Science Quarter 1 Exam
Study Guide

Objectives:

- Investigate the structure of the atmosphere (gas-air), hydrosphere (liquid- water), and the lithosphere (solid-land)
- Examine how organisms affect the composition of the Earth and its atmosphere
- Analyze processes that cause change on Earth
- Explore how the Earth's motion defines the day and the year and influences the phases of the moon and eclipse
- Explain how gravity influences the action of the tides
- Explain and illustrate how the tilt of the Earth's axis and Earth's revolution around the Sun create the seasons.

Book Chapters: (covered in class)

- Chapter C1 (pages C2- C31)
- Chapter C2 (pages C32- C59)
- Chapter C3 (pages C60-C91)
- Chapter C4 (pages C106-C107 only)
- Chapter D1 (pages D4- D33)

Recommended Study:

- Reread chapters
- Review Vocabulary
- Review Chapter Organizers
- Review all notebook notes and handouts

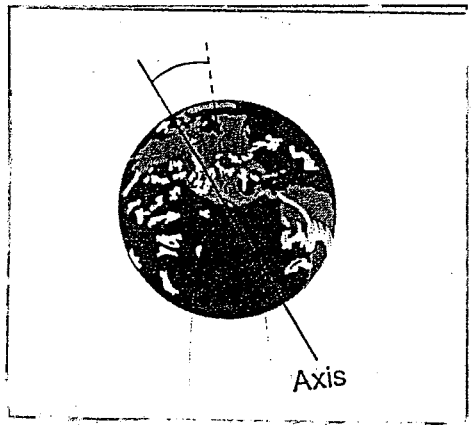
Science
1st 9wks Practice Exam
BVE- 5th Grade

Name _____ # ____
Date _____

Read each question carefully. Circle the letter to choose the best answer for each question.

1. Which of the following materials is MOST LIKELY to contain a fossil?
   A) Plant
   B) Rock
   C) Diamond
   D) Concrete

2. The picture below shows Earth tilted on its axis.



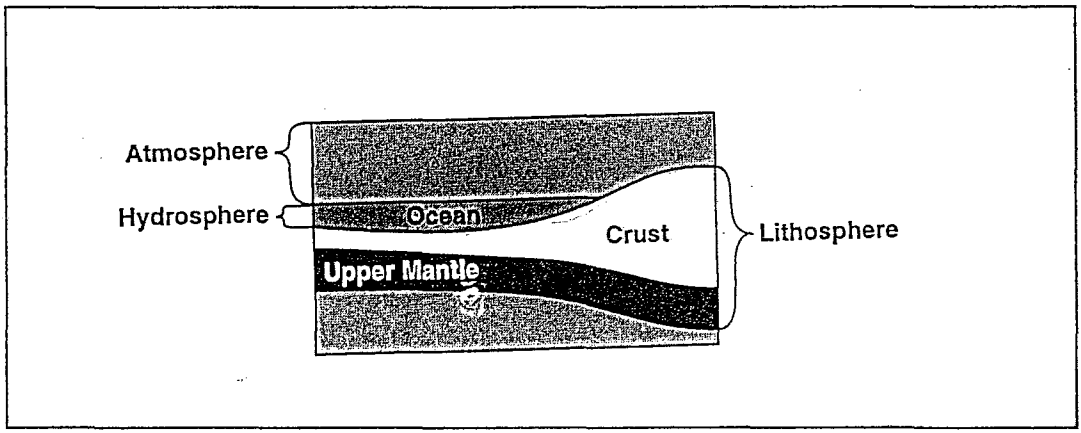
The tilt of the Earth's axis helps to create which of the following?
   A) Day and night
   B) The changing seasons
   C) The revolution of Earth
   D) The phases of the Moon

3. Which of the following describes the locations of the Moon and planets during a solar eclipse on Earth?
   A) Venus passes between Earth and the Sun.
   B) Earth passes between the Sun and the Moon.
   C) The Moon passes between Earth and the Sun.
   D) The Sun passes between Earth and the Moon.

4. Julie looked outside of her window one morning and saw a small puddle of water. Later in the day, the puddle was gone. What process MOST LIKELY explains why the puddle was gone?
   A) Runoff
   B) Evaporation
   C) Precipitation
   D) Condensation

5. Which of these occurs when Earth's crust slips at a fault line?
   A) Tornadoes
   B) Earthquakes
   C) Snowstorms
   D) Water erosion

6. The diagram below shows three of Earth's layers: the atmosphere, the hydrosphere, and the lithosphere.



Which of these is the range in which life exists?
   A) From beneath the lithosphere to the top of the atmosphere
   B) From the bottom of the lithosphere to the top of the hydrosphere
   C) From the upper part of the hydrosphere to the top of the atmosphere
   D) From the upper part of the lithosphere to the lower part of the atmosphere

7. Tosha viewed the Moon through a telescope. She saw large, round, dark areas on the surface of the Moon. Which of the following did she MOST LIKELY see?
   A) Plains
   B) Valleys
   C) Craters
   D) Oceans

