

One-Week Science Lesson Plan for 1st Grade (Age 6)

Topic: Exploring Plants and Their Needs

Day 1: Introduction to Plants - What Are Plants?

Learning Objectives:

- By the end of the lesson, the child will be able to identify basic parts of a plant (root, stem, leaf, flower).
- The child will understand that plants are living things.

Materials Needed:

- Various real plants or pictures of plants
- A large paper with an outline of a plant for labeling
- Crayons or markers
- Book: *The Tiny Seed* by Eric Carle (or any simple plant book available)

Lesson Introduction:

- Take the child outside or look through a window to observe different plants. Ask, "What do you see? What do you think plants are?"

Instructional Procedures:

- **Exploration:** Look at several plants or pictures, let the child touch leaves, stems, petals (if safely accessible).
- **Explanation:** Introduce plant parts using the plant outline. Name each part simply: roots help plants stay in the ground, stems hold the plant up, leaves help make food, flowers help make seeds.
- **Application:** Have the child color and label each part of the plant on the outline paper.
- **Reflection:** Ask the child which part of the plant they found most interesting and why.

Assessment and Evaluation:

- Observe the child's labeling and ask them to point to parts on live plants or pictures.
- Adjust by reviewing any parts they find confusing with more hands-on examples.

Integration with Other Subjects:

- Practice writing the names of plant parts (language arts).
- Draw a plant scene (art).

Differentiation and Personalization:

- For kinesthetic learners, act out plant parts (roots digging, stems standing tall).
- For children needing more support, focus only on two parts today (e.g., roots and leaves).

Real-Life Applications and Field Activities:

- Look for plants on a nature walk or in the yard.

Resources for Further Learning:

- Video: "Plant Parts for Kids" on YouTube (short and simple)
 - Read *From Seed to Plant* by Gail Gibbons
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Day 2: What Do Plants Need to Grow?

Learning Objectives:

- The child will list the basic needs of plants: sunlight, water, air, and soil.
- The child will recognize that plants cannot grow without these needs.

Materials Needed:

- Small pot or container with soil
- Seeds (beans or any easy-to-grow seed)
- Watering can or cup
- Chart paper or whiteboard for listing needs

Lesson Introduction:

- Ask: "What do you need to grow big and strong? Do you think plants need the same things?"

Instructional Procedures:

- **Exploration:** Plant seeds together while explaining each step.
- **Explanation:** Explain what plants need: sunlight helps them make food, water helps them drink, soil gives them nutrients, and air is all around.
- **Application:** Create a simple chart with pictures and words for plant needs.
- **Reflection:** Talk about how the child will help the plant grow.

Assessment and Evaluation:

- Ask the child to name the plant's needs without help.
- Review any missing items with examples.

Integration with Other Subjects:

- Practice counting seeds while planting (math).
- Write or draw daily observations in a journal (language arts/art).

Differentiation and Personalization:

- For children who like stories, create a short story about a thirsty seed growing.
- For those needing extra help, use pictures only for the chart.

Real-Life Applications and Field Activities:

- Water the plant daily and observe changes.

Resources for Further Learning:

- Video: "What Plants Need" by SciShow Kids
- Book: *Planting a Seed* by Bonnie Worth (from Dr. Seuss's Cat in the Hat Learning Library)

Day 3: How Do Plants Grow? The Life Cycle of a Plant

Learning Objectives:

- The child will be able to sequence the four main stages of a plant's life cycle: seed, sprout, growing plant, and flower.
- The child will understand that plants change over time.

Materials Needed:

- Plant life cycle coloring pages or printables
- Markers/crayons
- Real plant or photos to compare stages

Lesson Introduction:

- Show pictures of seeds and flowers, ask, "Where do flowers come from?"

Instructional Procedures:

- **Exploration:** Look closely at the seeds and any sprouts from the plant started Day 2.
- **Explanation:** Describe the life cycle stages with simple steps and pictures.
- **Application:** Color and arrange the life cycle pictures in order.
- **Reflection:** Ask the child to tell you the life cycle in their own words.

Assessment and Evaluation:

- Have the child verbally order the stages or use the printed pictures to arrange them.
- Provide extra support if concepts are unclear by retelling with hand gestures or props.

