

Subject: Science/Reading

Grade: 5

Class Time: 60 minutes

Standards: 1.1, 1.2, 3.2, 3.3

Objective: Students will conduct an experiment to demonstrate plants' need for light

Materials: **For each pair of students:** Scissors, tape, ruler, large rubber band, cardboard shoe box with lid, cardboard dividers, four dry lima beans that have been soaked in water overnight, small flowerpot filled with dirt (small enough to fit inside shoe box), Plant Power

Procedure:

- Quickly review process of photosynthesis from lessons #1 and #2
- Explain that students will conduct an experiment to demonstrate a plant's need for light
- In pairs, students will follow steps on p. 28 of Plant Power to conduct experiment:
 - (1) Make a maze by taping dividers inside box
 - (2) Cut a 5 cm hole in the upper right corner of lid
 - (3) Plant four beans in flowerpot
 - (4) Place pot in corner of box farthest from hole in lid
 - (5) Put lid on box, then place rubber band around covered box
 - (6) Place box in a sunny or well-lit location

Follow-up Activities:

- ✓ Over next two weeks, students will open box every 2-3 days to observe and water plant as necessary, date and note observations in notebook
- ✓ Classroom discussions
- ✓ Students will write a paper that describes experiment, observations and explains the cause and effect