

Components of Activity

Earth 18& Earth 19

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 1st 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 2nd 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 1st 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 2nd 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 18 Rocks and Rock Types

The previous topic introduced minerals. Here we explore rocks and rock types. A rock is a naturally occurring aggregate of minerals and/or mineraloids. The three categories are igneous, sedimentary, and metamorphic. Example of each are as follows: Igneous Rocks (Basalt. Gabbro. Granite. Obsidian. Volcanic Ash and Tuff); Sedimentary Rocks. (Clays, Mudstones and Shales. Limestones. Sandstone); Metamorphic Rocks (Gneiss. Marble. Quartzite. Schist. Slate). (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 19 Resources and Energy

A natural resource is something that is found in nature and can be used by people. Earth's natural resources include light, air, water, plants, animals, soil, stone, minerals, and fossil fuels. People need some natural resources to stay alive. Water resources are useful to humans – needed for life to exist. A renewable resource is a resource which can be used repeatedly and replaced naturally. Examples include oxygen, fresh water, solar energy and biomass. Hydrocarbon resources are often known as fossil fuel resources as hydrocarbons are the primary constituent of natural gas, oil, and coal. (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? >> _____
