

Wisconsin Garden in a Glove

Grow your own Wisconsin specialty crops and explore seed germination.

Different seeds come from different crops. The physical properties of each variety of seed may be different, but seeds do have something in common: all seeds need water, oxygen (air), and the correct temperature to **germinate**, or sprout.

In the germination process, moisture softens the seed's outer protective covering, called the **seed coat**. The embryo pushes through the softened seed coat and the new plant begins to grow. The roots push further down into the soil and a shoot, which contains the new plant's stems and leaves, called **cotyledons**, push up towards the surface.

Typically, the germination process occurs underground where it cannot be seen but in this activity, you will provide seeds the necessary conditions to germinate five different types of seeds in a clear glove.



Ginseng



Strawberries



Sweet Corn



Pumpkins



Green Beans

Activity 2: Germinate a Garden in a Glove

Procedure:

1. Gather the following materials: 1 clear plastic glove, 5-8 cotton balls, 5 different varieties of seed, a permanent marker, and clear tape and science journal.
2. Use the permanent marker to label each finger and thumb of a plastic glove with one variety of seed per finger/thumb - strawberry, pumpkin, green bean, sweet corn, and ginseng. Write your name in the center of the glove.
3. Dip five cotton balls into water and squeeze out excess moisture.
 - a. Note: For the large seeds, pumpkin and green bean, use two moistened cotton balls.
4. Place one seed on each cotton ball.
5. Insert the cotton balls and seed into the correctly labeled fingers of the glove.
6. Fold down the opening of the glove and secure it with tape.
7. Hang gloves on a classroom bulletin board or other warm location, with fingers facing downward.

Observations & Transplanting:

- Record daily observations of germinating seeds in your science journal by tracing your hand in your science journal and draw pictures of seed growth, noting measurements and changes.
- Some seedlings will be ready for transplanting within 1-2 weeks.
 - Cut the bottom off each glove finger and remove the cotton balls with the sprouts.
 - The entire cotton ball should be planted with the seedling into soil.

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In the presentation, Expedition Agriculture, you learned about different types of Wisconsin **crops**, or plants, that are grown on farms. Wisconsin farmers grow lots of different types of foods from seeds. Inside every seed is an **embryo**, or baby plant, which has the potential to grow into a new plant.

Activity 1- Are all Seeds Created Equal?

Do all seeds look the same? For most seeds the answer is no. Different plants have different sizes, shapes, textures and even colors of seeds. Gather samples of five common Wisconsin crop seeds- strawberry, pumpkin, green bean, sweet corn, and ginseng. Observe each seed and record your observations on the Seed Observation Chart below.

Seed Observation Chart

| Seed Variety | Sketch of Seed | Observation Notes: Size, Mass, Color, and Texture |
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Wisconsin Garden in a Glove activity adapted from "Farm in a Glove," by Minnesota AITC