS-ESS1-1				
	DCI: HS-ESS2-2				
	DCI: HS-ESS2-4				
	DCI: HS-PS3-1				
radical reaction	BBK				
react				real-world	
reactant				rearrangement	
recognizable	SP: 5				
	DCI: 1-LS3-1				
recombination of chemical elements	BBK				
recombination of genetic material	BBK				
reconstruction	DCI: MS-LS4-2				
	DCI: HS-ESS2-3				
record	HS-ESS1-6				
	DCI: HS-ESS2-4				

recreational	DCI: HS-LS2-7 DCI: HS-LS4-6	region	3-ESS2-2 MS-ESS2-5 MS-ESS3-2 HS-ESS3-1 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-LS2-5 CC: MS-PS1-3 DCI: K-ESS2-1 DCI: K-ESS3-2 DCI: 4-ESS2-1 DCI: MS-ESS3-2 DCI: MS-PS3-3 DCI: HS-LS1-1 DCI: HS-LS3-1	1-ESS1-2 4-ESS2-1 5-ESS1-1 MS-ESS1-2 MS-ESS1-4 MS-PS3-2 HS-LS2-6 HS-PS1-1 HS-PS1-4 HS-PS1-8 HS-PS3-2 DCI: 3-PS2-3 DCI: 3-PS2-4 DCI: 5-LS2-1 DCI: MS-ESS1-1
recrystallization	BBK HS-ESS2-5		MS-ESS2-6 MS-ESS3-5 HS-ESS3-1 HS-ESS3-5 DCI: 4-ESS1-1 DCI: MS-ESS2-6 DCI: HS-ESS2-4 DCI: HS-ESS3-6	DCI: MS-ESS1-4 DCI: MS-PS1-4 DCI: MS-PS3-2 DCI: HS-LS2-2 DCI: HS-LS2-6 DCI: HS-LS2-8 DCI: HS-PS3-1 DCI: HS-PS3-2 DCI: HS-PS3-5 DCI: HS-PS4-3
recycle	BBK K-ESS3-3 MS-LS2-5 HS-ESS3-2 HS-ESS3-4 DCI: 5-LS2-1 DCI: MS-LS2-3		regularity CC: MS-PS1-5	relative mass BBK
recycling	HS-ESS3-2 DCI: MS-LS2-5		regulate HS-LS1-2 DCI: HS-LS3-1 DCI: HS-LS3-2	relative motion BBK
recycling of matter	BBK		regulation DCI: HS-ESS3-2	relative position BBK
red shift	HS-ESS1-2		regulatory DCI: HS-LS3-1	
redesign process	DCI: MS-ETS1-3 DCI: MS-PS1-6			
redistribute	DCI: MS-ESS2-6 DCI: HS-ESS2-2 DCI: HS-ESS2-4			
refinement	HS-PS2-3 DCI: MS-ETS1-4 DCI: MS-PS1-6			
reflect	4-PS4-2 MS-PS4-2 HS-ESS2-2 HS-PS4-4 DCI: 4-PS4-2 DCI: MS-PS4-2 DCI: HS-PS1-1 DCI: HS-PS1-2 SP: HS-LS3-2			
reflection	BBK DCI: HS-ESS2-2 DCI: HS-ESS2-3 DCI: HS-ESS2-4			
reflective	1-PS4-3			
reflectivity	5-PS1-3			

	MS-LS1-7 MS-PS1-6 HS-ESS1-1 HS-ESS3-4 HS-PS1-4 HS-PS1-8 DCI: 5-LS2-1 DCI: 5-PS3-1 DCI: MS-ESS2-6 DCI: MS-ESS3-5 DCI: MS-LS1-6 DCI: MS-LS1-7 DCI: MS-PS1-6 DCI: HS-ESS1-1 DCI: HS-ESS1-2 DCI: HS-ESS1-3 DCI: HS-ESS2-5 DCI: HS-ESS2-6 DCI: HS-ESS2-7 DCI: HS-LS1-5 DCI: HS-LS1-7 DCI: HS-LS2-4 DCI: HS-PS1-4 DCI: HS-PS1-5 DCI: HS-PS1-8	MS-ESS2-6 MS-LS4-6 MS-PS1-1 MS-PS3-2 MS-PS3-5 MS-PS4-1 HS-ESS1-4 HS-ESS3-6 HS-LS2-1 HS-LS2-2 HS-LS2-4 HS-PS1-4 HS-PS1-7 HS-PS2-2 HS-PS2-4 HS-PS4-4 DCI: K-2-ETS1-2 DCI: K-ESS3-3 DCI: 2-LS2-2 SP: K-ESS2-2 SP: 2-PS1-4 SP: 4-PS4-1 SP: MS-LS4-6 SP: MS-PS4-1 SP: HS-ESS1-4 SP: HS-ESS3-6 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4 SP: HS-PS4-1	reproducible result reproduction reproductive capacity reproductive system reproductive value of traits repulsion repulsive requirement requirements for life reservoir resilient resistant resonance	BBK BBK 3-LS1-1 4-LS1-1 MS-LS1-4 MS-LS3-2 HS-LS4-2 DCI: 3-LS1-1 DCI: 4-LS1-1 DCI: MS-LS1-4 DCI: MS-LS3-1 DCI: MS-LS2-1 DCI: MS-LS4-6 DCI: HS-LS3-2 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-LS4-4 BBK BBK BBK HS-PS1-1 HS-PS1-3 DCI: HS-PS2-6 HS-PS2-6 DCI: MS-PS2-3 K-LS1-1 DCI: MS-LS2-1 DCI: HS-ETS1-1 DCI: HS-PS2-3 DCI: HS-PS3-3 BBK 5-ESS2-2 MS-ESS3-2 DCI: HS-LS2-2 DCI: HS-LS2-6 3-ESS3-1 4-ESS3-2 HS-PS4-3
release	representation	3-LS4-2 MS-LS4-4 HS-LS2-8 HS-LS4-2 DCI: 3-LS4-2 DCI: 3-LS4-4 DCI: MS-LS1-4 DCI: MS-LS3-2 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-LS4-4 DCI: HS-LS4-5		
release of energy				
remove				
renewable	Marzano Research			
renewable energy	4-ESS3-1 HS-PS3-3			
renewable resource	MS-ESS3-1 DCI: 4-ESS3-1 DCI: MS-ESS3-1			
replicable experiment	BBK			
replication	HS-LS3-2 DCI: HS-LS3-2			

