

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

**Grade 5, Chapter 3
Weather**

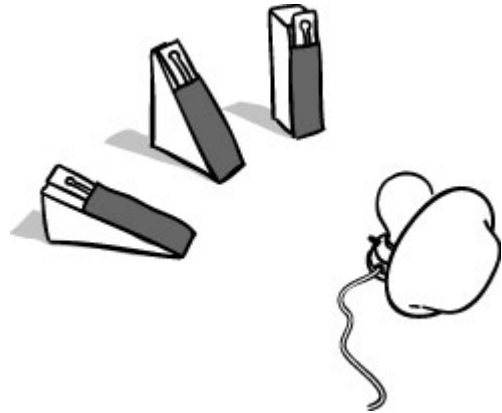
Name _____

Date _____

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

A student runs a science experiment.

The materials are three wooden blocks, three thermometers, black construction paper, a light bulb, and a plastic bowl. The set up is shown here.



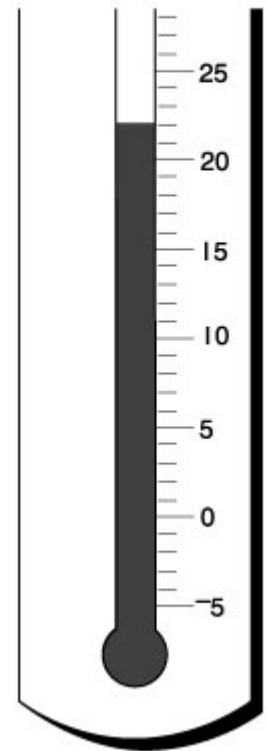
- 1** What hypothesis might the experiment be testing?
 - A** If Earth were farther away from the Sun, then Earth would have colder temperatures.
 - B** If the Sun were hotter, then Earth would have warmer temperatures.
 - C** If the angle that sunlight hits a surface is increased, then the surface will become hotter.
 - D** Black paper grows hotter in sunlight than white paper.

- 2** Which of these questions could the results of this experiment help answer?
 - A** Why are temperatures warmer at the equator than at the poles?
 - B** Why do we have day and night?
 - C** Why are Earth's waters cooler than its land?
 - D** Why is Earth warmer than Mars, but colder than Venus?

- 3** What is the role of the plastic bowl next to the light bulb?
 - A** The bowl focuses the light onto the wooden blocks.
 - B** The bowl represents Earth's atmosphere.
 - C** The bowl is for safety. It shields bright light from students' eyes.
 - D** The bowl represents the Moon.

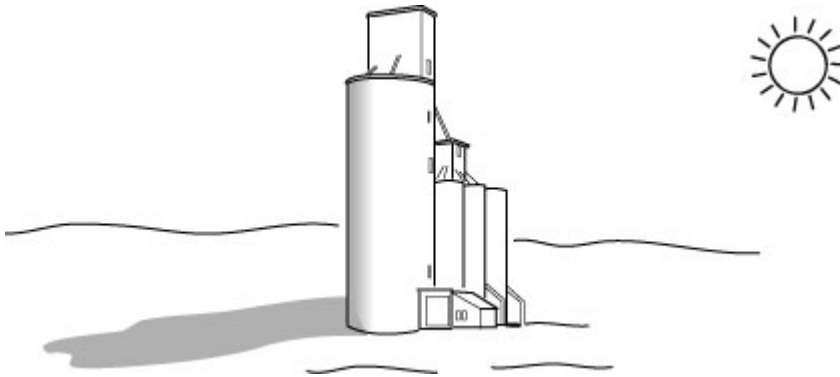
- 4 What is the temperature in Celsius degrees shown on the thermometer? Round your answer to the nearest whole number. Record and bubble your answer.

⓪	⓪	⓪	
①	①	①	
②	②	②	
③	③	③	
④	④	④	
⑤	⑤	⑤	
⑥	⑥	⑥	
⑦	⑦	⑦	
⑧	⑧	⑧	
⑨	⑨	⑨	



- 5 Does the Sun play a role in Earth's water cycle? If yes, what is that role?
- A Yes, the Sun provides the energy for water to evaporate.
 - B Yes, the Sun heats clouds to trigger precipitation.
 - C Yes, the Sun heats the air to form clouds.
 - D No, the Sun has no role in the water cycle.

