



Basic Vegetable Gardening

Lesson 3a: Seed Germination Test

Lesson Summary: Boys and girls will test the germination rate of garden seeds.

What the boys and girls will learn:

How to know if seeds will germinate well when they are planted.

Time: 25 minutes for test

15 minutes to figure germination rate

What you need for the lesson:

Old papers, old newspapers or an old cloth for germinating seeds

Seeds for vegetables and fruits

Steps:

1. (3 minutes) Introduction

Review important lessons from the last meeting.

Tell the boys and girls that they will be scientists today. They will put seeds in wet papers or cloths and wait 5 days. Then they will see how many seeds germinate. Scientists who grow plants often test their seeds. This test works well for African villages.

Germinate means the seed begins to sprout.

It is important to see how many of the seeds germinate to determine how many need to be planted in the garden.

2. (20 minutes) Start test.

Ask boys and girls why some seeds do not germinate.

Answers: seeds are too old, stored wrong

Put boys and girls into groups. Each group will test a different fruit or vegetable.

1. Tell them to wet an old newspaper or cloth.
2. Put 20 seeds on one half of the wet cloth.
3. Fold the other half of the cloth on top of the seeds and roll it up. The seeds are inside the cloth.
4. Record how many seeds you started and the date.
5. Store it in a cool place.
6. Plan to check the seeds in 5-7 days.





3. (10 minutes) Continue the germination test.

Check the seeds in 5-7 days. Review how the test was started. Unwrap the cloth.

3.1 Calculate the germination rate. Fill out the chart below.

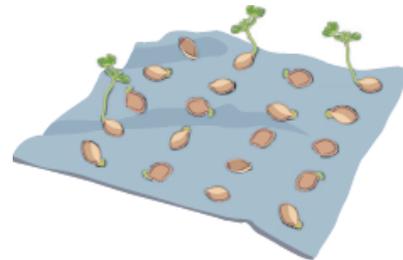
Count how many seeds germinated. Write it down.

| Type of Plant | # Planted | # Germinated | Germination Rate |
|-----------------------|-----------|--------------|------------------|
| <i>Example: beans</i> | 20 | 15 | 75% |
| | | | |
| | | | |

Divide the number that germinated by the number of seeds you started with.

Example:

$$\frac{3 \text{ seeds germinated}}{20 \text{ seeds planted}} \times 100 = 15 \% \text{ germination rate}$$



If the germination rate is less than 85%, plant more seeds than recommended in the garden.

4. (5 minutes) – Review by asking these two questions:

- What did we do last week and today?
- Why is it important to test the germination rate of the seeds?
Answer: It is important to test the germination rate of seeds to see how many seeds need to be planted.



5. (1 minute) – Close

Tell members what the next lesson will be.