resource	K-ESS3-3 4-ESS3-1 5-ESS3-1 MS-ESS3-1 MS-LS2-1 HS-ESS3-2 HS-ESS3-3 HS-ESS3-4 HS-LS2-1 HS-LS4-2 HS-PS4-4 DCI: K-ESS3-1 DCI: 3-5-ETS1-1 DCI: 3-LS4-4 DCI: 4-ESS3-1 DCI: 4-PS3-4 DCI: 5-ESS3-1 DCI: MS-ESS3-1 DCI: MS-LS2-1 DCI: MS-LS2-5 DCI: MS-PS2-3 DCI: HS-ESS3-2 DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-LS2-6 DCI: HS-LS2-7 DCI: HS-LS4-2 DCI: HS-LS4-6 SP: MS-PS2-3	reuse	K-ESS3-3 HS-ESS3-2 HS-ESS3-4
	2-PS1-4 DCI: 2-PS1-4	reversible	2-PS1-4 DCI: 2-PS1-4
	BBK	revision of scientific theories	BBK
	1-ESS1-1 MS-ESS3-5 HS-ESS2-2 HS-LS2-6 DCI: MS-ESS3-5 DCI: HS-ESS3-6	rise	1-ESS1-1 MS-ESS3-5 HS-ESS2-2 HS-LS2-6 DCI: MS-ESS3-5 DCI: HS-ESS3-6
	4-ESS1-1 5-ESS2-2 HS-ESS2-2 HS-ESS3-1 DCI: 2-ESS2-3	river	4-ESS1-1 5-ESS2-2 HS-ESS2-2 HS-ESS3-1 DCI: 2-ESS2-3
	HS-ESS3-1	river delta	HS-ESS3-1
	K-PS3-1 2-ESS1-1 4-ESS1-1 MS-ESS2-1 MS-ESS2-3 MS-ESS3-1 MS-PS3-1 HS-ESS1-5 HS-ESS1-6 DCI: 4-ESS2-1 DCI: 5-ESS2-1 DCI: MS-ESS2-3 DCI: HS-ESS1-5 DCI: HS-ESS1-6 DCI: HS-ESS2-1 DCI: HS-ESS2-5	rock	K-PS3-1 2-ESS1-1 4-ESS1-1 MS-ESS2-1 MS-ESS2-3 MS-ESS3-1 MS-PS3-1 HS-ESS1-5 HS-ESS1-6 DCI: 4-ESS2-1 DCI: 5-ESS2-1 DCI: MS-ESS2-3 DCI: HS-ESS1-5 DCI: HS-ESS1-6 DCI: HS-ESS2-1 DCI: HS-ESS2-5
	BBK	rock breakage	BBK
	BBK	rock characteristics	BBK
	BBK	rock composition	BBK
	BBK HS-ESS2-5	rock cycle	BBK HS-ESS2-5
	4-ESS1-1 MS-ESS1-4	rock formation	4-ESS1-1 MS-ESS1-4
resource availability	BBK MS-LS2-1 DCI: HS-ESS3-1	rock layer	4-ESS1-1 MS-LS4-1
respiration	BBK HS-LS2-3	rock layer movement	BBK
respiratory system	BBK MS-LS1-3	rock record	DCI: HS-ESS1-6
response	1-LS1-2 5-PS1-3 HS-LS1-2 HS-LS1-3 DCI: MS-LS4-6 DCI: HS-ESS3-6	rock sequences	BBK
rest	HS-ESS1-6 DCI: 3-PS2-1	rock strata	MS-ESS1-4 DCI: MS-ESS1-4
restore	DCI: 5-LS2-1	role	MS-ESS1-2 MS-ESS3-5 MS-LS1-2 MS-LS1-6 HS-ESS1-1 HS-LS1-4 HS-LS2-3 HS-LS2-5 HS-LS2-8 HS-LS3-1 HS-LS4-1
		roll	K-PS2-1 3-PS2-2 MS-PS3-1 HS-PS2-1
		root	BBK K-ESS2-2 1-LS1-1 4-LS1-1 DCI: 1-LS1-1
		root development	HS-LS1-3
		rotation	MS-ESS2-6 DCI: 5-ESS1-2 DCI: HS-ESS2-4
		Rube Goldberg device	HS-PS3-3
		ruler	BBK
		runoff	HS-ESS2-2
		safety	HS-ETS1-3 SP: 6 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ETS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6
		salinity	DCI: MS-ESS2-6
		salt water	BBK

sample	MS-PS3-4 DCI: MS-PS3-4
satellite	BBK MS-ESS3-2 HS-ESS1-4
scanner	DCI: HS-PS4-5
sea floor	HS-ESS2-1 DCI: MS-ESS2-3
sea-floor spreading	BBK
sea level	HS-ESS2-4 HS-ESS3-1 HS-ESS3-5 HS-LS2-6
seamount	HS-ESS2-1
season	3-ESS2-1 MS-ESS1-1 DCI: MS-ESS1-1
seasonal	5-ESS1-2 HS-LS2-6 HS-LS4-4 DCI: 1-ESS1-2
seasonal changes	BBK
seasonal weather pattern	BBK
second law of thermodynamics	HS-PS3-4
sediment	MS-ESS3-1 HS-ESS2-2 DCI: 4-ESS2-1 DCI: 5-ESS2-1
sediment deposition	BBK
sedimentary	DCI: MS-LS4-1
sedimentary rock	BBK
sedimentation	BBK MS-ESS2-1
seed	2-LS2-2 MS-LS1-4 MS-LS1-5 DCI: 2-LS2-2
segment	DCI: HS-LS3-1
segregation	BBK

seismic wave	BBK HS-ESS2-3 HS-PS4-1 DCI: HS-ESS2-3
selective breeding	DCI: MS-LS4-5
selective gene expression	BBK
semiconductor	BBK
sense receptor	MS-LS1-8 DCI: 4-LS1-2
senses	BBK 4-LS1-2
sensory	4-LS1-2 MS-LS1-8
separation method [for mixtures]	BBK
sequence	DCI: HS-LS4-1
service	MS-LS2-5 DCI: MS-LS2-5
severe weather	K-ESS3-2 MS-ESS3-2 HS-ESS3-1 DCI: K-ESS3-2
sex cell	BBK
sex chromosome	BBK
sex-linked trait	BBK
sexual reproduction	MS-LS3-2 HS-LS4-2 DCI: MS-LS3-1 DCI: HS-LS3-2 DCI: HS-LS4-2
shadow	5-ESS1-2 DCI: 1-PS4-3 DCI: 5-ESS1-2
shared characteristic	BBK
shell	1-LS1-1 4-ESS1-1 MS-LS1-4
shelter	BBK
shift	HS-ESS1-2 HS-LS4-3 DCI: MS-LS2-4
short-term	DCI: MS-ESS1-1
shrub	2-ESS2-1
sibling	3-LS3-1
similarities and differences among organisms	BBK
simple molecule	MS-PS1-1
simple wave	DCI: MS-PS4-1
situation	K-2-ETS1-1 HS-PS4-3 SP: 6 DCI: K-2-ETS1-1 DCI: K-PS2-2 DCI: 3-PS2-2 DCI: 3-PS2-3 DCI: 3-PS2-4 DCI: HS-PS1-6
skeletal system	BBK
sketch	K-2-ETS1-2 DCI: K-2-ETS1-2 DCI: K-ESS3-3 DCI: 2-LS2-2
skin	4-LS1-1
sky	BBK 1-ESS1-1 DCI: 1-ESS1-1 DCI: MS-ESS1-1
slope	4-ESS2-1 SP: HS-LS3-3 SP: HS-LS4-3
snow	DCI: K-ESS2-1
social	MS-LS2-5 HS-ETS1-3 CC: HS-ESS3-2 DCI: HS-ESS3-2 DCI: HS-ESS3-4 DCI: HS-ETS1-3 DCI: HS-LS2-7 DCI: HS-LS4-6

societal	HS-ETS1-1 SP: 1 CC: 3-5-ETS1-2 CC: 3-ESS3-1 CC: 4-ESS3-2 CC: MS-ESS3-2 CC: MS-ESS3-3 CC: MS-ETS1-1 CC: MS-LS2-5 CC: MS-PS1-3 CC: MS-PS2-1 SP: HS-ESS3-2	solar heater HS-PS3-3 solar radiation MS-ESS3-5	sound wave BBK MS-ESS1-2 MS-ESS1-3 MS-PS2-4 HS-ESS1-4 HS-ESS1-6 DCI: MS-ESS1-1 DCI: MS-ESS1-2 DCI: MS-ESS1-3 DCI: HS-ESS1-4 DCI: HS-ESS1-6 DCI: HS-ESS2-4	South pole DCI: 5-ESS1-2
sodium	HS-PS1-2	solar system BBK MS-ESS1-2 MS-ESS1-3 MS-PS2-4 HS-ESS1-4 HS-ESS1-6 DCI: MS-ESS1-1 DCI: MS-ESS1-2 DCI: MS-ESS1-3 DCI: HS-ESS1-4 DCI: HS-ESS1-6 DCI: HS-ESS2-4	space MS-ESS1-3 MS-LS1-5 MS-PS2-1 CC: MS-ESS1-3 CC: MS-ESS1-4 CC: MS-ESS2-2 CC: MS-PS1-1 DCI: 5-ESS3-1 DCI: 5-PS1-1 DCI: MS-PS2-5 DCI: MS-PS4-2 DCI: HS-ESS2-2 DCI: HS-ESS2-4 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-5 DCI: HS-PS3-2	space probe BBK
sodium chloride	MS-PS1-1	solar system formation BBK	space weather HS-ESS1-1	spacecraft MS-ESS1-3
sodium hydroxide	MS-PS1-2	solid 2-ESS2-3 MS-PS1-4 HS-ESS2-5 DCI: 2-PS1-1 DCI: 5-LS2-1 DCI: MS-PS1-1 DCI: MS-PS1-4	spatial MS-ESS2-2 HS-ESS2-1 DCI: 4-LS1-2	special theory of relativity BBK
soil	BBK K-PS3-1 5-LS1-1 5-LS2-1 MS-ESS3-1 MS-LS2-5 HS-ESS2-2 HS-ESS2-5 HS-ESS2-6 HS-ESS2-7 HS-ESS3-1 HS-ESS3-2 DCI: 4-ESS2-1 DCI: 5-ESS2-1 DCI: 5-LS2-1 DCI: MS-LS2-3 DCI: HS-LS2-4	solid rock BBK	specialized MS-LS1-3 MS-LS1-4 HS-LS1-1 DCI: 4-LS1-2 DCI: MS-LS1-3 DCI: MS-LS1-4 DCI: HS-LS1-1	specialized cell BBK
soil color	BBK	solubility BBK 5-PS1-3 HS-ESS2-5	specialized organ BBK	specialized tissue BBK
soil composition	BBK	soluble Marzano Research	speciation BBK DCI: HS-LS2-7	
soil fertility	BBK			
soil texture	BBK			
solar	MS-PS3-3 HS-ESS2-4			
solar cell	HS-PS3-3 HS-PS4-5 SP: 1 DCI: HS-PS4-5			
solar energy	DCI: HS-LS2-5			
solar flare	HS-ESS1-1			

