DATE: NAME: CLASS:

CHAPTER 2 BLM 2-9

Chapter 2 Review (Alternative Format)

Goal • To review the concepts from Chapter 2.

Reviewing Key Terms

Fill in the blanks using a word from the list below.

organs	shoot	differentiation	gall
epidermis	root	system	meristem

1. The _____ protects the inner tissues of the leaf.
2. Specialized cells form during _____, which is a stage of development in an organism's body.
3. _____ cells can give rise to various specialized cells in an organism's body.
4. Roots, stems, and leaves are all plant _____.
5. A plant _____ can be compared to a tumour in an animal.
6. An organ _____ co-ordinates the functions of organs to do a complex job for an organism.
7. Plants have two organ systems: the _____ system and the _____ system.

Knowledge and Understanding

Fill in the blanks.

8. Multicellular animals can sometimes replace or repair tissues, but they cannot replace or repair _____. Plants are different; periodically they can replace or repair new leaves, stems and roots.
9. Like multicellular animals, plants are made up of organs, and those organs are divided into _____. In plants, the three main organs are made of tissues, including dermal, ground and _____ tissue.
10. The cells in actively growing areas give off a chemical called _____, which is a plant _____. If there is an actively growing terminal bud, the chemical will _____ lateral growth.
11. Match the terms on the left with the most appropriate terms on the right.

xylem vessel	cell
leaf	part of a cell
fibrous root	tissue
epidermis	organ
root hair	system

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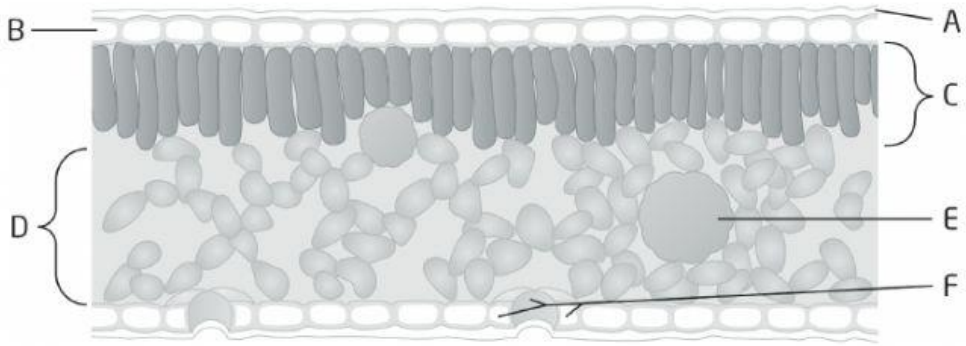
Chapter 2 Review (Alternative Format)

12. Name the structures in this sketch of a leaf cross section.

A. _____ D. _____

B. _____ E. _____

C. _____ F. _____



13. Which of the structures in question 12 is responsible for gas exchange and transpiration?

_____

14. a. Fill in the missing components to complete the photosynthesis reaction.

carbon dioxide + _____ + light energy ⟶ glucose + _____

b. Which plant organelle is responsible for photosynthesis?

_____

15. There is something wrong with the following sentence. Re-write it to make it correct.

Root cells transport minerals from the soil to the xylem, which also helps to transport sugar from the soil.

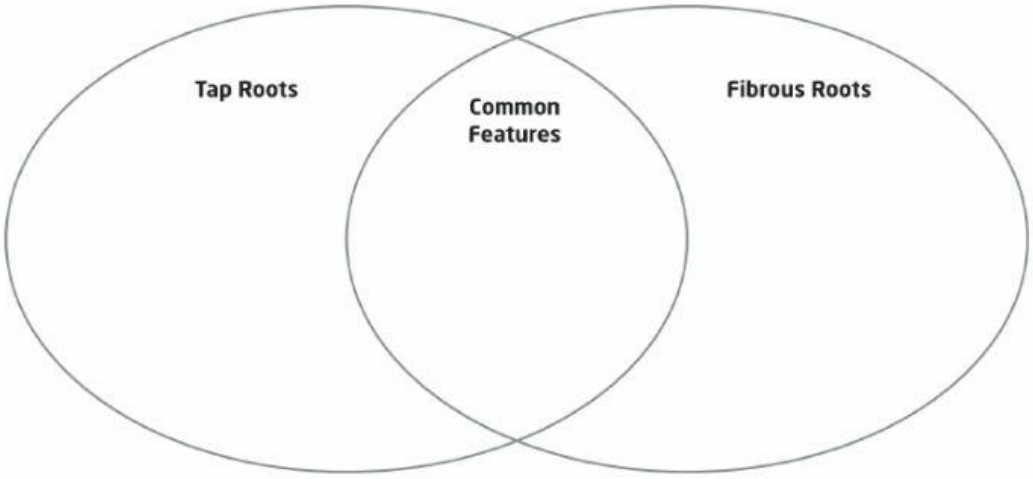
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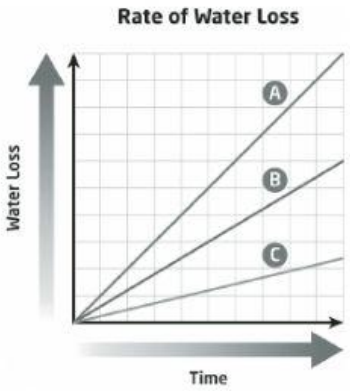
Chapter 2 Review (Alternative Format)

16. Use the Venn diagram below to compare and contrast tap roots and fibrous roots. Consider their structures and functions, and where you are likely to find them.



