

GREENHOUSE WORKER STUDENT INSTRUCTIONS

Greenhouse workers spend all day working with plants!

Greenhouse workers:

- Plant, grow, harvest and transplant trees, shrubs or plants
- Spray, weed, fertilize and water plants and shrubs, using hand and gardening tools
- Dig, cut, and transplant seedlings, cuttings, trees and shrubs
- Haul and spread topsoil, fertilizer, peat moss, and other materials to condition the soil

Greenhouse workers work in greenhouse facilities, sometimes called nurseries. They can also work at a customer's home or building location.

In this kit, you will learn to:

- Test seeds for germination
- Mix potting soil
- Grow plants from seed
- Transplant plants
- Root stem cuttings
- Grow plants using propagation methods
- Graft one plant to another
- Build a small greenhouse



ACTIVITY 1: TESTING SEEDS FOR GERMINATION

Germination is the sprouting ability of seed. Most seeds sold today have been tested and their germination is known. However, if the sprouting ability is not known, germination is a good way to see if seeds can still be used to grow new plants.

In this activity, you will learn to:

- Define germination
- Test seeds for germination
- Figure germination percentage



Materials needed from the kit:



Seed packages



1 piece of filter paper



1 petri dish

Materials you need to get:

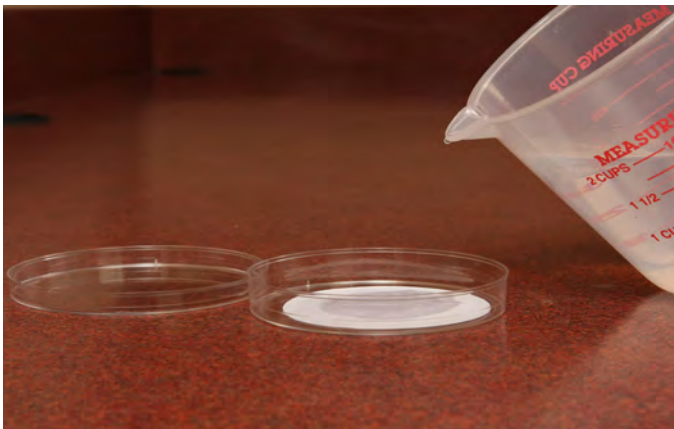
- Additional seeds (optional - from a vegetable such as a bean)
- Water
- Sunlight

Procedure:

1. Place the filter paper in the bottom of the petri dish.



2. Dampen the filter paper with a small amount of water.



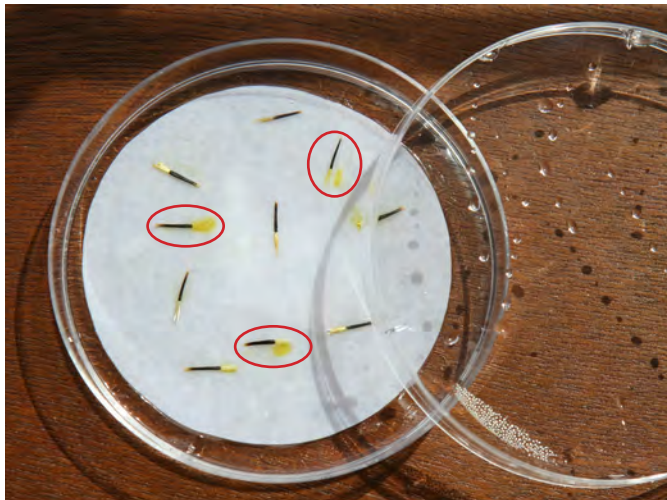
3. Place 10 seeds on the damp filter in the petri dish. Put the lid on the dish.



4. Put the dish in a sunny, warm place. Keep it damp.



5. After 3 or 4 days, look at your dish to see if any seeds have started to sprout. Remember, different seeds take different lengths of time to germinate.



← In this example, note the three seeds that look like they are germinating.

6. After about 1 week, most of the seeds that are going to, will have sprouted. Count the sprouted seeds. Can you figure the percentage of the sprouted seeds? Divide 10 seeds into the number of seeds that have sprouted. This will tell you the germination percentage.

For example:

10 seeds are placed onto a filter paper	=	10	$\overline{)5.00}$	=	50%	germination
5 seeds sprout			$\underline{5.00}$			
			$\underline{\quad .00}$			

7. When the percentage of germination is low, more seeds need to be planted to grow the number of plants you want.



8. Some people save seeds from flowers and vegetables to use from year to year. If you know someone who does this, ask if you can make a germination test for them.



9. When you're finished with this activity, clean up and put your materials away.