SCIENCE GRADE 3 LESSON 1

Plant Life Cycles

How to use: Print first for the main practice. Then use the device to repeat activities and save progress.

LEARNING OBJECTIVES

1. Describe the stages of a plant life cycle in order
2. Identify the role of seeds, roots, and flowers in plant growth

MINI LESSON

Plants go through a series of changes from a tiny seed to a mature plant that produces new seeds. This repeating pattern is called a life cycle. Every plant follows similar stages, though the speed and appearance of each stage can differ.

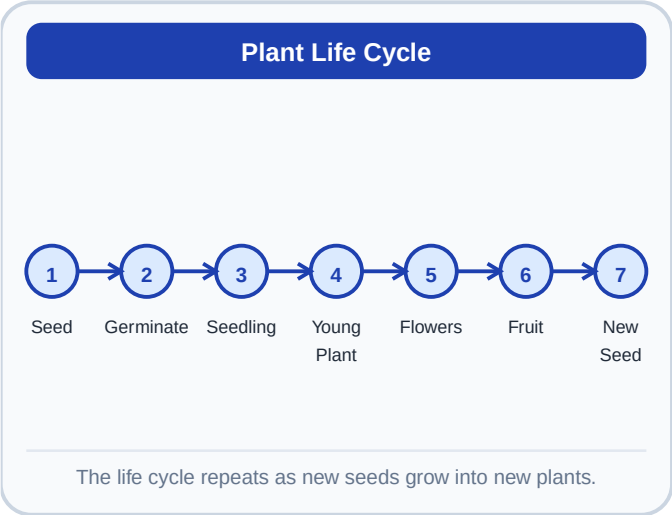
Stages of a Plant Life Cycle

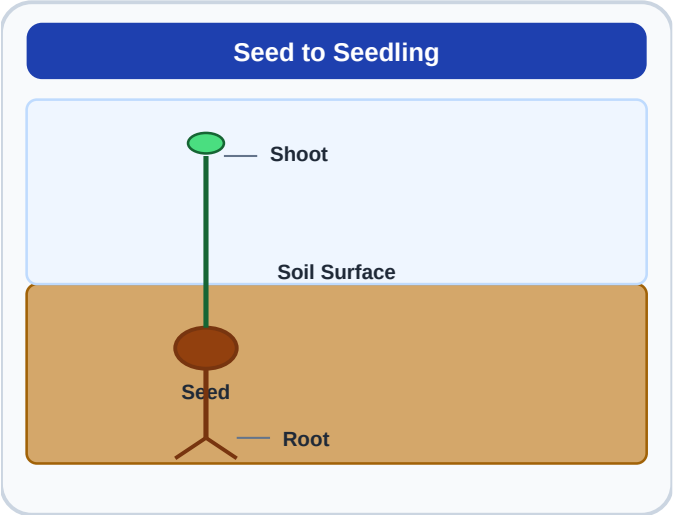
1. Seed — the starting point, containing everything needed to grow.
2. Germination — the seed absorbs water, splits open, and a root grows down.
3. Seedling — a young shoot pushes through the soil and tiny leaves appear.
4. Young plant — leaves grow larger, collecting sunlight for food (photosynthesis).
5. Mature plant — the plant reaches full size and flowers bloom.
6. Pollination and fruit — flowers are pollinated and fruit forms around seeds.
7. New seeds — the fruit releases seeds that will start new plants.

Key Parts and Their Roles

- Roots — anchor the plant and absorb water and minerals from the soil.
- Stem — carries water and nutrients up to the leaves.
- Leaves — make food using sunlight, water, and carbon dioxide (photosynthesis).
- Flowers — attract pollinators so seeds can form.
- Seeds — contain the new plant embryo; start the cycle again.

! Remember: seeds need water, warmth, and air to germinate — they do not need sunlight until the shoot appears.





EXERCISES — PUT IN ORDER

Number the stages of the plant life cycle in the correct order (1 = first).

- ◯ Seed in the soil
- ◯ Seed germinates and root grows
- ◯ Seedling pushes through soil
- ◯ Young plant grows leaves
- ◯ Plant matures and flowers bloom
- ◯ Flowers are pollinated and fruit forms
- ◯ Fruit contains new seeds

Number the circles in the correct order.

EXERCISES — MULTIPLE CHOICE

Circle the best answer.

What is the first stage of a plant life cycle?
- ◯ Seed
- ◯ Flower
- ◯ Fruit

What process allows a seed to begin growing?
- ◯ Photosynthesis
- ◯ Germination
- ◯ Pollination

Which part of the plant makes food using sunlight?
- ◯ Root
- ◯ Stem
- ◯ Leaf

What is the role of the root?
- ◯ Absorbs water and anchors the plant
- ◯ Carries out photosynthesis
- ◯ Attracts pollinators

What happens after a flower is pollinated?
- ◯ The root grows longer
- ◯ Fruit and seeds form
- ◯ Leaves fall off

What do seeds need to germinate?
- ◯ Sunlight, soil, and a flower
- ◯ Water, warmth, and air
- ◯ Fruit, water, and cold

Which stage comes after the seedling stage?

- ◯ Young plant grows leaves
- ◯ Germination
- ◯ Pollination

What is photosynthesis?

- ◯ The process of seeds sprouting
- ◯ The process of making food using sunlight
- ◯ The process of absorbing water through roots

Why do plants produce flowers?

- ◯ To carry out photosynthesis
- ◯ To grow taller
- ◯ To attract pollinators so seeds can form

How does a plant life cycle continue after fruit forms?

- ◯ New seeds are released and can grow into new plants
- ◯ The old plant stops growing permanently
- ◯ The roots grow into a new plant

ASSESSMENT

PARENT / TEACHER CHECKLIST

- ☐ Names and orders all seven stages of a plant life cycle correctly.
- ☐ Explains the role of roots, leaves, and flowers in plant growth.
- ☐ Describes what a plant needs to germinate and grow.
- ☐ Connects the concept of fruit to the dispersal of new seeds.