

Seed Growth

Plants come from seeds.

This happens when the seeds are planted in the ground and sprout (begin to grow).

Before a seed can sprout, it must go through a process called **germination**.

The process of germination happens inside the seed.

The parts of a seed

Before we look at the inside of a seed, let's talk about the outside of the seed.

The outside of a seed is called **the seed coat**.

The seed coat is the hard outer layer of the seed.

It is the part we see and hold in our hands before we plant them in the ground or a pot of soil.

Not all seed coats are alike, though.

Some are hard (corn, beans, peas, okra, morning glories).

Other seeds have soft seed coats (marigolds, tomatoes, zinnias, peppers, cucumbers).

THE PROCESS OF GERMINATION

If you have ever planted a seed, you know how exciting it is to see the plant that comes from that seed break through the soil. Have you ever thought about how it happens?

Let's find out!

When you plant seeds in some soil, it is important to keep the soil watered (not too much).

The reason this is so important is because the seeds you plant need to be able to take in oxygen and minerals from the soil and water through the seed coat's tiny pores (holes) to give the inside of the seed the food it needs to break open and make its way through the soil so it can grow into a plant.

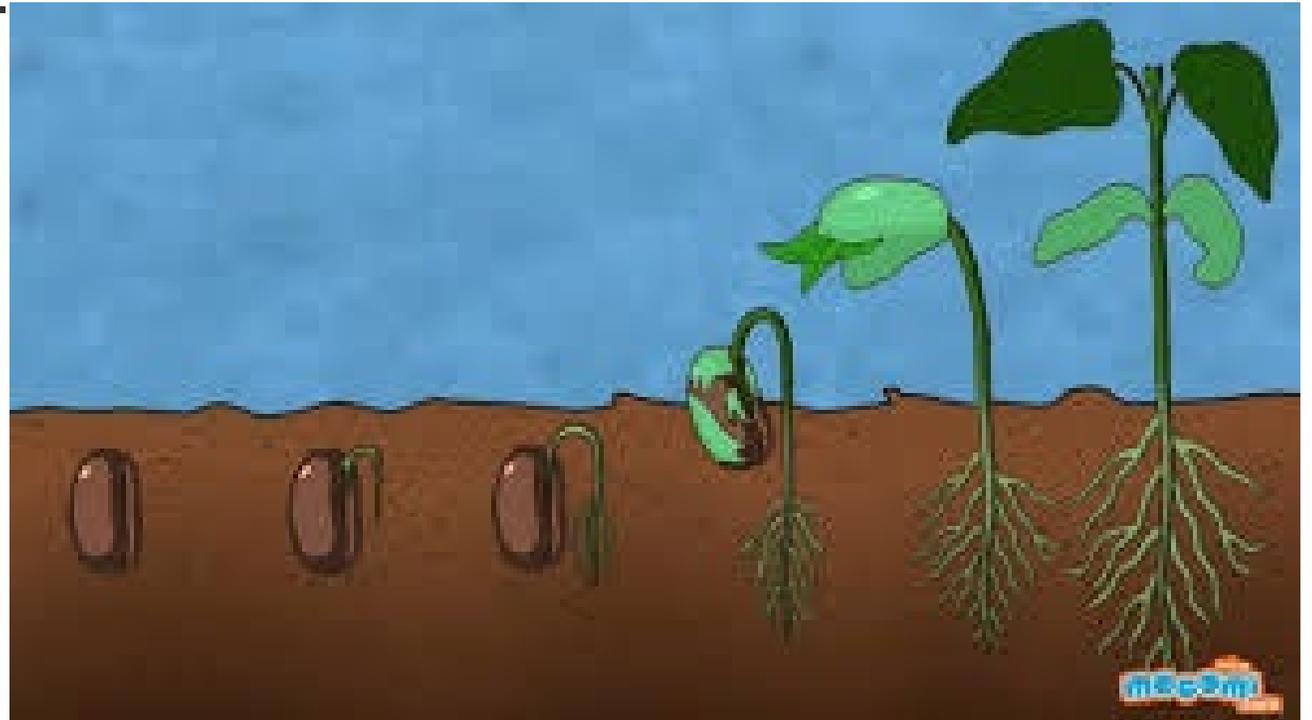
What happens next?

When the seed is full enough, it pops open.

The first parts of the seed to come through the seed coat are the shoot and the root.

The root takes hold of the soil and starts to take in food from the soil.

But because it is still so small, the inside of the seed is still the main source of food for the seed.



If you have any seeds you could try this at home (you could use seeds from the fruits/ vegetables you have in your fridge, e.g peppers, kiwis, strawberries, tomatoes)

Germination experiment:

- Fill each section of an empty egg carton with moist potting soil.
- Place a different kind of seed in each section.
- Make a chart showing what seeds are planted in each section of the egg carton.
- Keep the seeds in a warm, sunny place and keep the soil moist—but not too wet.
- Write down how many days it takes for each seed to germinate and pop through the soil.

What about the rest of the life of the plant?

There are lots of dandelions around at the moment! Think about each stage of its life, from seed to plant to seed dispersal. What stages does it go through?

