

NATURE DETECTIVES

Winter 2024-25

Text by Pam Sherman
Illustrations by Emily Lark

Discover Secrets of Seeds!

What are seeds? What do they look like?

What's that big thing at the center of your peach and plum? What are those little hard brown things inside your apple core? Yes, those are seeds. The baby plants inside them ready to unfold and grow into a new apple, peach or plum tree.



Seeds come in all shapes and sizes and colors. Can you find the seeds in the tomatoes you eat? The melons? Some watermelons have very few seeds these days, but older varieties and other melons still have them. Can you find the seeds in cucumbers? Can you find the pea and the bean seeds in the pea and bean pods? Hint: the peas and beans are the seeds! Another trick question for you: what does corn seed look like? It's the kernels!

Here's another tricky one: what are bread and cookies made of? Flour, right? But what is flour? Ground-up seeds of the plant we call wheat! We also make cookies from oat seeds and bread from rye and barley seeds. They are called grain and are in the grass family.

Pull Out and Save



What does the flour look like when it's still seeds? There are many different types of wheat and the seeds of each look different from each other, too. When you take a drive in the eastern part of our county you can see lots of these growing in farmers' fields.

When you make rice, what are you cooking? Yup, the seeds. Do all rice seeds look alike? There are fat, short, sticky rice seeds and long, thin non-sticky rice seeds. Some are white, some are red, some black.

With every food you prepare and eat, can you find the seeds? Some are easy, some are harder. Can you find the seeds in strawberries? Hint: they are not inside it. In raspberries? Blueberries?

Here's a tricky one: can you find the seeds of lettuce? Have you ever seen a lettuce seed? When lettuce is going to seed, it hardly looks like the same plant you put in your salad. The lettuce grows into a kind of tower, with tiny yellow flowers and tiny, fluffy seeds. If you know a gardener, ask them to leave at least one lettuce plant to go to seed next summer so you can see it and save its seeds! Another tiny seed is carrot seed. If you sneeze or blow even lightly over lettuce or carrot seeds, you might scatter them all over the room.

Have you eaten pine tree seeds? What a strange question! But yes, trees have seeds just like veggies. If you have eaten a pine nut from a Colorado pinyon pine tree, you have eaten its seed. It's called a nut because to some people it looks like one, but don't be fooled: it is really the tree's seed. (Do your grownups know this?)

What's so important about seeds?

For starters, they contain the new baby plants inside a protective shell — some are hard, some are soft. If we cut the flower or pull up the plant before it makes seeds or before the seeds are fully formed, there will be no new baby plants.

Do you like chocolate cake? Lots of people do. Does chocolate cake come from a seed? That seems like a silly question, but what are the ingredients? If you make the cake yourself or if you buy a mix, the same ingredients are in there: chocolate, milk, wheat flour, vanilla, eggs, sugar, to name some of the main ones.

Does chocolate come from a seed? You bet, from a tropical cacao plant. What about vanilla? Isn't it a liquid? Vanilla is from a beautiful tropical orchid, so it's from a seed. We already talked about wheat flour. What about sugar? Right again! It can come from beets which grow right here in Colorado.

But milk doesn't come from a seed, does it?

It's from a cow and a cow is not a plant, it's an animal. But how does the cow grow big and strong enough to give milk? It eats grass and other plants in the pasture and the seeds of those plants. That's how. You've probably seen cows munching away as you drive by farms in our county.



Same with eggs: they don't grow from a seed, they come from a chicken, of course. What do chickens love to eat to make them grow and stay healthy? Seeds!

Do you wear cotton t-shirts or jeans? Where does the cotton come from? Yup, cotton seeds. Do you wear wool in the winter to keep warm? Where does the wool come from? Yup, sheep. And sheep eat grasses and all kinds of other plants and their seeds.

Does your family use canola oil or sesame seed oil in cooking? Or walnut or almond oil? These oils come from the seeds themselves. Olive oil is from the fruit just around the seed. Does your family use coriander or fennel seed or dill seed in cooking? All these are seeds from plants.

