

Seed Germination Test

Germination: “the development of a plant from a seed”

Often when purchasing seeds from big seed companies, they will include a germination rate as a percentage. This germination rate is applicable for the year you get the seeds and goes down as time goes on. Keeping seeds in a cool, dry place helps, but you can expect germination rates to decrease over time.

We have seeds that were donated this year - they were supposed to be planted in the spring. There is an easy way to test germination rate. This can be used to estimate how many plants you can expect to sprout when you plant the seeds in your garden. It can be done indoors and is a good way to prepare for the growing season in late winter or early spring.

Some seeds require extra work to germinate like soaking overnight, scratching part of the outer layer off, or submerging in acid. We won't do that today - we will use the simple method.

Supplies:

Spray bottle

Paper Towels

10 seeds of the same type

Process:

- Wet your paper towel with the spray bottle.
- Put 10 seeds in a row.
- Fold your paper towel over the seeds and wet again.
- The paper towel can then be placed in a plastic bag.
- Write your name, date, type of seed, and # of days to germinate on the bag.
- Keep the paper towel moist (it should stay moist in the plastic bag but may need to be sprayed again)
- Check on your seeds based on the expected germination date (i.e. Carrots should germinate in 7-10 days, so check on day 10).
- Count how many seeds have sprouted.
- Calculate the germination rate (percentage of seeds that sprouted)
 - For example, if 5 of the 10 seeds have sprouted, germination rate is 50%

If you are using seeds from a previous year in your garden, this can be a really helpful activity to know how many seeds you need to plant in order to get the number of plants you want!

Notes:

Pinecone Bird Feeders

Some birds are great for the garden while others are pests. If anyone has tried to grow blueberries without netting, you know birds get to those before we can most of the time! A lot of birds are great to have around the garden, though. They eat pest insects and bugs. If birds can find a food source near the garden over the winter, they're more likely to come back when there are plants in the garden and help with pest control.

We are going to make simple Pinecone Bird Feeders today to take home or hang around the garden when the weather is nicer.

Supplies:

Pinecones
Peanut butter
Spatula
Twine/string
Bird seed
Tray

Process:

- Choose your pinecone
- Wrap twine/string around the pinecone with extra so we can tie it to a branch or fencing
- Use a spatula to cover your pinecone with peanut butter
- Roll the peanut butter pinecone in the bird seed
- Hang it up wherever you would like!

Just an interesting fact - if you want to do this at home and find a pinecone that is not open yet, you can put it in the oven at 200 degrees to get it to open! By doing this, we are actually imitating nature. Though wildfires have been a huge issue in recent years, in the past they were an important part of the ecosystem. For example, the heat from wildfires causes the cones of Giant Sequoias and Redwoods (other evergreens, too) to open and release the seeds. The fire also cleared out the small plants growing, so it provided space for the seeds to germinate and grow!

Notes: