

# Components of Activity

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## Earth 43& Earth 44

**WHAT THIS ACTIVITY IS ABOUT:** This activity is about cross-cutting concepts in science.

*Crosscutting Concepts represent common themes that span across science disciplines. These concepts identify universal properties and processes found in all the science disciplines.*

### **INSTRUCTIONS:**

**1. Briefly scan through each paragraph before starting.**

**2. Carefully read the 1<sup>st</sup> paragraph. Underline and/or circle key ideas and words.**

*Circle either YES or NO for each of the cross-cutting concepts on that page that apply.*

**3. Carefully read the 2<sup>nd</sup> paragraph. Underline and/or circle key ideas and words.**

*Circle either YES or NO for each of the cross-cutting concepts on that page that apply*

**4. Return to the 1<sup>st</sup> paragraph. Write a brief response for each cross cutting concept marked YES.**

*At bottom of page, circle the number of the cross-cutting concept which BEST fits the paragraph.*

**5. Return to the 2<sup>nd</sup> paragraph. Write a brief response for each cross cutting concept marked YES.**

*At bottom of page, circle the number of the cross-cutting concept which BEST fits the paragraph.*

**6. At the bottom of each page, describe WHY you selected that cross-cutting concept as the BEST fit.**

**7. Complete a VENN diagram on the back page for the two topic paragraphs.**

**8. Write a 50 word essay. Summarizing your discoveries, ideas, and conclusions about the paragraphs.**

## Earth 43 Deep Space

Astronomy is the study of the universe. Here are some examples of why studying space beyond Earth is important: the moon drives the ocean's tidal system, asteroid impacts have repeatedly devastated Earth's inhabitants, and energy from the sun drives our weather and climates. A knowledge of astronomy is essential to understanding the Earth. Astronomers can also use a knowledge of Earth materials, processes and history to understand other planets – even those outside of our own solar system. (topic) Does this paragraph mention, describe, imply, refer to, or convey:

1. (YES) (NO) any **patterns**?  
*in what way >>* \_\_\_\_\_  
\_\_\_\_\_
2. (YES) (NO) any **cause and effect**?  
*in what way >>* \_\_\_\_\_  
\_\_\_\_\_
3. (YES) (NO) a **quantity, numeric scale, or proportion**?  
*in what way >>* \_\_\_\_\_  
\_\_\_\_\_
4. (YES) (NO) a **system, or organized structure**?  
*in what way >>* \_\_\_\_\_  
\_\_\_\_\_
5. (YES) (NO) about **energy or matter?** (*Especially flows, cycles, and conservation*)?  
*in what way >>* \_\_\_\_\_  
\_\_\_\_\_
6. (YES) (NO) the **structure or function** of something?  
*in what way >>* \_\_\_\_\_  
\_\_\_\_\_
7. (YES) (NO) concepts of **stability and/or change**?  
*in what way >>* \_\_\_\_\_  
\_\_\_\_\_

Circle the number which BEST represents the paragraph? (1) (2) (3) (4) (5) (6) (7).

*Why did you choose this number? >>* \_\_\_\_\_  
\_\_\_\_\_

## Earth 44 Outdoors and Nature

According to the U.S. Bureau of Labor Statistics (BLS), nearly half of all jobs required outdoors. For purposes of this topic, an outdoor career is one in which at least some workers spend a large part of their workday doing tasks outside. Industry sectors with opportunities for employment outdoors include: • Agriculture, forestry, fishing, and hunting, Construction, Leisure and hospitality, Mining, quarrying, and oil and gas extraction, Transportation and warehousing, and Utilities. While not all workers in these industry sectors are outdoors, at least some of them are. Even people who work primarily outdoors, however, may spend at least part of their time indoors.(topic) Does this paragraph mention, describe, imply, refer to, or convey:

1. (YES) (NO) any **patterns**?  
in what way >> \_\_\_\_\_  
\_\_\_\_\_

2. (YES) (NO) any **cause and effect**?  
in what way >> \_\_\_\_\_  
\_\_\_\_\_

3. (YES) (NO) a **quantity, numeric scale, or proportion**?  
in what way >> \_\_\_\_\_  
\_\_\_\_\_

4. (YES) (NO) a **system, or organized structure**?  
in what way >> \_\_\_\_\_  
\_\_\_\_\_

5. (YES) (NO) about **energy or matter**? (*Especially flows, cycles, and conservation*)?  
in what way >> \_\_\_\_\_  
\_\_\_\_\_

6. (YES) (NO) the **structure or function** of something?  
in what way >> \_\_\_\_\_  
\_\_\_\_\_

7. (YES) (NO) concepts of **stability and/or change**?  
in what way >> \_\_\_\_\_  
\_\_\_\_\_

Circle the number which BEST represents the paragraph? (1) (2) (3) (4) (5) (6) (7).

Why did you choose this number? >> \_\_\_\_\_  
\_\_\_\_\_