species	BBK 3-LS4-2 MS-LS1-5 MS-LS4-1 MS-LS4-3 HS-ESS3-4 HS-LS2-7 HS-LS4-2 HS-LS4-5 HS-LS4-6 DCI: 3-LS4-2 DCI: 5-LS2-1 DCI: MS-ESS3-3 DCI: MS-LS2-2 DCI: MS-LS2-5 DCI: MS-LS4-3 DCI: MS-LS4-6 DCI: HS-LS2-1 DCI: HS-LS2-2 DCI: HS-LS2-7 DCI: HS-LS3-1 DCI: HS-LS4-1 DCI: HS-LS4-2 DCI: HS-LS4-5 DCI: HS-LS4-6	speed	BBK K-PS2-2 4-ESS2-1 4-PS3-1 4-PS3-3 MS-PS2-3 MS-PS3-1 HS-PS4-1 CC: MS-PS3-1 CC: MS-PS3-4	star	BBK 1-ESS1-1 5-ESS1-1 5-ESS1-2 HS-ESS1-1 HS-ESS1-2 HS-ESS1-3 DCI: 1-ESS1-1 DCI: 5-ESS1-2 DCI: 5-ESS1-2 DCI: HS-ESS1-1 DCI: HS-ESS1-2 DCI: HS-ESS1-3				
			DCI: K-PS2-1 DCI: K-PS2-2 DCI: 3-PS2-1 DCI: MS-PS3-1 DCI: HS-PS3-1 DCI: HS-PS4-1						
			speed of light BBK		star age BBK				
			sperm BBK		star brightness BBK				
			sperm cell BBK		star composition BBK				
			spherical 5-PS2-1		star destruction BBK				
			spontaneous		star formation BBK				
					star size BBK				
					star system BBK				
			spontaneous nuclear reaction		star temperature BBK				
					star types BBK				
					MS-ESS1-2 MS-ESS2-4 MS-PS1-4 HS-PS1-2				
species diversity	BBK	state	DCI: MS-PS1-4 DCI: MS-PS3-3 DCI: MS-PS3-4 DCI: HS-PS1-1 DCI: HS-PS1-2 DCI: HS-PS3-4	state	DCI: MS-PS1-4 DCI: MS-PS3-3 DCI: MS-PS3-4 DCI: HS-PS1-1 DCI: HS-PS1-2 DCI: HS-PS3-4				
	MS-PS2-2								
specification	DCI: MS-ETS1-1								
	DCI: MS-PS3-3								
spectrum	HS-ESS1-2		stabilize						
	DCI: HS-ESS1-2								
	DCI: HS-ESS1-3								
stable	HS-LS2-6 HS-PS4-2 CC: HS-ESS1-6 CC: HS-ESS2-7 CC: HS-LS2-6 CC: HS-LS2-7 CC: HS-PS1-6 DCI: 5-LS2-1 DCI: HS-LS2-2 DCI: HS-LS2-6 DCI: HS-PS1-4 DCI: HS-PS3-4	stable	HS-LS2-6 HS-PS4-2 CC: HS-ESS1-6 CC: HS-ESS2-7 CC: HS-LS2-6 CC: HS-LS2-7 CC: HS-PS1-6 DCI: 5-LS2-1 DCI: HS-LS2-2 DCI: HS-LS2-6 DCI: HS-PS1-4 DCI: HS-PS3-4	states of matter	BBK				
static	MS-PS3-2								
stationary	MS-PS2-1								

statistical	MS-ESS1-3 SP: MS-ESS1-3 SP: MS-ESS2-3 SP: MS-ESS3-2 SP: MS-ETS1-3 SP: MS-LS2-1 SP: MS-LS4-1 SP: MS-LS4-3 SP: MS-PS1-2 SP: MS-PS3-1 SP: HS-ESS1-4 SP: HS-ESS2-2 SP: HS-ESS3-3 SP: HS-ESS3-5 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS3-3 SP: HS-LS4-3 SP: HS-LS4-6 SP: HS-PS1-7 SP: HS-PS2-1 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1	storage of genetic information	BBK	structure	K-PS2-2 K-PS3-2 1-LS1-1 4-LS1-1 MS-ESS2-3 MS-ESS3-4 MS-LS1-4 MS-LS3-1 MS-LS4-1 MS-LS4-2 MS-PS1-1 HS-ESS2-3 HS-LS1-1 HS-LS4-1 HS-PS1-3 HS-PS2-6 CC: K-2-ETS1-2 CC: 1-LS1-1 CC: 2-LS2-2 CC: MS-LS1-2 CC: MS-LS3-1 CC: MS-PS1-2 CC: MS-PS1-3 CC: MS-PS4-2 CC: MS-PS4-3 CC: HS-ESS2-5 CC: HS-LS1-1 CC: HS-PS2-6 DCI: 4-ESS2-2 DCI: 4-LS1-1 DCI: 5-PS1-1 DCI: MS-LS1-2 DCI: MS-LS3-1 DCI: MS-PS1-1 DCI: HS-ESS2-3 DCI: HS-LS1-1 DCI: HS-LS2-4 DCI: HS-PS1-1 DCI: HS-PS2-6 DCI: HS-PS3-1 DCI: HS-PS4-2 DCI: HS-PS4-5
		store	4-LS1-2 MS-PS3-2 MS-PS4-3 HS-LS1-5 HS-PS3-2 HS-PS4-2 DCI: MS-LS1-6 DCI: MS-PS1-6 DCI: MS-PS3-2 DCI: HS-ESS2-5 DCI: HS-LS1-5 DCI: HS-LS2-4 DCI: HS-LS2-5 DCI: HS-PS1-4 DCI: HS-PS1-5 DCI: HS-PS2-5 DCI: HS-PS3-2 DCI: HS-PS3-5 DCI: HS-PS4-2 DCI: HS-PS4-5		
		stored energy	BBK HS-LS2-4 DCI: 4-PS3-4 DCI: MS-LS1-7 DCI: HS-PS3-1		
		storybook	SP: K-2-ETS1-2 SP: K-ESS3-1 SP: 2-ESS2-2 SP: 2-LS2-2		
		straight line	DCI: MS-PS4-2		
		straight-line motion	BBK		
		stream	MS-ESS3-3 HS-ESS2-5 DCI: 5-ESS2-2 DCI: 5-ESS3-1		
		structural	MS-LS3-1 SP: 5 DCI: HS-LS1-2 DCI: HS-LS3-1		
		stunt	3-LS3-2		
		subduction zone	MS-ESS3-1		
		subset	DCI: MS-LS3-2		

