

OAKLAND CUSD #5

EARTH SCIENCE

APRIL 13-17, 2020

WILLIAM SEWELL

Week: April 13-17, 2020

Teacher: William Sewell

Communication: email: william.sewell@oakland5.org or Google Hangout-Meet

Office hours: Monday and Wednesday: 12:00 to 2:00 p.m., Tuesday and Thursday: 12:00 to 1:00 p.m.

Due Date: All assignments are due 4/20/2020 either by sending a picture of it and turning it into Google Classroom or turning it into the office.

Assignments: All assignments will be in "Google Classroom" and a paper copy will be provided from the Oakland main office. I will have office hours as listed above which we can review the assignments given and I will help you as much as needed. However, the expectation is the same as it was before. I expect you to have made a serious effort to complete the assignment, before asking for help. You will not learn anything with me just giving you the answers.

Class	Choice 1	Choice 2	Choice 3 (Enrichment)
Earth Science	Chapter 25 Test, p.45-47	Collect 15 different rock samples. Take pictures or draw each and describe them: shape, various colors, size, sharp sides/ smooth, etc.	Take pictures of the moon and record the cycle that it is in from Monday through Friday. Please use the given table to complete.
Physical Science	Chapter 13: Review Worksheet, p.35-36, and the Chapter Test, p.37-38	Record your (not family) water usage throughout the week. Please use the given table to complete.	Do speed lab of races. Record your distance and time yourself. Please use the given table to complete.
Chemistry	Unit 4 Test (To be completed with notes and other resources)	Unit 5: Relative Mass Lab video and write-up	Do the Unit 5 worksheet entitled "The Mole". Use dimensional unit conversions to complete.
Pre-calculus	Complete Composite Functions Unit Test Version 2 on Khan or paper version.	Complete a worksheet on matrices.	Watch videos on Inverse trigonometric functions and do 8 problems for the exercises. They will be assigned in Khan academy.

Energy Resources

Reviewing Vocabulary

Match the definition in Column A with the term in Column B.

Column A

- _____ 1. Energy contained in water and steam heated by Earth's internal heat
- _____ 2. Can be separated from oil shale and refined
- _____ 3. Light, spongy plant material used as fuel
- _____ 4. Produced from wheat or corn
- _____ 5. Gas mixture manufactured from vegetable oil

Column B

- a. biodiesel
- b. kerogen
- c. ethanol
- d. geothermal energy
- e. peat

Complete each statement.

6. Materials like wood and coal are _____, which are burned to produce heat or power.
7. Energy sources known as _____ formed over thousands or millions of years from the compression and decomposition of organic matter.
8. The amount of work produced compared to the amount of energy used is called _____.
9. A common method of _____ is capturing and using heat during electric generation.
10. Sunlight falling on a(n) _____ produces a flow of electrons, which creates an electric current.
11. On a global scale, _____ meets current and future energy needs without damaging Earth's environment.

Understanding Main Ideas (Part A)

For each item, write *F* for fossil fuel, *B* for biomass fuel, or *O* for other source of energy. Some items may have more than one answer. Then answer the questions.

- | | |
|------------------------------|--------------------------|
| _____ 1. biogas | _____ 9. kerogen |
| _____ 2. charcoal | _____ 10. straw |
| _____ 3. coal | _____ 11. natural gas |
| _____ 4. ethanol | _____ 12. nuclear energy |
| _____ 5. fecal material | _____ 13. peat |
| _____ 6. field crops | _____ 14. petroleum |
| _____ 7. geothermal energy | _____ 15. tidal power |
| _____ 8. hydroelectric power | _____ 16. wind power |
| | _____ 17. wood |

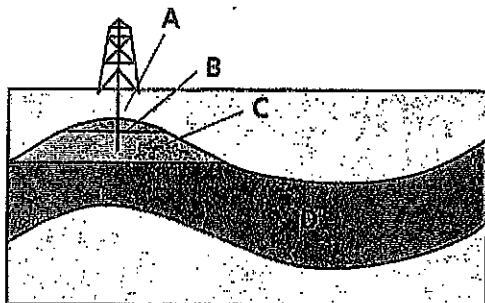
18. What is the ultimate source of energy for most of the energy sources listed above? What are the two exceptions?

19. List four traditional fuels.

20. List five alternative energy resources.

Understanding Main Ideas (Part B)

Match each letter on the diagram with the appropriate term below.



- _____ 1. oil
- _____ 2. gas
- _____ 3. water
- _____ 4. barrier of impermeable rock

Answer the following questions.

5. Explain why natural gas is usually found with oil.

6. Put these fuels in order from the smallest percentage of carbon to the largest percentage: anthracite, bituminous coal, lignite, peat. Which of these fuels burns hottest and cleanest?

7. How is coal transformed into electricity?

8. Compare and contrast the formation of coal and oil.

Name _____

Moon Phases

Date _____

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Date	Moon Phase Name	Picture of the moon / drawing	Outside conditions (clear cloudy)
4/13			
4/14			
4/15			

Name _____

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Date	Moon Phase Name	Picture of the moon / drawing	Outside conditions (clear cloudy)
4/16			
4/17			