## Components of Activity

## Earth 19\& Earth 21

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

Circle the number which BEST represents the paragraph? (1) (2) (3) (4) (5) (6) (7).
Why did you choose this number? >> $\qquad$
$\qquad$

## Earth 21 The Rock Record

The rock record is nothing more than the rocks that currently exist. The rock record does not show a tidy, orderly progression of geologic events. Rock formations are eroded, buried, torn apart, melted, squashed together, even turned upside down. This geologic record is the history of Earth as recorded in the rocks that make up its crust. Rocks have been forming and wearing away since Earth first started to form, creating sediment that accumulates in layers of rock called strata. (topic) Does this paragraph mention, describe, imply, refer to, or convey:

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

Circle the number which BEST represents the paragraph? (1) (2) (3) (4) (5) (6) (7).
Why did you choose this number? >> $\qquad$
$\qquad$


Write a 50 Word Essay about the topic paragraphs here ...
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