	5-PS1-2	MS-PS2-2	BBK
	5-PS1-4	DCI: 3-PS2-1	K-ESS3-1
	MS-PS1-2	DCI: MS-PS2-2	K-PS3-1
	MS-PS1-4	DCI: HS-PS1-4	K-PS3-2
	MS-PS1-6	DCI: HS-PS1-5	2-LS2-1
	HS-PS1-3		4-ESS3-1
substance	DCI: 2-PS1-4	K-PS3-2	MS-ESS2-6
	DCI: 5-PS1-2	1-ESS1-1	HS-ESS2-2
	DCI: 5-PS1-4	5-ESS1-1	DCI: K-ESS2-1
	DCI: MS-PS1-1	5-ESS1-2	DCI: K-PS3-1
	DCI: MS-PS1-2	5-PS3-1	DCI: K-PS3-2
	DCI: MS-PS1-3	MS-ESS2-4	DCI: 1-ESS1-1
	DCI: MS-PS1-4	MS-PS2-4	DCI: MS-ESS1-1
	DCI: MS-PS1-5	HS-ESS1-1	DCI: MS-ESS2-4
		DCI: 5-ESS1-1	DCI: MS-ESS2-6
substructure	CC: HS-ESS2-5	DCI: 5-ESS1-2	DCI: MS-LS1-6
	DCI: HS-PS1-1	DCI: 5-PS2-4	DCI: HS-ESS1-1
subsystem	MS-LS1-3	DCI: 5-PS3-1	DCI: HS-ESS1-4
	CC: MS-LS1-3	DCI: MS-ESS1-1	DCI: HS-ESS2-4
subunit	DCI: MS-PS1-4	DCI: MS-ESS1-2	DCI: HS-ESS2-5
success	3-5-ETS1-1	DCI: MS-ESS1-3	sunspot
	HS-PS2-3	DCI: MS-ESS2-1	HS-ESS1-1
	DCI: 3-5-ETS1-1	DCI: MS-ESS2-6	superconductor
	DCI: 4-PS3-4	DCI: HS-ESS1-4	BBK
	DCI: MS-PS3-3	DCI: HS-ESS2-4	supernova
	SP: 3-5-ETS1-1	DCI: HS-PS4-5	DCI: HS-ETS1-1
	s		DCI: HS-LS4-2
successful	MS-ETS1-1	sun's position	K-ESS2-2
	MS-ETS1-3	sun's radiation	3-LS3-2
	MS-LS1-4	sun's size	4-ESS1-1
	DCI: MS-ETS1-1		4-LS1-1
	DCI: MS-LS4-6		5-ESS1-1
	DCI: MS-PS3-3		5-LS1-1
	SP: HS-ETS1-1		5-PS2-1
successive	DCI: HS-LS1-4		MS-ESS3-4
sugar	5-PS1-1		MS-LS1-3
	MS-PS1-2		MS-LS1-4
	HS-LS1-6		MS-LS1-7
	DCI: MS-LS1-6		MS-LS2-4
	DCI: HS-LS1-5		MS-LS4-6
	DCI: HS-LS1-6		MS-PS2-4
suitability	SP: HS-PS4-2		MS-PS3-5
			MS-PS4-3
			HS-LS1-6
			HS-LS2-1
			HS-LS2-2

support (cont'd)	HS-LS2-4	support	SP: 4-ESS2-1	support	SP: HS-LS1-1
	HS-LS2-8		SP: 4-PS3-2		SP: HS-LS1-6
	HS-LS3-2		SP: 5-ESS1-1		SP: HS-LS2-1
	HS-LS4-1		SP: 5-LS1-1		SP: HS-LS2-2
	HS-LS4-3		SP: 5-PS1-3		SP: HS-LS2-3
	HS-LS4-5		SP: 5-PS1-4		SP: HS-LS2-4
	HS-PS1-7		SP: MS-ESS1-4		SP: HS-LS2-7
	HS-PS2-1		SP: MS-ESS2-2		SP: HS-LS4-2
	HS-PS2-2		SP: MS-ESS2-5		SP: HS-LS4-4
	HS-PS4-1		SP: MS-ESS3-1		SP: HS-PS1-2
	HS-PS4-3		SP: MS-ESS3-3		SP: HS-PS1-5
	CC: K-PS2-1		SP: MS-ESS3-4		SP: HS-PS1-6
	CC: K-PS2-2		SP: MS-ETS1-2		SP: HS-PS1-7
	CC: 1-PS4-1		SP: MS-LS1-1		SP: HS-PS2-3
	CC: 1-PS4-2		SP: MS-LS1-3		SP: HS-PS3-3
	CC: 1-PS4-3		SP: MS-LS1-4		SP: HS-PS4-1
	CC: 2-PS1-2		SP: MS-LS1-5		
	CC: 4-ESS1-1		SP: MS-LS1-6		MS-ESS2-2
	CC: 4-ESS2-2		SP: MS-LS1-8		MS-ESS3-2
	CC: HS-ESS2-4		SP: MS-LS2-2		HS-ESS1-6
	CC: HS-ESS3-5		SP: MS-LS2-4		HS-ESS2-1
	DCI: 5-ESS2-1		SP: MS-LS2-5		HS-ESS2-2
	DCI: MS-LS1-7		SP: MS-LS4-2		HS-ESS2-4
	DCI: MS-LS4-6		SP: MS-LS4-4		HS-ESS2-5
	DCI: HS-ESS1-2		SP: MS-LS4-5		HS-ESS3-1
	DCI: HS-ESS3-3		SP: MS-LS4-6		HS-ESS3-4
	DCI: HS-LS2-1		SP: MS-PS1-3		DCI: 1-PS4-3
	DCI: HS-LS2-2		SP: MS-PS1-6		DCI: 4-PS4-1
	DCI: HS-LS2-7		SP: MS-PS2-1		DCI: 4-PS4-2
	DCI: HS-LS4-6		SP: MS-PS2-2		DCI: MS-ESS3-5
	SP: K-ESS2-2		SP: MS-PS2-4		DCI: MS-PS4-2
	SP: K-PS2-1		SP: MS-PS2-5		DCI: HS-ESS2-3
	SP: K-PS3-1		SP: MS-PS3-3		DCI: HS-ESS2-7
	SP: 1-ESS1-2		SP: MS-PS3-4		
	SP: 1-PS4-1		SP: MS-PS3-5		
	SP: 1-PS4-3		SP: MS-PS4-1		
	SP: 2-LS2-1		SP: HS-ESS1-2		
	SP: 2-LS4-1		SP: HS-ESS1-6		
	SP: 2-PS1-1		SP: HS-ESS2-4		
	SP: 2-PS1-4		SP: HS-ESS3-1		
	SP: 3-5-ETS1-3		SP: HS-ESS3-4		
	SP: 3-LS3-2		SP: HS-ESS3-5		
	SP: 3-PS2-1		SP: HS-ESS3-6		
	SP: 3-PS2-2		SP: HS-ETS1-2		
	SP: 4-ESS1-1		SP: HS-ETS1-3		

