

Visual Summary

To complete this summary, circle the correct word. Then, use the key below to check your answers. You can use this page to review the main concepts of the lesson.

Plant Processes

During photosynthesis, plants use energy from sunlight to make food out of carbon dioxide and water.



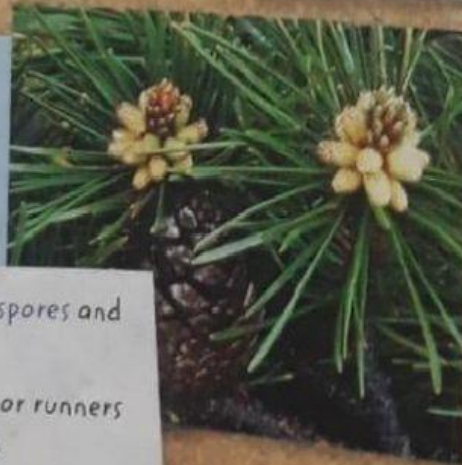
Plants respond to environmental stimuli such as light, gravity, and changing seasons.



- 21 Photosynthesis takes place in chloroplasts / mitochondria, which contain chlorophyll.
- 22 Photosynthesis / cellular respiration releases the energy stored in food and produces carbon dioxide and water.

- 25 Growth, wilting, and dormancy are examples of plant responses / stimuli.

Plants complete their life cycles by alternating between sporophytes and gametophytes.



- 23 Flowering plants produce seeds / spores and fruit following fertilization.
- 24 Some plants use plantlets, tubers, or runners to reproduce sexually / asexually.

Answers: 21 chloroplasts;
22 cellular respiration; 23 seeds;
24 asexually; 25 responses

- 26 Explain What are two ways in which photosynthesis is important?

Lesson Review

Vocabulary

Fill in the blank with the term that best completes the following sentence.

- 1 _____ is the transfer of pollen from the male reproductive structures to the female structures of seed plants.
- 2 The process by which plants release water vapor into the air through stomata is called _____.
- 3 A _____ is the female reproductive structure of flowers.
- 4 Seeds are _____ when conditions are unfavorable for growth.

Key Concepts

- 5 **Identify** Explain what a plant produces in each of the two parts of its life cycle.

- 6 **List** Provide three examples of asexual plant structures.

- 7 **Predict** In which parts of a plant would you expect phototropism to occur? Explain.

- 8 **Explain** Describe the roles of chloroplasts and chlorophyll in photosynthesis.

