

Here's more information on:

Foods you can find in the Demonstration Garden!

Bonus round (Foraged Foods) included

1. An edible flower- Nasturtiums and Marigolds!

- Some flowers are tasty! Nasturtiums, shown in the scavenger hunt, have a very peppery taste. Marigold petals, which are also edible and abundant in the demo garden, can range from a citrusy taste to mild spiciness.
- Nasturtiums don't only have edible flowers- you can also eat their leaves, stems, and unripe seeds! In fact, one of nasturtium's cousins, *tropaeolum tuberosum*, or Mashua, is a delicious root vegetable eaten across the Andes!

2. CORN

- Like many other food crops, corn was not simply discovered out in the wild one day. Instead, it was carefully bred to produce more (and bigger) edible kernels! Corn was domesticated by indigenous people of Southern Mexico around 9,000 years ago.
- Corn is one of the Three Sisters- the three main agricultural staples of many indigenous societies of central and north America! The other two sisters are climbing beans and squash. When growing together, the cornstalk serves as structure for the beans to climb on, the large squash leaves shade the ground, which prevents water loss and weed growth, and the beans fix nitrogen in the soil, an important nutrient all plants need to grow!

3. A plant with climbing tendrils- Squash, Cucumbers, and Peas

- Have you ever noticed these thin, curly stems grasping at fences, wires, or other plants? Those are tendrils, and plants use them to climb up and hold onto structures. They are sensitive to touch, and respond by curling, wrapping, or adhering onto things around them. Why do you think these plants might like to climb?
- Want to see more cool tendrils? Check out the chestnut vine in Sugar from the Sun- it's used its tendrils to completely cover a metal structure that stretches over the path!

4. A not-green leaf- Purple Basil

- Not all leaves are green- some are red, purple, or black! These colors come from anthocyanin, a pigment that protects the leaves from bright light. This pigment also acts as an antioxidant and anti-inflammatory when eaten!
- Basil is actually in the same family as mint! The Lamiaceae family is full of aromatic herbs. Besides the good smells, you can see the family relation in the flowers, which are small, light purple or white, and clustered along a stalk at the top of the plant's leafy stems.

5. Fruit growing in a bunch- Tomatoes, Grapes

- Some fruits we enjoy grow in clusters, making them easier to harvest! To find another one, look up when you're in the shade by Play & Grow!
- The tomato's wild ancestor, *Solanum pimpinellifolium*, is native to western South America and has fruits the size of peas! We don't know yet exactly when this

plant was domesticated into modern tomatoes (*Solanum lycopersicum*), but the first evidence of cultivation is from around 500 bc in Southern Mexico.

6. A plant for brewing tea- Chamomile, Mint

- Have you ever sipped a cup of hot tea over the winter, or a glass of iced tea when it's hot outside? Chances are you've tried mint or chamomile! Both are soothing, delicious, and caffeine free.
- If you want to grow mint in your garden, make sure you plant it in a pot! Most species of mint are very good at spreading, and will quickly take over a garden (note our many volunteer lemon balm mints in Play & Grow!)
- While chamomile makes a tasty tea, it's health benefits are still being researched and debated. It may worsen certain allergies, and can interact with drugs like aspirin. If you take any prescriptions or herbal supplements, be sure to look up their potential interactions with chamomile before trying this tea!

7. Something you might find in a salad- Kale

- Many softer salad greens like lettuce can only grow at the beginning or very end of summer, since hot weather is too intense for them! Kale, however, is very hardy- it can keep growing even after the ground freezes in fall.
- The variety of kale shown in the scavenger hunt is dinosaur (or lacinato) kale. There are many different varieties, which differ in leaf shape, size, and color- the other two main shapes are curly kale and flat-leaf kale.

8. A veggie that grows underground- Beets, Radishes, and Onions

- Some underground foods we eat are roots, like potatoes, radishes, and beets. Other plants, like onions and garlic, are bulbs. The parts of the bulb we eat are modified leaf scales, which evolved to store energy- this is what makes them so nutritious for us!
- Radishes are part of the mustard family. Although people often eat only the root, the whole plant is edible- the leaves have a spicy, peppery flavor.

9. A fruit inside a lantern- Tomatillo

- Tomatillos and other members of the genus *Physalis* grow these papery husks to protect their sweet, acidic fruit as it develops. While the husks are not edible themselves, they can be used as a leavening agent. Boiling water with tomatillo husks, removing the husks, then using the water when baking bread or masa (a delicious dough made with corn flour) can act like baking soda, making the finished product lighter and fluffier!
- This plant is part of the nightshade family, Solanaceae, which also contains tomatoes, potatoes, peppers, eggplant, tobacco, okra, and paprika!
- In 2017, a group of paleobotanists found two fossilized paper lanterns that were determined to be 52 million years old! This is very special, since delicate paper husks normally do not fossilize well. These represent the oldest *physalis* specimens, and the oldest Solanaceae fruit ever discovered. They were found in Laguna del Hunco, Patagonia, Argentina.

