Primary Science: Germination

Germination is the process by which a plant grows from a seed. Everything that lives on earth has a life cycle. Plants start their lives as tiny seeds.

Inside every seed there is an embryo, which is a tiny plant, and the endosperm, which are small leaves which feed the embryo.

They outside of a seed has a coat/skin, and this acts as protection to make sure the embryo is safe. The coat can be hard or soft, protecting the seed from injuries, extreme weather, and parasites.

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The embryo is safely stored inside the coat of the seed, waiting for the perfect time to begin germinating (growing).

These seeds need to pass through a process called scarification, which means allowing moisture (water) to get into the seed.

Gardenrers and farmers soak their seeds in water, or cutting a small hole for them so they can soften their coats, making them grow faster!

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Seeds need the right conditions to germinate and it can take years for the conditions to be right. Even old seeds can still be able to germinate and grow.

Some seeds need light to germinate, but others may need darkness. All seeds need moisture, oxygen, and the right temperature to germinate.

When conditions are right, the seed starts taking in water and gets bigger until the coat splits. Air can then get to the seed. The oxygen in the air helps the plant burn the food inside the seed to produce energy, allowing it to grow.

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Answer the questions.

What is germination?

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What is inside a seed?

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Why do seeds have a coat?

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Answer the questions.

Write down the conditions for a seed to grow.

Where can we get seeds?