surrounding	K-ESS3-1 DCI: 4-PS3-2 DCI: 4-PS3-3 DCI: HS-LS1-7 DCI: HS-PS3-3 DCI: HS-PS3-4	synthetic polymer	BBK	BBK 2-PS1-4 3-ESS2-1 3-LS4-4 MS-ESS2-5 MS-ESS3-5
survival	4-LS1-1 HS-LS4-2 DCI: 1-LS1-1 DCI: 4-LS1-1 DCI: MS-LS2-2 DCI: HS-LS4-6 DCI: HS-LS2-7 DCI: HS-LS2-8 DCI: HS-LS4-3 DCI: HS-LS4-4	system level	HS-LS1-2	
survival of organisms	BBK	systematic	MS-ETS1-2 SP: 3 SP: 6 SP: 7 DCI: MS-ETS1-2 DCI: MS-ETS1-3 DCI: MS-LS2-5 DCI: MS-PS3-3 DCI: HS-ETS1-2 DCI: HS-PS1-6 DCI: HS-PS2-3	
survival value of traits	BBK	tar sand	HS-ESS3-2	
survive	K-LS1-1 1-LS1-1 1-LS1-2 3-LS2-1 3-LS4-2 3-LS4-3 MS-LS4-4 HS-LS2-8 HS-LS4-2 DCI: 1-LS1-1 DCI: 3-LS4-2 DCI: 3-LS4-3 DCI: 3-LS4-4 DCI: 5-LS2-1 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-LS4-4 DCI: HS-LS4-5	teamwork	BBK	temperature
		technical	MS-PS4-3 HS-PS2-6 HS-PS4-5 SP: MS-PS4-3 SP: HS-PS2-6 SP: HS-PS4-4 SP: HS-PS4-5	HS-LS1-3 HS-LS4-4 HS-PS1-5 HS-PS3-4 CC: 5-PS1-2 CC: 5-PS1-3 DCI: K-ESS2-1 DCI: 2-PS1-1 DCI: 3-LS4-4
		tectonic	Marzano Research	DCI: MS-ESS2-5 DCI: MS-ESS2-6
		tectonic cycle	DCI: HS-ESS2-4	DCI: MS-PS1-4
		tectonic process	DCI: MS-ESS2-3	DCI: MS-PS3-3
		tectonic uplift	HS-ESS2-1	DCI: MS-PS3-4
		telescope	BBK MS-ESS1-3	DCI: HS-ESS3-6 DCI: HS-LS1-7
sustain	DCI: HS-LS2-7 DCI: HS-LS4-6	test results	HS-ESS2-1	
sustainability	HS-ESS3-3 DCI: HS-ESS3-3	tension	DCI: HS-LS2-1 DCI: HS-LS2-2	
swarm	HS-LS2-8	terrestrial	DCI: MS-LS2-3 DCI: MS-LS2-5	
swing	3-PS2-2	testable	SP: 7 DCI: MS-ETS1-4 DCI: MS-PS1-6 DCI: MS-PS3-3	
synthetic	MS-PS1-3	texture	SP: HS-ETS1-1 SP: HS-LS3-1 SP: HS-PS4-2	2-PS1-1 2-PS1-2