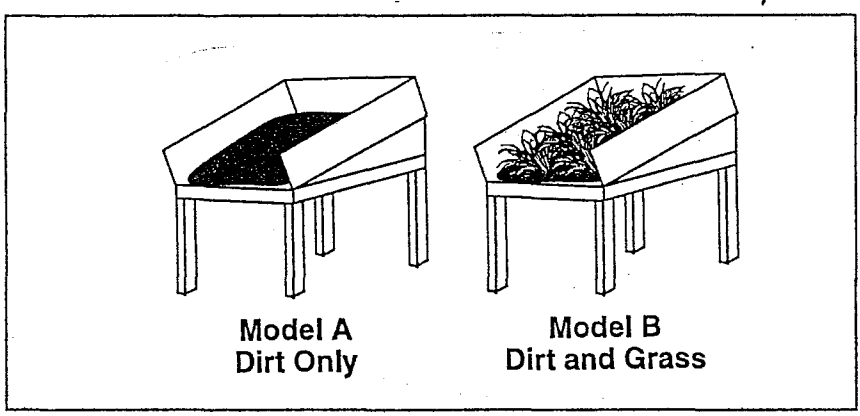
8. Sir Isaac Newton explained that a force from Earth, the Moon, and the Sun causes the water level to rise and fall in the ocean. What force is Newton describing?
   A) Gravity
   B) Eclipses
   C) Currents
   D) Refraction

9. Bonesha's class is looking at the Moon through a telescope. How does a telescope help the students look at the Moon?
   A) It makes the Moon look fuller.
   B) It makes the Moon look bigger.
   C) It brings the Moon closer.
   D) It makes the Moon shine brighter.

10. Lorraine puts a pot of water on the stove. She turns on the heat and the water boils. What does the water change to as it boils?
   A) Gas
   B) Heat
   C) Solid
   D) Liquid

11. A question on Jamal's homework assignment asked him to explain why air is matter. Which of the following statements should Jamal write to answer the question correctly?
   A) Air is invisible.
   B) Air is needed for breathing.
   C) Air takes up space and has mass.
   D) Air takes the shape of its container.

12. A science class built the models shown below to conduct a study.



Students poured the same amount of water over both models. They observed that most of the dirt emptied out of the container in Model A and that a small amount of dirt emptied out of the container in Model B. What were the students MOST LIKELY studying?
   A) Volcanic eruptions
   B) The rock cycle
   C) Earthquakes
   D) Erosion

13. In which major layer of Earth is soil found?
    A) Crust
    B) Mantle
    C) Inner core
    D) Outer core

14. Wendy wants to find out how much precipitation will occur during the next storm. Which tool should she use to collect this data?
    A) Rain gauge
    B) Anemometer
    C) Thermometer
    D) Balance scale

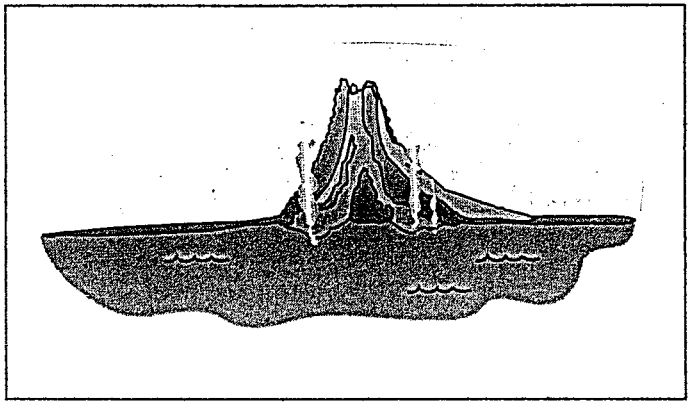
15. Angie left her glass of water in the sunlight. When she came back, the water was warmer. Which of the following BEST describes why the water was warmer?
    A) Energy from the Sun reflected off the water.
    B) Energy from the Sun evaporated some of the water.
    C) Energy from the Sun passed through the water.
    D) Energy from the Sun was absorbed by the water.

16. Which of the following is happening as the amount of daylight increases each day in Mississippi?
    A) Earth is moving closer to the Sun.
    B) Earth is tilting more toward the Sun.
    C) The rotation of Earth is slowing down.
    D) The Moon is reflecting light from the Sun.

17. What two weather instruments measure amounts of water?
    A) Hygrometer and barometer
    B) Rain gauge and hygrometer
    C) Barometer and anemometer
    D) Anemometer and rain gauge

18. Which part of Earth is hottest?
    A) Core
    B) Crust
    C) Mantle
    D) Surface

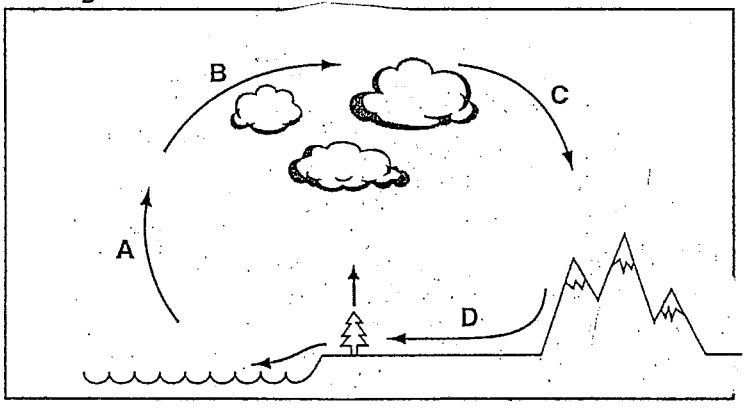
19. The picture below shows lava flowing out of a volcano and into the ocean.



