A Handful of Seeds

(A different and very visible way for students or groups to compare rates of germination.)

Objective:

Students will compare and contrast the germination rate of different types of bean seeds.

You'll Need:

- Clear plastic glove (one per student or group)
- Cotton balls
- Seeds-five different varieties of beans (pinto, lima, lentil, soybean, black-eyed pea, etc.)
- Duct tape or wide masking tape
- Fine point permanent marker
- Plant light or windowsill (indirect light)
- Hand magnifiers

Procedure:

1. Distribute seed varieties to students. Identify seeds and observe with hand magnifiers.

Ask students to predict which type of bean might germinate first and why. Record predictions.

3. Moisten cotton balls and push one into each finger tip of the plastic glove.

4. Place one bean seed on each moistened cotton ball (a different variety in each finger).

5. Label each finger of the glove with the variety of the bean seed it contains.

6. Gently press glove to force out air. Seal the opening with duct tape or wide masking tape,.

7. Label the taped end with the date. Place in a well-lit location out of direct sunlight.

8. Observe for signs of germination and record data. Have students illustrate changes.

Evaluation:

Which variety of bean germinated first? How do you know? How long did it take for the first seed to germinate? The last seed? If the activity were repeated, do you think the results would be the same? Why or why not? Illustrate your "handful of seeds" and write five sentence describing the germinating seeds.