

## What are castings and what are they good for?

Castings are the product of all your red wigglers hard work. Castings are the excretions of the worms once they have eaten and digested the food you give them in their bin. Essentially casting are worm poop. But these castings are extremely useful to help plants grown and to make soil healthy. In fact, Castings are the best biological fertilizer out there. Nothing in nature works better to help plants grow than the casting produced by your hard working red wigglers.

Castings are nutrient rich soil conditioners. They can contain enough organic nutrients in just a tablespoon to feed a 6" potted plant for over two months. More so they have great benefits for making sure soil is healthy for plant growth too. These casting help soil retain more water as well as letting air into the soil. These are all very important things to consider for plant growth. More so, castings help extract toxins out of soil that could affect your plants and prevent the growth of bad bacteria and fungi. Now that you've heard all the wonderful benefits of castings, here are some ideas of how you can use you castings!



### Using castings as a soil conditioner:

Use castings as a soil conditioner by digging up the very top layer of dirt and layering the castings on top. Next water the casting and you have soil that's conditioned and ready to have things planted in it. This use of castings adds nutrients to your soil before you plant anything so that you plants grow strong and healthy right from the beginning.



### Using castings as a plant fertilizer:

To use casting as a fertilizer you simply have to add a layer of castings on top of the soil surrounding your plant. Another option is to lightly dig the castings into the dirt around your plants. Don't worry about using too much castings as adding too many casting will not harm your plants. Using castings as a fertilizer is a good way to make sure you plants have the nutrients they need to continue growing and to stay healthy.

### Using castings in casting tea:

Casting tea is an easy and effective way to distribute your castings nutrients to your plants. To make casting tea simply mix roughly 1 cup (250mL) of worm castings with 4L of water and let sit. Once the tea has sat for a few days its ready to use. Water plants with this tea to share all the important nutrients with them.





Have you helped the environment today?

## May Environmental challenge:

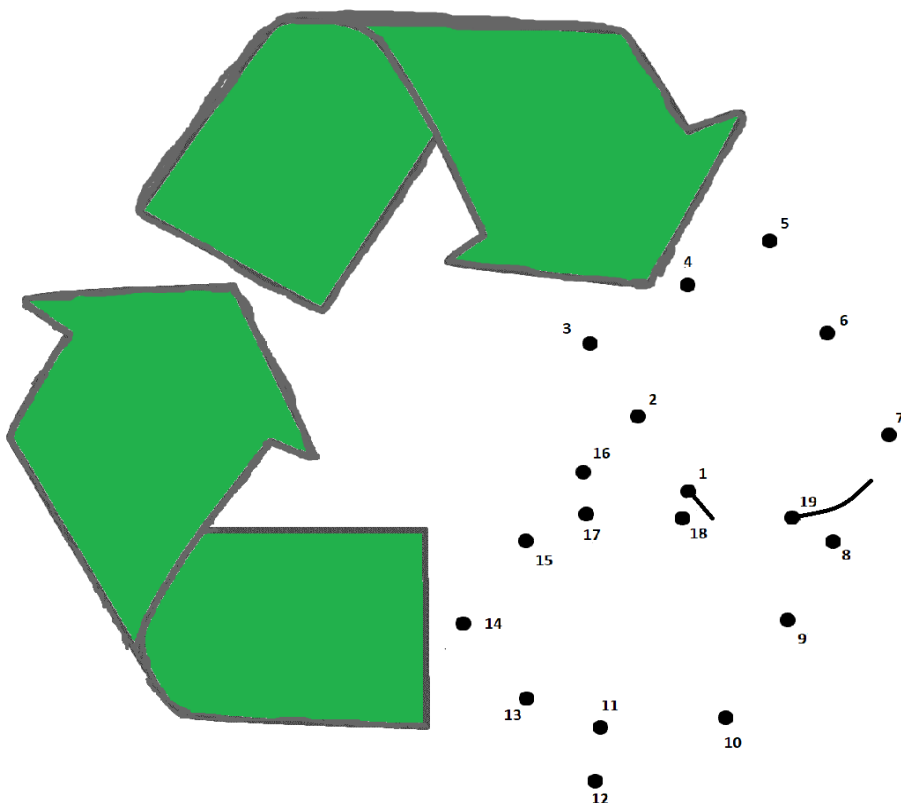
May 22nd is international day for biological diversity. Biodiversity is when there are various different organisms and species living in an ecosystem or habitat. This variability of organisms is important for the health and stability of the planet and it's ecosystems. When plants or animals go extinct or become endangered this makes that ecosystem less biodiverse. Important jobs that those species might have performed for the earth might not be happening anymore.

Challenge instructions: At home in your yard take the time to search for as any different kinds of organisms as possible. Record all the different organisms you find on a piece of paper. Make sure to include both plants, animals, and fungi. After you are done look back on all the different organisms you found in just your yard alone! Even if one of these organisms was removed it could have a possible effect on all the other organisms living there.

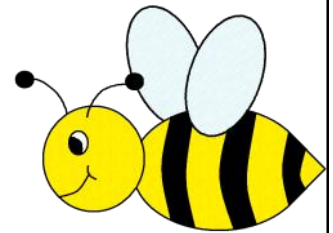
Challenge tips:

- Try to disturb as little of the organisms as possible during the challenge. Don't pick any plants and use only your eyes to observe any animals you might find including insects.
- Remember many organisms like to hide. Try being creative in your search digging into the ground might find you more things. Just remember to ask your parents permission first.
- Remember you are looking for different species in your yard so if you found two lady bugs there's no need to record that twice but a dandelion and a daisy are two different types of organisms.

## Connect the dots to complete the recycling symbol



## World Bee Day



May 20th is World bee day.

This day is a day for us to acknowledge and appreciate the important role that bees have in our world.

Bees are pollinators. This means that they go around from plant to plant or flower to flower looking for food. In the process of searching for nectar from these plants they end up picking up pollen from the flowers. As they enter other flowers this pollen falls off the bees fertilizing the flower to produce seeds. Many plants cannot reproduce unless a pollinator like a bee is involved.

Bees fill a unique and important role in ecosystems. This makes them a keystone species. A keystone species is so important to their ecosystems that if they are removed it can have negative impacts on the entire ecosystem. Planting bee friendly flowers assist bees and promote a healthy environment.