Integration with Other Subjects:

- Write simple sentences about each life cycle stage (language arts).
- Act out the life cycle as a movement game (physical education).

Differentiation and Personalization:

- Add a sequencing puzzle for more advanced learners.
- Use simplified explanations for children who need it.

Real-Life Applications and Field Activities:

- Continue observing the growing plant; draw what changes they see.

Resources for Further Learning:

- Video: "Plant Life Cycle for Kids" by Kids Learning Tube
- Interactive games on plant life cycles at websites like PBS Kids or National Geographic Kids

Day 4: Exploring Leaves - Why Are They Important?

Learning Objectives:

- The child will identify leaves as the part of the plant that makes food.
- The child will describe simple functions of leaves and recognize different leaf shapes.

Materials Needed:

- Assorted leaves collected outside or from books/photos
- Paper for leaf rubbings
- Crayons or pencils

Lesson Introduction:

- Collect leaves outside or look at pictures. Ask, "What do you notice about these leaves? Look at their shapes and colors."

Instructional Procedures:

- **Exploration:** Make leaf rubbings by placing leaves under paper and coloring over them with crayons.
- **Explanation:** Briefly explain how leaves use sunlight to help the plant make food (photosynthesis simplified for age).
- **Application:** Sort leaves by size, shape, or color.
- **Reflection:** Ask, "Why do you think leaves are important for a plant?"

Assessment and Evaluation:

- Observe child's sorting process and discussion about leaf function.
- Revisit ideas if child struggles to grasp leaf function with more hands-on demonstrations.

Integration with Other Subjects:

- Math: Count and compare leaves.
- Art: Create a leaf collage or nature journal entry.

Differentiation and Personalization:

- For tactile learners, allow extra time exploring textures.
- Simplify the function explanation or focus on leaf identification if needed.

Real-Life Applications and Field Activities:

- Leaf scavenger hunt outside or neighborhood walk collecting different leaves.

Resources for Further Learning:

- Book: *Leaves* by David Ezra Stein
- Website: Leaf identification apps or simple online leaf recognition games

Day 5: Review and Plant Care Project

Learning Objectives:

- The child will demonstrate knowledge of plant parts, needs, and life cycle.
- The child will practice caring for a plant using learned skills.

Materials Needed:

- The planted seed/pot from Day 2
- Printed worksheet or drawing sheet for review (optional)
- Water and plant care tools

Lesson Introduction:

- Ask: “What have we learned about plants this week? What do plants need to be happy?”

Instructional Procedures:

- **Exploration:** Review plant parts using a real plant; use pictures if needed.
- **Explanation:** Reinforce the needs of plants and life cycle stages verbally.
- **Application:** Help the child water and care for their plant and draw or talk about what they do to help the plant grow.
- **Reflection:** Have the child share their favorite part of the plant or growing process and any questions they have.

Assessment and Evaluation:

- Use a verbal quiz or “show me” game to review key concepts.
- If gaps appear, plan additional mini-lessons or repeat favorite activities.

Integration with Other Subjects:

- Write a sentence or two about their plant care (language arts).
- Create a simple reward chart for plant watering (life skills/math).

Differentiation and Personalization:

- For children ready to extend, encourage journaling plant growth daily.
- For support needs, focus on verbal recall and hands-on care.

Real-Life Applications and Field Activities:

- Continue to observe and care for the plant throughout the year.
- Plan a family garden or pot more plants if possible.

Resources for Further Learning:

- Family activity: Visit a local garden or farm.
- Book: *Planting a Rainbow* by Lois Ehlert for more colorful plant exploration

Additional Notes for Parents/Guardians:

- Encourage child-led observation and questions throughout the week.
- Create a cozy and distraction-free learning space with natural light.
- Use simple language and keep explanations short, reinforcing ideas with visuals and hands-on activities.
- Involve siblings by assigning roles—older can help younger with tasks like watering or recording observations.
- Celebrate small successes and enjoy the natural curiosity of your child!

This flexible plan lets you adjust pacing, revisit topics, and introduce fun outdoor experiences that homeschooling uniquely offers.