| Lesson: Parts of the plant | Name: |
|----------------------------|-------|
| Teacher:                   | Date: |

#### Parts of a Plant Lesson Plan

**NGSS Benchmark:** SC.3.L.14.1 – Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction.

#### Objective

- Identify and label the main parts of a plant.
- Explain the function of each plant structure.
- Observe how water moves through a plant stem.

#### Materials

- PowerPoint: Parts of a Plant
- Reference video (STEM Scholars Hub)
- Labeled plant diagram handouts
- Celery stalks
- Clear cups
- Food coloring
- Markers
- Observation sheets

## Procedure (50 minutes)

#### 1. Introduction (15 min)

- Present visuals of the main plant parts and their functions.
- Play the short video explaining plant structures.
- Show a real plant or diagram; ask students to identify visible parts.
- Distribute labeled plant diagrams for reference.

## 2. Experiment: Celery Water Transport (15 min)

- Fill clear cups with water and add food coloring.
- Place celery stalks inside the colored water.
- Explain: "This will help us observe how stems transport water."

## 3. Observation (10 min)

- Students record predictions: "What do you think will happen?"
- Observe celery changes during the experiment and note early results.

# 4. Generalization (5 min)

- Discuss:
  - o What changed in the celery?
  - o How does this show the stem's role?
- Reinforce how all plant parts work together for survival.

#### 5. Assessment (5 min)

• Students complete the interactive "Parts of a Plant" quiz on STEMScholarsHub.net.

## Safety Guidelines

- Handle food coloring carefully to prevent stains.
- Students should avoid touching their faces during the experiment.
- Wash hands after the activity.
- Monitor material use, especially with younger students.

#### Accommodations

- ELL: Provide dual-language labeled diagrams and vocabulary support.
- **ESE/504**: Pair students with supportive peers; simplify steps; allow extra time; ensure materials are within easy reach.