What kind of rock forms when the lava cools after entering the ocean?

A) Igneous
B) Metallic
C) Sedimentary
D) Metamorphic

20. Look at the diagram below.



In which location of the diagram is water changing from a liquid to a gas?

A) A
B) B
C) C
D) D

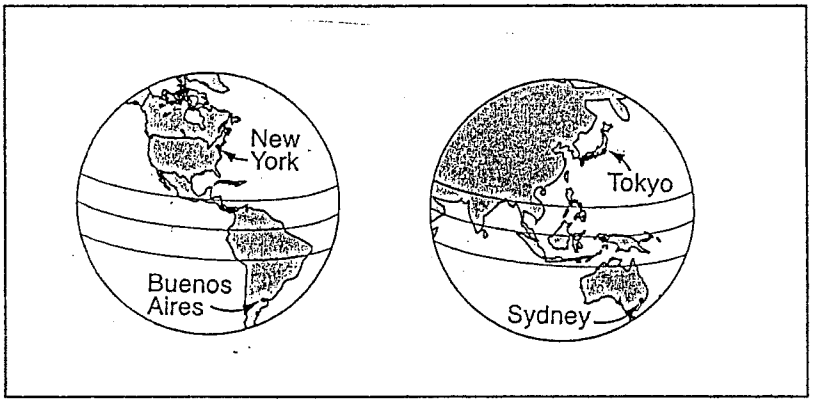
21. Chang jumps rope. No matter how high he jumps, he still returns to the ground. What force pulls him back to the ground?

A) Inertia
B) Gravity
C) Friction
D) Pressure

22. Deep within Earth, rocks are crushed and melted. Which of the following MOST LIKELY happens as this hot, melted rock comes to the surface of Earth?
    A) Mudslides
    B) Earthquakes
    C) Mountains form
    D) Volcanoes erupt

23. What causes ocean tides?
    A) Magnetic field of Earth
    B) Friction between ocean currents
    C) Gravitational attraction of the Moon
    D) Air resistance between wind and water

24. Maps of the Western hemisphere and the Eastern hemisphere are shown below.



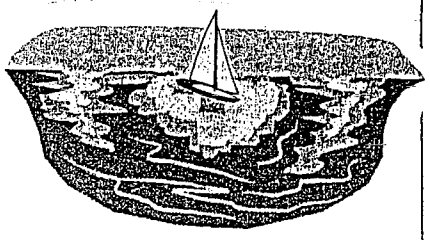
Which two cities have summer at about the same time of year?
    A) Sydney and Tokyo
    B) Tokyo and Buenos Aires
    C) Buenos Aires and Sydney
    D) New York and Buenos Aires

25. Greg washed his bike and used a towel to dry it off. He left the wet towel outside under the hot sun. When he came back later, the towel was completely dry. Which BEST describes what happened to the water that was in the towel?
    A) The water melted.
    B) The water evaporated.
    C) The water boiled away.
    D) The water soaked into the cloth.

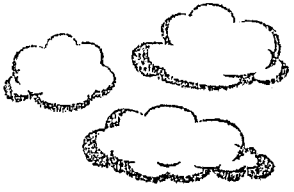
26. What determines the length of one day on Earth?
    A) The time it takes the Sun to circle Earth
    B) The time it takes Earth to circle the Sun
    C) The time it takes Earth to spin once on its axis
    D) The time it takes the Sun to spin once on its axis

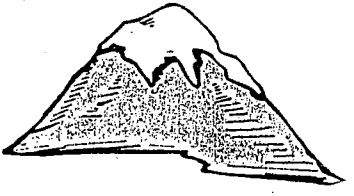
27. Why is the Northern Hemisphere of Earth warmer in summer than in winter?
    A) Less direct sunlight shines on the Northern Hemisphere
    B) Earth is moving more quickly in its orbit around the Sun.
    C) More direct sunlight shines on the Northern Hemisphere.
    D) The Sun gives off more heat in the summer than in the winter.

28. Which picture BEST shows Earth's hydrosphere?

A. 

B. 

C. 

D. 

29. Soil and weathered rock wash into low places to form sediment. Over a long period of time, the sediment changes into sedimentary rock. Where does this change occur?
    A) In the top layer of sediment
    B) At Earth's surface near sunlight
    C) Near the openings of volcanoes
    D) At the bottom of many layers of sediment

30. In 1969, Neil Armstrong was the first person to set foot on the Moon. Which of the following changed while he was on the Moon?
    A) His mass
    B) His weight
    C) His volume
    D) His density