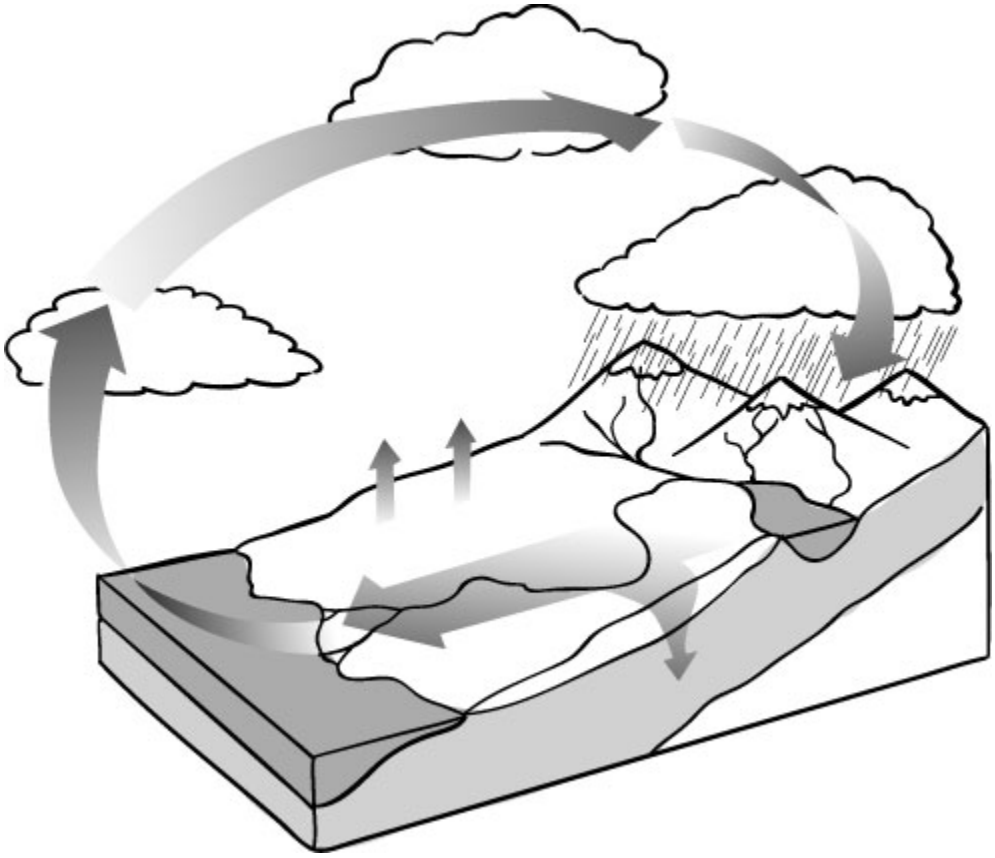
McGraw-Hill Science © 2000, Texas Edition
TAKS Practice Test

Grade 5, Chapter 10
Earth's Air, Water, and Energy

Name _____

Date _____

Use the illustration and your knowledge of science to answer Questions 1 to 4.



The Water Cycle

1 What do the arrows in the drawing represent?

A Water in the liquid state only

B Water in the gas state only

C How water moves in the water cycle

D Either water in the liquid state or oxygen gas

2 Ocean water is salty. When water evaporates from the ocean, what happens to the salt?

A The salt evaporates into the air with the water.

B The salt remains in the ocean.

C The salt combines with oxygen in the air to form minerals.

D The salt combines with oxygen in the air to form carbon dioxide.

3 What happens to water that soaks into the ground?

A The water sinks into Earth's central core.

B The water becomes groundwater. It may return to the surface.

C The water becomes soil water. It either stays in the ground or is taken up by plants.

D The water always collects in lakes and ponds.

4 What percentage of Earth's water is salt water, the kind of water found in oceans and seas?

A 40%

B 66%

C 88%

D 97%

5 Humans and other animals breathe oxygen every day. Is oxygen a renewable resource? Why or why not?

A Yes. Plants and algae return oxygen to the atmosphere.

B Yes. Plants store oxygen in their stems and leaves.

