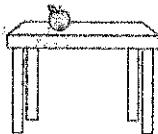


Force and Motion

Part I. Multiple Choice.

- 1) Inertia states that...
 - a. An object moves when a force is put upon it.
 - b. An object at rest, stays at rest. And an object in motion, stays in motion.
 - c. Energy is needed to do work.
 - d. All things have energy.
- 2) Which of the following is an example of potential energy?
 - a. Moving car
 - b. A ball rolling down a hill
 - c. Batteries
 - d. A jogger
- 3) What two things can affect the amount of kinetic energy an object has?
 - a. Heat and mass
 - b. Friction and heat
 - c. Speed and energy
 - d. Mass and speed
- 4) Which of the following is NOT an example of friction?
 - a. Brakes on a car
 - b. Hands rubbing together
 - c. Pulling back a rubber band
 - d. Using sandpaper to smooth a table
- 5) The force that pulls all objects toward Earth is called _____.
 - a. Acceleration
 - b. Movement
 - c. Free fall
 - d. Gravity
- 6) Which picture shows an object that has kinetic energy?

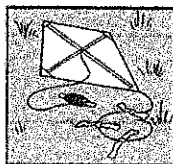
a.



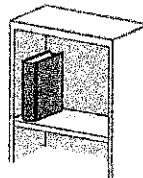
b.



c.



d.



- 7) The object used for comparing another object to describe its position is called a _____.
 - a. Frame of reference
 - b. Position
 - c. Movement
 - d. Picture of reference

Part II. Write true or false for each statement. If the statement is false, rewrite it as a true statement on the line provided.

8) _____ You can tell that an object has moved when its position has changed.

9) _____ The less force used, the quicker or easier an object will move.

10) _____ The unit used to measure force is kilograms.

11) _____ Friction creates heat.

12) _____ Force is the ability to do work.

Part II. Read each question carefully and give your best answer.

13) Which of the following is a form of energy?

Chemical Energy

Heat Energy

Air Energy

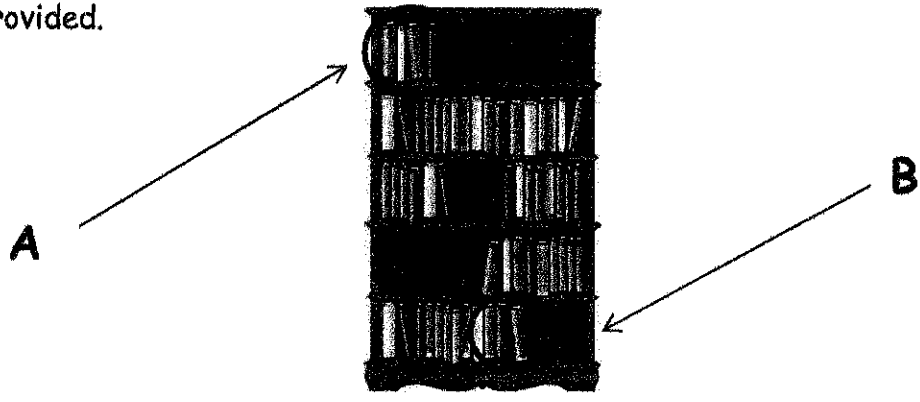
Water Energy

Light Energy

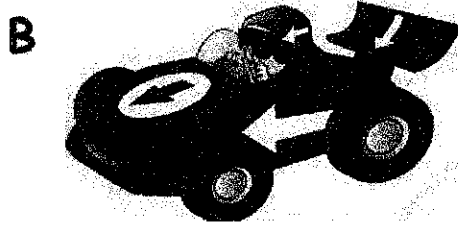
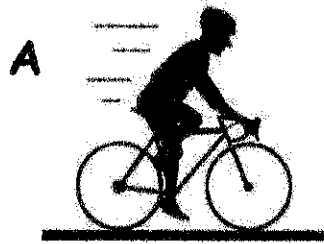
Mechanical Energy

14) Explain the difference between potential and kinetic energies.

