

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

**Grade 5, Chapter 1
The Importance of Plants**

Name _____

Date _____



Plant A under a bright light



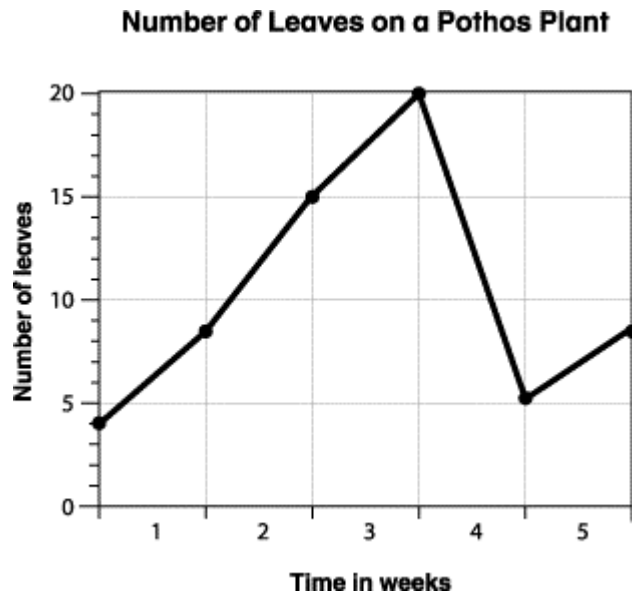
Plant B under a dim light

- 1 The drawings show the setup for an experiment on *Draceana* plants. What hypothesis might the experiment be testing?
 - A If the temperature is raised, then a plant will grow larger.
 - B If the light is brighter, then a plant will grow larger.
 - C If the pot is wider, then a plant will grow more leaves.
 - D All plants have green leaves.

- 2 Which of these tools would best help you observe the cells of a typical plant?
 - A Hand lens
 - B Telescope
 - C Microscope
 - D Safety goggles

- 3 Which of these leaf adaptations would help a plant survive in a cold, dry climate?
 - A Broad, thin leaves
 - B Thick needles, covered in wax
 - C Compound leaves
 - D White leaves or needles

Use the information in the graph and your knowledge of science to help you answer Questions 4 and 5.



4 When did the *Pothos* plant gain the most leaves?

- A Week 1
- B Week 2
- C Week 3
- D Week 4

5 Which of these events would best explain the results of this experiment?

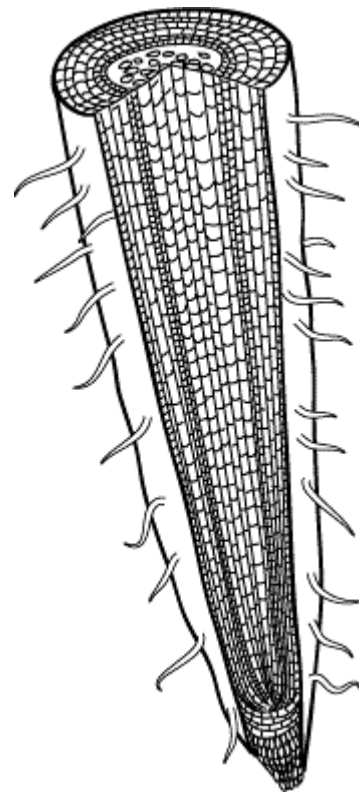
- A The *Pothos* plant received no water.
- B The *Pothos* plant grew too large for its pot.
- C During Week 2, the *Pothos* plant was moved into bright sunlight.
- D During Week 4, someone cut off a branch of the *Pothos* plant.

6 What role do fungi perform in the soil?

- A Fungi break down decaying plants and animals.
- B Fungi provide energy for young plants.
- C Fungi use sunlight to make their own food.
- D Fungi grow into protists.

7 What does this drawing illustrate?

- A The inside of a plant's root.
- B The inside of a plant's stem.
- C The inside of a woody stem, such as a tree trunk.
- D The inside of a soft stem, such as the stem of a dandelion.



8 To make food for a plant, structures called chloroplasts need _____.

- A sunlight only
- B sunlight, water, and minerals only
- C sunlight, water, and air only
- D sunlight, water, minerals, and air

9 Plants move water in a process called transpiration. How does water move through a plant in this process?

- A From the air into the leaves, then out the roots
- B From the soil into the roots, then into the stem
- C From the soil into the roots, up the stem, and out the leaves.
- D In a cycle among roots, stems, and leaves.

- 10** In 1876, a vine called kudzu arrived in America from Japan. Since then, it has spread throughout the Southeast United States. While insects in Japan eat kudzu, those in the United States do not. As a result, kudzu has been growing rapidly and killing other plants.

Which of these of statements best applies to kudzu in the United States?

- A** Imported plants can harm the environment.
- B** The kudzu vine is beneficial to the Southeast United States.
- C** The soils in Japan and the Southeast United States are much alike.
- D** Kudzu requires little sunlight.

Use the information in the text and your knowledge of science to answer Questions 11 and 12.

In the rainforest, some orchids grow high up in trees. Some of these orchids have only a few, tiny leaves. Instead of using leaves to make food, they use long green roots that are open to the air. The roots wrap around the tree's branches or trunk.

- 11** As described in the passage, an orchid uses long, green roots to _____.
- A** anchor the plant to the ground
 - B** draw water and minerals from the soil
 - C** perform photosynthesis
 - D** give rise to beautiful flowers
- 12** It can be inferred that the cells of the long, green roots contain _____.
- A** chlorophyll
 - B** bacteria or protists
 - C** spongin, a protein that is strong and flexible
 - D** atropine, a drug found in some roots

ANSWER KEY and CORRELATIONS:

Question	Answer	TAKS	McGraw-Hill Science Grade 5 textbook
1	B	5.2A	pp. 2, S13
2	C	5.4A	pp. 3, R7
3	B	5.9B	p. 25
4	B	5.2E	pp. R21, TX30
5	D	5.2C	pp. R21, TX30
6	A	5.5A	p. 11
7	A	2.9A	p. 20
8	D	2.9B	pp. 19-21
9	C	5.5A	pp. 19-21
10	A	3.8C	p. 35
11	C	5.9B	pp. 26, 32
12	A	5.9B	pp. 26, 32