

Botany Basics for Young Explorers

Botany · Answer Key · 12 Questions

1. Which green pigment do plants use to absorb sunlight for photosynthesis?

A) Chlorophyll

B) Carotene

C) Anthocyanin

D) Xanthophyll

2. What is the primary function of a plant's root system?

A) Producing seeds

B) Photosynthesis

C) Absorbing water and nutrients

D) Attracting pollinators

3. Which part of a plant is responsible for producing seeds?

A) Stem

B) Flower

C) Leaf

D) Root

4. What process do plants use to release water vapour into the atmosphere through their leaves?

A) Respiration

B) Transpiration

C) Germination

D) Pollination

5. Which of these plants is classified as a gymnosperm, meaning it produces 'naked' seeds?

A) Rose

B) Pine tree

C) Apple tree

D) Lily

6. What is the hard, protective outer covering of a seed called?

A) Endosperm

B) Embryo

C) Seed coat

D) Cotyledon

7. Which gas do plants primarily take in from the air to perform photosynthesis?

- A) Oxygen
- B) Nitrogen
- C) Carbon dioxide**
- D) Hydrogen

8. What are the tiny openings on the underside of a leaf that allow for gas exchange called?

- A) Stomata**
- B) Xylem
- C) Phloem
- D) Cuticle

9. Which substance provides the structural strength in plant cell walls?

- A) Starch
- B) Cellulose**
- C) Glucose
- D) Protein

10. What is the scientific term for the growth of a plant toward a light source?

- A) Gravitropism
- B) Phototropism**
- C) Hydrotropism
- D) Thigmotropism

11. Which vascular tissue in plants is responsible for transporting water from the roots to the leaves?

- A) Phloem
- B) Xylem**
- C) Cambium
- D) Pith

12. What is the main role of the phloem in a plant?

- A) Transporting sugars**
- B) Storing water
- C) Providing support
- D) Anchoring the plant