15) Look at the picture. Which is showing more potential energy; A or B? Explain your answer on the lines provided.



16) Look at each picture. Which is showing more kinetic energy; A or B? Explain your answer on the lines provided.



Force and Motion

Directions: Use the words in the word bank to complete a summary about Force and Motion. Use each word only once.

speed reference direction velocity acceleration
forces motion position friction gravity

You can describe the motion of an object by saying it is moving (in a straight line or is curved around another object). You can also describe where an object is by its position in relation to another object. The second object acts as a reference point. When an object changes position, you know it has motion.

Motion can also be described by finding an object's speed or how fast or slow it moves in a certain amount of time. In addition, you can describe the object's speed AND direction together. This is called velocity.

There are some ways objects in motion are affected. Gravity or pushes and pulls, affect the motion of an object. Gravity is a force that pulls objects down to Earth. Friction is a force that slows things down or can even make them stop.

Did you know acceleration means more than the increase of an object's speed? It also describes an object that is slowing down or changing direction. Since acceleration is a change in speed or direction, that means, acceleration is a change in velocity!

Landforms, Earthquakes, Volcanoes & Fossils Review

Name: _____

Directions: Fill-in-the-blanks with the correct vocabulary terms. Hint: Use your Science Notebook.

1. A mountain that forms as lava flows through a crack onto Earth's surface is called a _____.
2. When rivers slow down, they drop sand and sediments in a process known as _____.
3. Any natural shape on Earth's surface is known as a _____.
4. The traces or remains of an organism that lived long ago are known as _____.
5. The shape of the landforms in an area is referred to as the area's _____.
6. An _____ is the shaking of Earth's surface caused by tectonic plate movement.
7. A _____ chain can form when two tectonic plates come together, pushing upward.
8. A huge, moving mass of ice is known as a _____.
9. _____ are the "V-shaped" areas in between mountains that have low floors and steep sides.
10. A _____ is a raised area of land with a flat top.
11. _____ form at the ends of rivers and are triangular in shape. They are formed by erosion and deposition of sediments.

Directions: Circle the letter of the best answer for each multiple choice question.

12. Which pair of landforms are most alike?

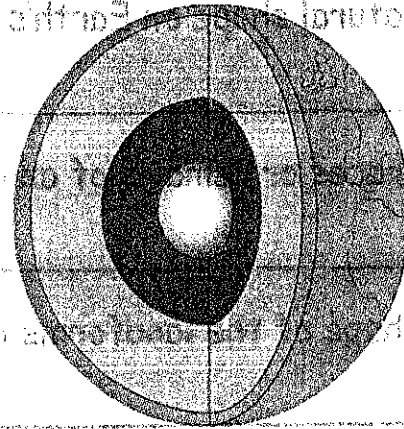
- a. plains/plateaus
- b. canyons/mesas
- c. valleys/faults
- d. buttes/mountains

13. Which of these landforms are made by plate tectonic movement?

- a. Plateaus
- b. Valleys
- c. Islands
- d. Mesas

14. Which layer of Earth does "X" mark?

- a. Crust
- b. Mantle
- c. Inner Core
- d. Outer Core



15. What happens when two tectonic plates move apart from each other?

- a. New sea floor forms from magma
- b. A giant, empty hole is made
- c. Mountain chains form
- d. Nothing happens

16. What is found inside of a volcano?

- a. Lava
- b. Outer Core
- c. Magma
- d. Amber

17. Which of the following is not a type of volcano?

- a. Composite
- b. Richter
- c. Shield
- d. Cinder Cone

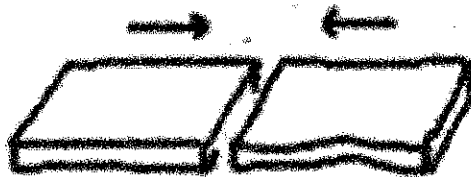
18. What kind of fossil is shown in this picture?