Have you ever seen a necklace made of hard seeds? People all over the world have made beautiful jewelry and art with seeds for thousands of years and we still do it!

How do seeds travel?

Now that it's winter, you can find seeds all over on plants growing near houses, shops, other buildings, on farms, in gardens, in

natural areas.

When you go outside, what seeds can you find to collect?

Everyone at some point has blown dandelion seeds

and watched them float with the wind. Have you watched maple seeds twirl in the wind? They are called samaras but most people call them "little helicopters."

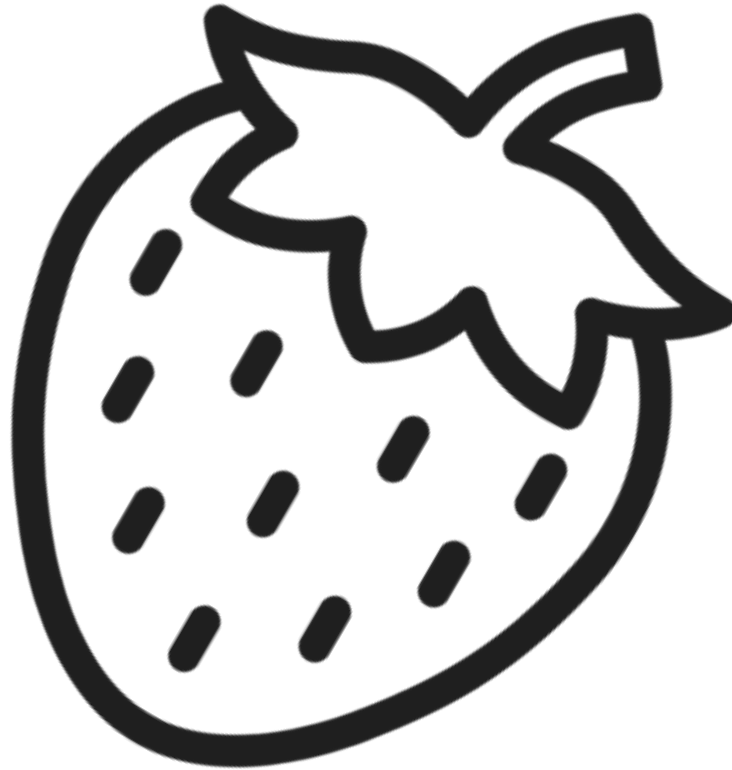
Some plants, like the invasive leafy spurge, burst open and shoot their seeds out far away from the parent plant so they have a chance to grow. Some, like milkweed, just split open when the seeds are ready. Have you seen that? Some plants like our native mountain mahogany actually shoot their seeds into the ground. They are feathery and shaped like little corkscrew drills and drill themselves into the soil to plant themselves!

Some plants drop their waterproof seeds into the stream, which carries them to a new place to grow. Some like the famous burdocks have seeds with teeny hairs with teeny hooks that stick tighter than sticky tape to an animal's fur or your socks.



ACTIVITIES

How many different places can you find seeds from garden veggies, lawn weeds, or wild, native plants? Do you find them on flowers, bushes, trees? They'll be on the plant or on the ground. Where you find birds eating, you will often find seeds. How many different colors can you find? How many different shapes? Lay them out and see. You can even make a seed picture by gluing the different shapes and colors into a pattern. Collect seeds from your pantry (dried beans, nuts, sunflower seeds, etc.) and fill in the strawberry shape to make seed art. Be creative!



Take one seed that grows easily and put it in a little soil inside a small cup. Water it a bit at first, but don't drown it. If you know what the seed is, you can read up on how to care for it. If you don't know what it is, have fun and learn what it wants by how it responds to your care. Put it in the window so it gets some light. How much light does it want? How much water does it want? Watch it grow. How long does it take your seed to sprout? Next spring when it's warm, transfer it to a bigger container or plant it outside. Just as seeds give us gifts of food, clothing, warmth, and beauty, you can give that seed a gift, too, by learning about what it likes best and taking care of it.