

1. The Grade 6 learners noticed that their school garden had many flowering plants. After several weeks, they observed new seeds and young plants growing around the flowers. Why is reproduction important to plants?

- A. It helps plants grow without water.
- B. It helps plants move to new places.
- C. It helps plants produce new plants.
- D. It helps plants produce flowers daily.

2. During a gardening activity, Maria noticed bees visiting the flowers of a squash plant. The bees moved from one flower to another while collecting nectar. How can the bees help the squash plant reproduce?

- A. They carry pollen between flowers.
- B. They carry water to the roots.
- C. They protect flowers from sunlight.
- D. They produce seeds inside the leaves.

3. A learner carefully observed a flower and noticed that pollen from one flower was transferred to another flower. What process was the learner observing?

- A. Photosynthesis
- B. Germination
- C. Propagation
- D. Pollination

4. After successful pollination, a flowering plant eventually produces seeds. Some of these seeds can grow into new plants when the conditions are suitable. Which statement best explains this process?

- A. Pollination prevents plants from producing seeds.
- B. Pollination helps form seeds for reproduction.
- C. Pollination changes seeds into mature plants.
- D. Pollination occurs only without sunlight.

5. Teacher Ana placed two flowering plants in the school garden. One plant was visited frequently by bees, while the flowers of another plant were protected from insects. After some time, the first plant produced more fruit. Which explanation is most reasonable?

- A. Bees may provide soil for the flowers.
- B. Bees may block sunlight from reaching flowers.
- C. Bees may change leaves into plant seeds.
- D. Bees may transfer pollen between flowers.

6. A learner wants to observe how insects affect pollination. She covers some flowers with a fine mesh bag that prevents insects from reaching them while leaving other flowers uncovered. Why is this setup useful?

- A. It compares flowers with and without insects.
- B. It ensures that all flowers produce fruits.
- C. It helps flowers grow without receiving water.
- D. It stops flowers from producing their pollen.

7. The school plans to remove all flowering plants from the garden and replace them with plants that rarely produce flowers. Which possible effect should the learners consider?

- A. Plants may eventually stop needing sunlight.
- B. There may be fewer flowers for pollinators.
- C. Pollination may no longer be needed by plants.
- D. All plants may automatically produce more seeds.

8. Lina planted a bean seed in moist soil. After several days, she observed a small root emerging from the seed. Later, a shoot appeared above the soil. What does this observation show?

- A. The seed is undergoing the pollination process.
- B. The seed is immediately producing new flowers.
- C. The seed is developing into a young plant.
- D. The seed is changing into pollen inside.

9. Two groups of seeds were prepared.

- **Group A:** Seeds were given enough water, air, and suitable temperature.
- **Group B:** Seeds were kept very dry.

After several days, most seeds in Group A began to develop. What can the learners reasonably conclude?

- A. Dry seeds always develop much more quickly.
- B. Water prevents seeds from developing properly.
- C. Seeds need darkness to develop properly.
- D. Suitable conditions help seeds develop properly.

10. A farmer collected seeds for planting the following season. He stored the seeds carefully in a clean, dry container and protected them from damage. Why is proper handling important?

- A. It helps maintain seed quality and viability.
- B. It makes seeds produce flowers immediately.
- C. It removes the need for proper growing conditions.
- D. It changes the seeds into pollen grains.

11. Rico cut a healthy stem from a plant and placed it in suitable growing material. After some time, the stem developed roots and new growth. Which propagation method is being used?

- A. Grafting
- B. Layering
- C. Cutting
- D. Budding

12. A gardener carefully joined a bud from one plant onto another plant so that the bud could continue growing. Which method is described?

- A. Layering
- B. Seed production
- C. Cutting
- D. Budding

13. A gardener bent a flexible branch toward the soil and covered part of it with soil while keeping it attached to the parent plant. After roots developed, the rooted part could be separated. Which method is this?

- A. Pollination
- B. Layering
- C. Cutting
- D. Budding

14. A farmer wants to produce new plants using a method in which a part of one plant is joined to another plant so that they grow together. Which method should the farmer consider?

- A. Germination
- B. Seed dispersal
- C. Grafting
- D. Pollination

15. A learner wants to determine whether the amount of water affects the growth of plant cuttings. She gives different amounts of water to three groups and measures their height after two weeks. What is the **independent variable**?

- A. Type of soil
- B. Number of leaves
- C. Height of the plants
- D. Amount of water

16. In the same investigation, the learner measures the height of each plant after two weeks. What is the **dependent variable**?

- A. Plant height
- B. Type of soil
- C. Amount of water
- D. Type of container

17. The learner uses the same type of plant, same soil, same container size, and same amount of sunlight for all groups. Why are these factors kept the same?

- A. They are results that should be removed from testing.
- B. They are controlled variables for a fair test.
- C. They are independent variables that must change.
- D. They are dependent variables that must be measured.

18. A group wants to compare seed propagation and stem-cutting propagation. Which investigation is the fairest?

- A. Change propagation and water amounts at the same time.
- B. Use different plants and different growing conditions.
- C. Change propagation while keeping other conditions equal.
- D. Use different soil, water, and sunlight conditions.

19. Before conducting an investigation, a group writes: "**Which plant propagation method produces greater growth after two weeks?**" They then identify what they will change, what they will measure, and what they will keep the same. Why is this planning important?

- A. It helps make the investigation fair and systematic.
- B. It removes the need to gather investigation data.
- C. It guarantees that the predicted result will happen.
- D. It allows several factors to be changed at once.

20. A group predicted that plants grown from cuttings would grow faster than plants grown from seeds. However, after collecting and analyzing their data, the seed-grown plants showed greater growth. What should the group do?

- A. Select only results that support the prediction.
- B. Change the data to match the prediction.
- C. Ignore the results because they were unexpected.
- D. Report the results and base conclusions on evidence.