- a. Body Fossil
- b. Trace Fossil
- c. Mold Fossil
- d. Cast Fossil



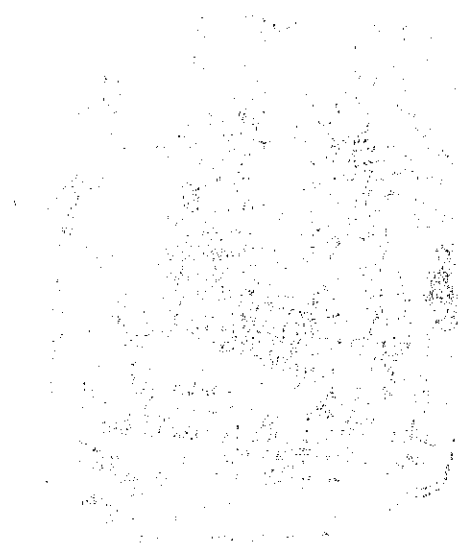
Directions: Answer the following questions with a paragraph.

19. The diagram below shows two tectonic plates. Tell what is happening to them, and describe what might happen when the two plates come together.
What landforms could form? What natural disasters could happen?



17. Which of the following is not a type of volcano?

- a. Composite
- b. Richter
- c. Shield
- d. Cinder Cone



18. What kind of fossil is shown in this picture?

- a. Body Fossil
- b. Trace Fossil
- c. Mold Fossil
- d. Cast Fossil

Directions: Answer the following questions with a paragraph.

19. The diagram below shows two tectonic plates. Tell what is happening to them, and describe what might happen when the two plates come together. What landforms could form? What natural disasters could happen?



What is weathering?
 Breaking down of rock by chemical or mechanical means

What is erosion?
 The process by which weathered material is moved from one place to another

What is deposition?
 When weathered rock material is moved by water and wind and deposited as sediment

What is Continental Drift?
 The continents are on large plates that moved and carried the continents to their current positions

How do Earth's plates move?
 Thermal Energy

How is igneous rock formed?
 Formed as magma cools

How is metamorphic rock formed?
 Formed when igneous, sedimentary, or metamorphic rock has been changed into a different rock

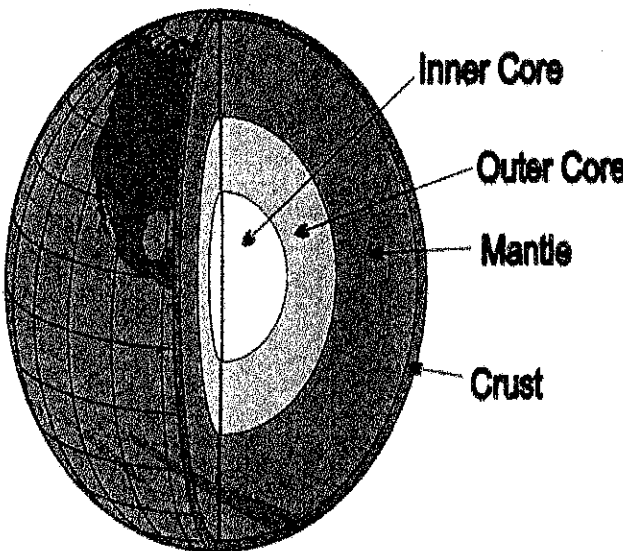
How is sedimentary rock formed?
 Formed when layers of sediments cement together over thousands of years

How is sedimentary rock formed?
 Formed when layers of sediments cement together over thousands of years

How is metamorphic rock formed?
 Formed when igneous, sedimentary, or metamorphic rock has been changed into a different rock

How is igneous rock formed?
 Formed as magma cools

How is metamorphic rock formed?
 Formed when igneous, sedimentary, or metamorphic rock has been changed into a different rock



Inner Core
 Outer Core
 Mantle
 Crust

Continental Drift

Transform Boundary

Divergent Boundary