Bonus round- foraging foods!

1. *Plantago major*

- This plant is known as broad leaf plantain, llanten in Spanish. It is native to Europe and Northern and Central Asia, and thought to be one of the first European plants to join colonizers in the Americas- it excels at growing in compacted, recently disturbed soil. People think these qualities may have contributed to another common name, “white man’s foot”, as it was seen to spring up quickly in the wake of colonizers and their land-clearing tendencies.
- This plant is NOT closely related to the banana-like plantains that we know and love!!
- The fresh, new leaves can be eaten raw, while the older, more fibrous leaves can be boiled and eaten in stews. These thick fibers can also be braided together and used for other purposes, like rope or fishing line. The seeds are edible, though bitter.
- *Plantago major* has also been used for many medicinal purposes over the years, including as a laxative, a poultice for skin sores and cancer, and for the roots, for reducing fever and aiding healing from respiratory infections.

2. Strawberries (and their leaves!)

- -Strawberries are considered a sacred first food of the Anishinaabe peoples. The Objwe name for strawberries is Ode’imin (O-day-imin) which means heart berry. Strawberries play a very important role in cultural practices and ceremonies of Anishinaabe folks:

“The act of gathering strawberries is seen as a way to maintain a connection with the land, strengthen community bonds, and pass on traditional knowledge. Anishinaabe teachings and stories also use the strawberry to convey important lessons and teachings. These stories often highlight the value of humility, gratitude, and respecting the interconnectedness of all living beings. The delicate nature of strawberries is a reminder of the importance of caring for the Earth and its resources. (nawapo.com)”.

- Strawberry leaves are also edible, and have many medicinal properties, including its use as an anti-inflammatory, a diuretic, and a source of vitamin C and antioxidants. They can be prepared as a tea or tincture, or tossed in a salad or smoothie!

3. Eastern Prickly Pear

- This plant’s latin name is *Opuntia humifusa*. It is a species of nopal native to the east coast of the US, although it can reach as far west as Montana if conditions are right! It does not like shade, instead preferring direct sun in rocky areas.
- You may recognize this plant from our outdoor winter scavenger hunt! That’s right, this cactus can live outside all winter- when it gets cold, it dehydrates and shrivels up so its tissues won’t freeze. In the spring, it puffs back up and starts growing again!
- The eastern prickly pear produces edible fruits, called “tuna” in Spanish. Young stems (that’s right, the big rounded pads that make up most of the plant are stems, not leaves!) are edible as well, and can be roasted to remove spines.

4. Acorns

- Acorns are nuts produced by oak trees and their close relatives, stone oaks! Like other nuts, acorns contain a plant embryo, which is absolutely packed with nutrients- levels vary by species of tree, but all include ample protein, fats, and carbohydrates, as well as plentiful calcium, phosphorus, potassium, and niacin.
- However, acorns are also high in tannins, a bitter polyphenol that can interfere with the body's ability to metabolize protein. This means that animals who enjoy feasting on acorns have to adapt, either behaviourally or internally, to extract the precious nutrients inside. For example, squirrels cache acorns underground, where over time, groundwater can leach out the tannins and leave the acorns more edible!
- White oaks (like our swamp white oak in Play and Grow!) contain less tannins than red oaks, making them a better candidate for foraging! However, they still need lots of processing before they are edible to humans. Cold water leaching, where chopped acorns are soaked in several changes of water over several days until the water no longer turns brown, is a good method for removing tannins. After this, the soaked acorns can be ground up and used as flour!

5. Purslane

- Purslane, or *Portulaca oleraceae*, is entirely edible! Raw purslane is about 93% water, 2% protein, and 3% carbs. It is also rich in vitamins E and C, and a moderate source of important dietary minerals including calcium, iron, and magnesium.
- Once you can identify purslane, you'll find it everywhere! This plant is adept at growing in adverse conditions, and is often found on sidewalks, in parking lots, and other disturbed areas (places where other vegetation has been removed or cannot survive due to human activity). Make sure to exercise caution when choosing which specimens to eat- plants close to the street can contain heavy metals from brake dust and car exhaust, while plants in heavily walked-on areas can be covered in anything that could travel on the bottoms of people's shoes!

6. Black walnut

- The edible part of this tree is its nut- but it's not easy to get out!! The nut is contained within a fleshy green fruit- this fruit contains very potent natural dye, as well as tannins that act to keep the dye in place, so make sure to not use your bare hands (or wear anything stainable) if you're opening them! The nut inside has a very thick, tough shell as well, which has led to many home-made black-walnut-specific nut cracking devices. The English walnut is much more widely eaten, due to the fact that it's much easier to prepare and extract!!
- This tree is a pioneer or early succession species. That means it is capable of being the first tree to start growing in a recently cleared or disturbed area. This is a special skill, as many plants can only grow within an already existing habitat and depend on the support of other species to establish themselves! In turn, being the first plant to colonize a new area means building habitat for these other plants, especially shade and erosion control.