Use this illustration and your knowledge of science to answer Questions 6 and 7.



Grain Elevator on the Texas Prairie

- 6** How will the length of the shadow of the grain elevator change throughout the day?
- A** The shadow is long at sunrise and shortens throughout the day.
 - B** The shadow is short at sunrise and lengthens throughout the day.
 - C** The shadow is long at sunrise, shortens throughout the morning, and then lengthens in the afternoon.
 - D** The direction of the shadow changes and the length remains unchanged throughout the day.
- 7** At noon, in which direction will the shadow point?
- A** North
 - B** South
 - C** East
 - D** West

8 In the stratosphere, sunlight changes oxygen into ozone. This forms the ozone layer. Why is the ozone layer important for life on Earth?

- A** Animals can only breathe oxygen in the ozone form.
- B** Ozone takes up carbon dioxide.
- C** Ozone screens away harmful radiation from the Sun.
- D** Plants take in ozone as part of photosynthesis.

9 What best describes Earth's water cycle?

- A** Water moving from the air to the land
- B** Water moving from the land to the air
- C** Water moving down rivers
- D** Water moving from one place to another on Earth

10 During the day, winds often blow from sea to land. At night, winds blow in the opposite direction, from land to sea.

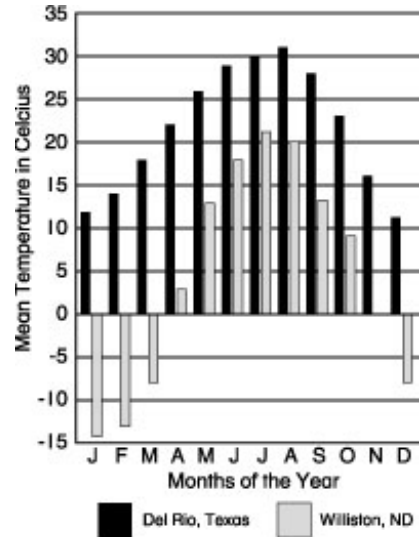
Why do these winds form?

- A** Earth's seas are larger than the land.
- B** The sea and land warm and cool at different rates.
- C** The sea is flatter than the land.
- D** Winds always blow toward the Sun.

Use the text, graph, map, and your knowledge of science to answer Questions 11 and 12.

The graph shows the mean temperature for each month for Willston, North Dakota, and Del Rio, Texas. The map shows the locations of both cities.

- 11 How much warmer on average is Del Rio, Texas, than Willston, North Dakota, during November?
- A 14 °C
 - B 16 °C
 - C 25 °C
 - D 35 °C



- 12 The temperature differences between the two cities are explained by the difference in their _____.
- A populations
 - B distances to the equator or the North Pole
 - C distances to the ocean
 - D day and night cycles



Use the following passage and your knowledge of science to answer Questions 13 and 14.

In the atmosphere, a water droplet forms from water vapor. It then falls to earth as rain. Later, part of the droplet is taken up by a plant's roots. It passes out the plant's leaves into the air.

- 13** In the order presented in the passage, what processes of the water cycle does the passage describe?
- A** Condensation, precipitation, evaporation
 - B** Condensation, precipitation, transpiration
 - C** Precipitation, runoff, evaporation
 - D** Transpiration, precipitation, evaporation
- 14** If the passage continued to describe how a water droplet changes, which process would occur next?
- A** Condensation
 - B** Precipitation
 - C** Transpiration
 - D** Runoff

ANSWER KEY and CORRELATIONS:

Question	Answer	TAKS	McGraw-Hill Science Grade 5 textbook
1	C	5.2A, 4.6A	p. 99
2	A	5.2D, 4.6A	p. 48
3	C	5.1A	p. 48
4	22	5.4A	pp. 99, 106
5	A	4.11C	p. 112
6	C	5.6A	p. 102
7	A	5.6A	p. 102
8	C	3.11A	p. 109
9	D	5.6 B	p. 127
10	B	4.11B, 4.11C	p. 137
11	B	5.2E	p. 100
12	B	4.6A, 5.2E	p. 100
13	B	5.5A	p. 126
14	A	5.5A	p. 126