C Yes. The ozone layer keeps making oxygen.

D No. We may someday breathe up all of Earth's oxygen.

6 What is one way to clean polluted water?

A Move polluted water to a lake or river.

B Clean polluted water in a water treatment plant.

C Freeze polluted water into ice.

D Dump polluted water into an ocean.

7 Which of these places would be best for building a power plant that ran on geothermal energy?

A A desert or other hot, dry place

B A waterfall

C Near a hot springs

D Near a nuclear power plant

Use the illustration, text, and your knowledge of science to answer Questions 8 to 10.

A student runs an experiment to test the effects of different liquids on chalk. Here is the procedure.

1. Label four cups A, B, C, and D. Place a piece of chalk into each cup.

2. Spray Chalk A with water. Spray Chalk B with vinegar. Spray Chalk C with soap water. Do not spray Chalk D.

3. Repeat Step 2 every hour for four hours. Observe the chalk pieces over the course of the day.

8 Which of these statements could be the hypothesis for this experiment?

A If chalk is sprayed with vinegar, then it will break apart faster than if it was dabbed with vinegar.

B If chalk is sprayed with vinegar, then it will break apart faster than if it was sprayed with water or soapy water.

C If chalk is sprayed with water, then it will become sticky and useless.

D A piece of chalk will break apart no matter what it is sprayed upon it.

9 Vinegar is a mild acid. Which event in nature does Chalk B model in the experiment?

A Acid rain falling on a statue made of rock

B Acid rain falling on a farmer's field

C Ocean waves eroding a beach

D Runoff from a rain storm

10 Adding what object to the list of materials would make the experiment safer to perform?

A A scissors with rounded tips

B A thermometer

C Safety goggles

D Fruit juice or soda pop

Use the text below and your knowledge of science to answer questions 11 to 13.

Professor A and Professor B are discussing the value of battery-powered automobiles.

Professor A:	**Professor B**:
Someday, Earth will run out of fossil fuels. Will we be prepared? We could be if we choose to develop other sources of energy today. For automobiles, batteries clearly are the power source to choose. Batteries do not use up fossil fuels. They also pollute the environment less than fossil fuels do. Yes, today's battery-powered cars cost more than other cars. But if we invest in them now, their price will go down. I urge everyone to buy battery-powered cars.	Earth could run out of fossil fuels, but not in our lifetime or even our children's lifetime. I like the idea of cars that run on batteries. However, they cost too much money and run too slowly. Thanks to new laws, cars that run on gasoline pollute less than ever before. Cars can also run on gasoline mixed with ethanol, which comes from corn. That's a renewable resource. I argue that the time for battery-powered cars has not yet arrived.

11 Both Professor A and Professor B agree that _____.

A people should purchase battery-powered cars

B battery-powered cars run slowly and cost too much money

C we should prepare now for the time when Earth runs out of fossil fuels

D fossil fuels are a nonrenewable resource

12 Which of these statements, if true, would strengthen the argument of Professor A?

A A new supply of oil was discovered near Antarctica.

B A dozen battery-powered cars were purchased in a town in Oklahoma.

C As cities grow, pollution from gasoline-powered cars becomes worse.

D The cost of gasoline will decrease in the future.

13 If Professor B is correct, what can be inferred about ethanol?

A Ethanol can completely replace gasoline as a fuel for cars.

B Ethanol can help people conserve gasoline.

C Ethanol costs just as much as the batteries in a battery-powered car.

D Like gasoline, ethanol cannot be replaced after it is used.

ANSWER KEY and CORRELATIONS:

Question	Answer	TAKS	McGraw-Hill Science Grade 4 textbook
1	C	5.6B, 5.3C	p. 458
2	B	5.6B	p. 458
3	B	5.6B	p. 459
4	D	5.6B, 3.11A	p. 456
5	A	3.11A	p. 456
6	B	5.6B	p. 470
7	C	5.8A	p. 472
8	B	5.2A	p. 449
9	A	5.3C	p. 449
10	C	5.1A	-
11	D	5.11C, 3.11A	p. 471
12	C	5.3A	p. 471
13	B	5.3B	p. 471