thaw	4-ESS2-1				
theoretical model	BBK				
thermal	HS-ESS2-3 DCI: HS-ESS2-3				
thermal conductivity	5-PS1-3				
	MS-PS1-4 MS-PS1-6 MS-PS3-3 HS-PS3-2 HS-PS3-4 CC: MS-PS3-5 DCI: MS-PS1-4 DCI: HS-PS3-2 DCI: HS-PS3-3 DCI: HS-PS3-4 DCI: HS-PS4-4				
thermal energy	BBK				
thermal equilibrium	HS-PS3-4				
thermometer	BBK				
	1-LS1-1 3-LS4-2 4-LS1-1				
thorn	HS-LS4-6 DCI: HS-LS2-7				
threatened species	HS-LS4-6				
tide	BBK				
tilt	DCI: MS-ESS1-1 DCI: HS-ESS2-4				
tilted	DCI: MS-ESS1-1				
time period	CC: 3-LS4-1 DCI: 2-ESS1-1				
	2-ESS1-1 MS-ESS1-4 HS-ESS2-4 DCI: MS-ESS1-4 DCI: HS-ESS2-4				
time scale	BBK MS-LS1-3 HS-LS1-2 HS-PS4-4 DCI: MS-LS1-3 DCI: HS-LS1-4				
tolerance	BBK CC: MS-LS1-3				
topographic map	4-ESS2-2				
tornado	MS-ESS3-2				
torque	BBK				
	SP: HS-ESS3-4 SP: HS-ETS1-2 SP: HS-ETS1-3 SP: HS-LS2-7 SP: HS-PS1-6 SP: HS-PS3-3				
tradeoff	3-LS3-1 3-LS3-2 MS-LS4-4 MS-LS4-5 MS-LS4-6 HS-LS3-1 HS-LS3-3 HS-LS4-3 HS-LS4-5 DCI: 3-LS3-2 DCI: MS-LS3-1 DCI: MS-LS3-2 DCI: MS-LS4-4 DCI: MS-LS4-5 DCI: MS-LS4-6 DCI: HS-LS3-2 DCI: HS-LS3-3 DCI: HS-LS4-2 DCI: HS-LS4-3 DCI: HS-LS4-4				
trait	MS-ESS2-6 MS-PS1-6 MS-PS3-3 MS-PS3-5 HS-PS4-2 CC: 4-PS3-1 CC: 4-PS3-2 CC: 4-PS3-3 CC: 4-PS3-4 CC: 5-PS3-1 DCI: 4-PS3-2 DCI: 4-PS3-3 DCI: 4-PS3-4 DCI: MS-LS2-3 DCI: MS-LS3-2 DCI: MS-PS1-4 DCI: MS-PS3-2 DCI: MS-PS3-4 DCI: HS-LS1-7 DCI: HS-LS2-4 DCI: HS-PS2-4(a) DCI: HS-PS2-4(b) DCI: HS-PS2-5 DCI: HS-PS3-1 DCI: HS-PS3-2 DCI: HS-PS3-4				
	transform	HS-LS1-5 DCI: 3-LS4-4 DCI: 4-PS3-2 DCI: 4-PS3-4			
transfer (verb)	BBK				
transfer system	DCI: HS-LS1-7				
transform (noun)	HS-LS1-5 HS-PS1-8 DCI: HS-PS2-6				
transform matter and/or energy	BBK				
transformation	BBK				
transition	1-PS4-3				
translucent	MS-LS3-2 HS-PS4-2				
transmission	MS-LS3-2 HS-PS4-2				

transmit	MS-PS4-2 MS-PS4-3 HS-PS4-5 DCI: 4-PS4-3 DCI: MS-LS1-8 DCI: MS-PS4-2 DCI: MS-PS4-3 DCI: HS-ESS2-5 DCI: HS-PS2-5 DCI: HS-PS4-5	trigonometric	SP: HS-ESS1-4 SP: HS-ESS3-3 SP: HS-ESS3-6 SP: HS-ETS1-4 SP: HS-LS2-1 SP: HS-LS2-2 SP: HS-LS2-4 SP: HS-LS4-6 SP: HS-PS1-7 SP: HS-PS2-2 SP: HS-PS2-4(a) SP: HS-PS2-4(b) SP: HS-PS3-1 SP: HS-PS4-1	unequal heating of oceans BBK
transparent	1-PS4-3 DCI: MS-PS4-2	trophic level	HS-LS2-4	unicellular BBK DCI: MS-LS1-1
transpiration	DCI: MS-ESS2-4	trough	DCI: HS-PS4-3	uniform HS-PS3-4 DCI: HS-PS3-4
transport	HS-ESS2-2 CC: 5-LS1-1 DCI: HS-ESS2-5 DCI: HS-LS1-7 DCI: HS-PS3-1 DCI: HS-PS3-4	tsunami	MS-ESS3-2 HS-ESS3-1 DCI: 4-ESS3-2	unique 3-LS1-1 DCI: 3-LS1-1 HS-ESS2-5
transport matter and/or energy	BBK	tuning fork	1-PS4-1	unit MS-PS2-2 CC: 5-ESS2-2 CC: 5-PS1-2 CC: 5-PS1-3 DCI: MS-LS1-1 DCI: MS-PS2-2
transport of cell materials	BBK	typical	3-ESS2-1 MS-ESS3-1 DCI: 3-ESS2-2 DCI: 3-PS2-1 DCI: 4-PS3-2 DCI: 4-PS3-3 DCI: 4-PS3-4 DCI: MS-ESS3-3 DCI: MS-ESS3-4	unity of life BBK
transportation	HS-ESS2-5	ultraviolet	DCI: HS-PS4-4	universal solvent BBK
tree	K-ESS2-2 K-ESS3-3 2-ESS2-1	ultraviolet radiation	BBK	universe BBK HS-ESS1-2 CC: HS-ESS1-2 CC: HS-PS1-7 CC: HS-PS3-1 DCI: 1-ESS1-1 DCI: 5-ESS1-1 DCI: MS-ESS1-1 DCI: MS-ESS1-2 DCI: HS-ESS1-2
trend	MS-LS4-6 HS-LS2-2 HS-PS1-2	unanticipated	SP: HS-PS1-5 SP: HS-PS2-3	unstable DCI: HS-ESS2-3 DCI: HS-PS1-8
trial	SP: 3-5-ETS1-3 SP: 3-ESS2-1 SP: 3-LS3-1 SP: 3-LS4-1 SP: 3-PS2-1 SP: 4-ESS2-2 SP: 5-ESS1-2 SP: 5-PS1-4 SP: HS-ESS2-5 SP: HS-LS1-3 SP: HS-PS1-3 SP: HS-PS2-5 SP: HS-PS3-4	unbalanced force	BBK 3-PS2-1 MS-PS2-2 HS-PS2-1	urban development MS-ESS3-3 HS-ESS3-4
		uncontrolled system	DCI: HS-PS3-4	urban planning HS-ESS3-3
		underground	DCI: 5-ESS2-2 DCI: MS-ESS2-2	urbanization HS-LS2-7
		unequal heating of air	BBK	vacuole BBK
		unequal heating of land masses	BBK	vacuum HS-PS4-1
				valley HS-ESS2-1
				vapor HS-PS1-3
				variant DCI: MS-LS3-1 DCI: HS-LS1-4