Thinking and Investigation

17. Your friend labelled the following graph incorrectly. What is the correct match of results and environmental conditions?



Friend's graph analysis:

A = control plant

B = plant placed in front of fan

C = plant placed in clear plastic bag

Correct graph analysis:

A = _____

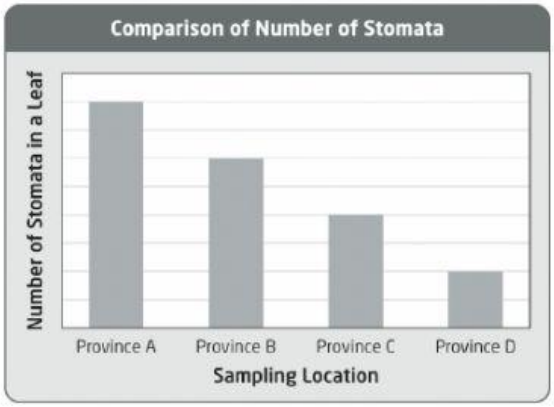
B = _____

C = _____

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Chapter 2 Review (Alternative Format)

18. This graph shows the number of stomata in the leaves of daisies collected in four different provinces. In which province would you expect the least and the greatest amount of rainfall? Write your answers directly above the correct provinces.



19. Why might a houseplant wilt if it is planted in a pot that is too small?

_____

_____

20. Using the table, compare and contrast the two specialized places where water passes through a plant.

	Root Hairs	Stomata
Organs where they are located		
Systems that they are associated with		
Direction that water flows (into the plant/ out of the plant)		
Other processes associated with structure		

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Chapter 2 Review (Alternative Format)

21. a. Describe the following tissues:

Dermal:

Ground:

Vascular:

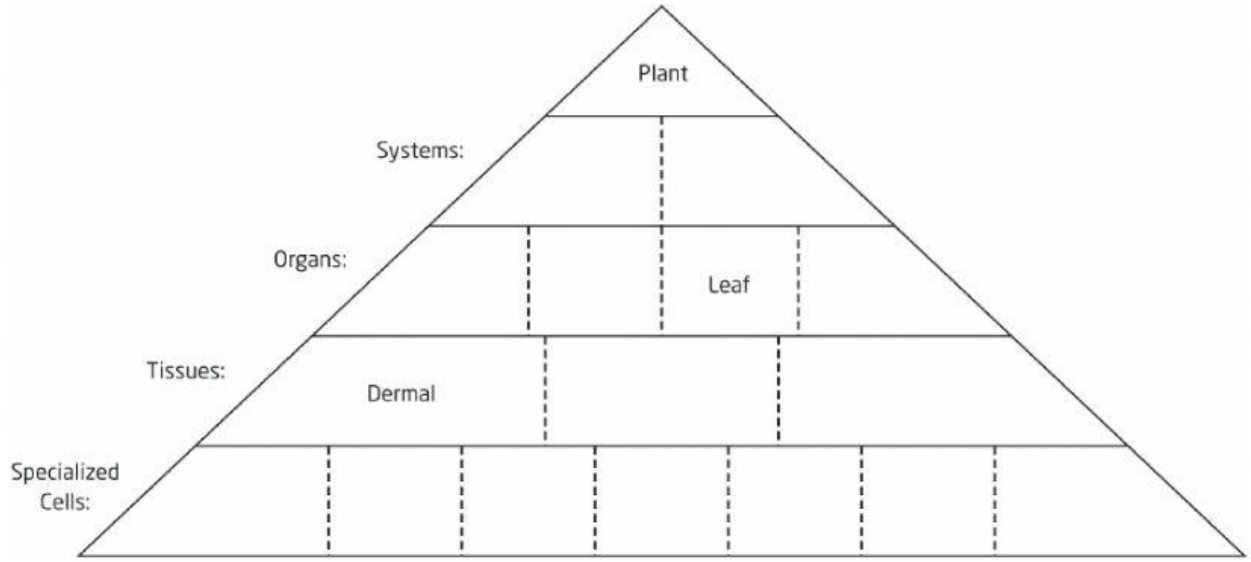
b. You place a celery stalk in a beaker filled with water and food colouring. The 'strings' on the outside of the stalk begin to take up the coloured water. What type of tissue do you think the strings are composed of?

_____

_____

Communication

22. In this chapter, you learned to explain the links between specialized cells, tissues, organs, and systems in plants. Using your textbook and/or your notes, fill in the following table to help you visualize the organization of a typical flowering plant.



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