Grade 3 Science | Teacher Guide

Lesson 1: Life Cycles and Living Things

Read together and supervise investigations. Distinguish models from observations and accept accurate alternative explanations. Never invent measurements.

1. Stages in an organism's life.

2. Yes.

3. Seed or seedling.

4. Flowers and seeds.

5. No.

6. Answers vary; do not invent an observation.

Extension: A model represents stages; seeing the diagram does not mean the student observed those events.

Read together and supervise investigations. Distinguish models from observations and accept accurate alternative explanations. Never invent measurements.

1. Germinate or begin to grow.

2. A seedling.

3. Flowers and pods containing seeds.

4. No.

5. Answers vary; no invented result.

6. To show when changes were observed.

Extension: Answers vary; propose a measurable question and a relevant controlled condition.

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1. A caterpillar or larva.

2. A chrysalis or pupa.

3. An adult butterfly.

4. A tadpole, in the common frog life cycle described.

5. A butterfly has a caterpillar and chrysalis; a frog has a tadpole.

6. No.

Extension: Diagrams show sequence, not exact duration; conditions and species vary.

Read together and supervise investigations. Distinguish models from observations and accept accurate alternative explanations. Never invent measurements.

1. A characteristic of an organism.

2. Yes.

3. No.

4. Yes.

5. Shape, size or color.

6. No.

Extension: Answers vary; compare multiple plants, record measurements and identify controlled conditions and limits.

Read together and supervise investigations. Distinguish models from observations and accept accurate alternative explanations. Never invent measurements.

1. Amount of light.

2. Plant type, soil, container or water.

3. Plant height over time.

4. To relate each measurement to an observation time.

5. No.

6. To help see variation and avoid relying on one unusual plant.

Extension: Plants can differ initially; light or water may be difficult to keep consistent; other factors may affect results.

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Independent check answers

1. Seed or seedling.

2. Chrysalis or pupa.

3. A frog life cycle.

4. No.

5. A characteristic of an organism.

6. No.

7. Plant type, soil, container or water.

8. Invented results do not show what happened and cannot support a trustworthy conclusion.

This check samples life cycle and evidence skills, not the complete science course. Record understanding and support needed; reteach and reassess.