variation	3-LS3-1 3-LS4-2 HS-ESS1-1 HS-ESS2-4 HS-ESS2-5 HS-LS3-2 HS-LS3-3 DCI: MS-ESS2-2 DCI: MS-LS3-1 DCI: MS-PS1-4 DCI: HS-LS3-2 DCI: HS-LS3-3 DCI: HS-LS4-2 DCI: HS-LS4-3		vegetation	4-ESS2-1 HS-ESS2-2 DCI: 5-ESS3-1 DCI: HS-ESS2-4		vulnerability	DCI: MS-ESS3-5
	vehicle		4-PS3-4 MS-PS2-1	warm (adjective)		K-ESS2-1 K-PS3-2	
	velocity		HS-PS2-1 DCI: HS-PS2-2	warm (verb)		DCI: K-PS3-1 DCI: K-PS3-2	
	version		DCI: MS-LS3-2	waste		DCI: HS-ESS3-4	
	vertebrate		BBK	waste management		HS-ESS3-3	
	vibrate		1-PS4-1 DCI: 1-PS4-1 DCI: MS-PS1-4	waste matter		DCI: 5-LS2-1	
	vibration		BBK	water capacity		BBK	
	viscosity		BBK DCI: HS-ESS2-5	water cycle		BBK	
	visible		1-ESS1-1 5-ESS1-2	water purification		MS-LS2-5 DCI: MS-LS2-5	
	visible light		BBK	water usage		MS-ESS3-3	
variety	2-LS4-1 HS-ESS2-5 SP: 1 SP: 2 DCI: 1-PS4-4 DCI: 2-PS1-3 DCI: 3-ESS3-1 DCI: 3-LS4-4 DCI: 4-ESS3-2 DCI: 5-ESS2-1 DCI: 5-PS1-3 DCI: MS-LS1-4 DCI: MS-LS2-5 DCI: HS-ESS2-4 DCI: HS-ETS1-4 DCI: HS-LS4-6 SP: 3-PS2-1 SP: 5-ESS2-2 SP: 5-PS1-2 SP: HS-ESS1-2 SP: HS-ESS3-1 SP: HS-LS1-1 SP: HS-LS1-6 SP: HS-LS2-3 SP: HS-LS4-2 SP: HS-LS4-4 SP: HS-PS1-2		visual	SP: MS-PS4-3		water wave	BBK DCI: MS-PS4-2
			vocalization	MS-LS1-4		wave	4-PS4-1 MS-PS4-1 MS-PS4-2 MS-PS4-3 HS-PS4-1 HS-PS4-3 HS-PS4-5 DCI: 4-PS4-1 DCI: MS-PS4-1 DCI: MS-PS4-2 DCI: HS-ESS2-3 DCI: HS-PS4-3 DCI: HS-PS4-4 DCI: HS-PS4-5
			volcanic activity	4-ESS3-2 MS-ESS3-1 MS-ESS3-5 DCI: HS-ESS2-4		wave packet	BBK
			volcanic ash cloud	DCI: HS-ESS2-4		wave peaks	DCI: 4-PS4-1
			volcanic eruption	BBK MS-ESS1-4 MS-ESS3-2 HS-ESS2-4 HS-ESS3-1 HS-LS2-6 DCI: 4-ESS3-2		wave pulse	MS-PS4-3 DCI: MS-PS4-3 DCI: HS-PS4-2 DCI: HS-PS4-5
			volcano	4-ESS2-2 MS-ESS1-3 MS-ESS2-2 DCI: 4-ESS2-2		wave source	BBK
			volume	4-ESS2-1 MS-PS3-4 HS-ESS3-5 CC: 5-ESS2-2 CC: 5-PS1-2 CC: 5-PS1-3 SP: 5-ESS2-2		wavelength	BBK 4-PS4-1 HS-PS4-1 DCI: MS-PS4-1 DCI: MS-PS4-2 DCI: HS-PS4-1 DCI: HS-PS4-4
vast	CC: HS-ESS1-2 CC: HS-PS1-7 CC: HS-PS3-1						

weather	BBK K-ESS2-1 3-ESS3-1 5-ESS2-1 MS-ESS2-1 MS-ESS2-5 DCI: K-ESS2-1 DCI: 3-ESS2-1 DCI: 3-ESS2-2 DCI: 5-ESS2-1 DCI: MS-ESS2-5	wind	BBK 2-ESS2-1 3-ESS2-1 3-ESS3-1 4-ESS2-1 4-ESS3-1 5-ESS2-1 MS-ESS2-2 MS-ESS2-5 MS-ESS2-6 DCI: K-ESS2-1 DCI: 2-ESS2-1 DCI: 4-ESS2-1 DCI: 5-ESS2-1 DCI: MS-ESS2-5
weather condition	3-ESS2-1 MS-ESS2-5		
weather forecasting	K-ESS3-2		
weather map	MS-ESS2-5		
weather patterns	BBK DCI: MS-ESS2-5		
weather scientist	DCI: K-ESS3-2		
weathered rock	BBK		
weathering	BBK 4-ESS2-1 MS-ESS2-1 MS-ESS2-2 MS-ESS3-1 HS-ESS2-1 HS-ESS2-5 HS-ESS2-7 DCI: MS-ESS2-2		
wedge	HS-ESS2-5		
week	BBK		
weight	BBK 5-PS1-2 CC: 5-ESS2-2 CC: 5-PS1-2 CC: 5-PS1-3 DCI: 5-PS1-2 SP: 5-PS1-2		
weight of subatomic particles	BBK		
wetland	MS-ESS3-3 HS-ESS2-2 DCI: 5-ESS2-2		
Wi-Fi device	MS-PS4-3		