



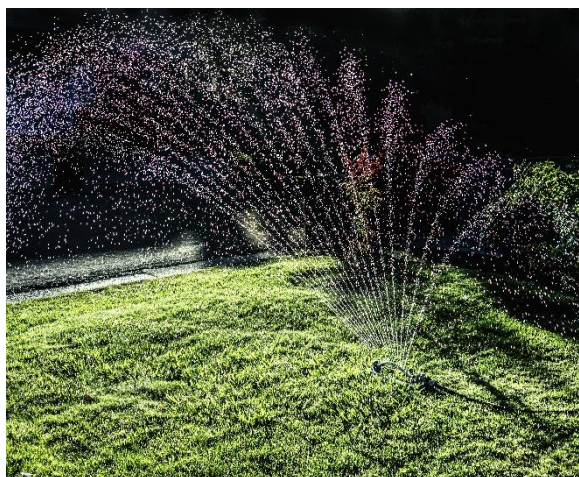
Hello Pioneers! Thank you for all the awesome vermicomposting ideas. You were creative, clever and thought about taking care of the environment too. I am working on checking out all the ideas to determine which will be used to create the bins for each building. I will show you the plans for each once I get a chance to examine all the ideas. I will accept vermicompost suggestions up until Sunday at 1:00 for those who didn't have a chance to send me their ideas yet. Our next step after the bin and bedding is the worms. So, let's spend some time this week learning about how to find worms.

Your nature engagement assignment this week is to test out some methods for locating worms. I would love for you to think of creative ideas on your own and will give you a few ideas to try as well. Think about what you have already learned about what worms need. You should try out the ideas and count how many worms you find using each method. Send me your results in the google classroom nature section. Some things to ask yourself...Did you find worms in shady areas? Sunny areas? What time of day is best to find worms? Does weather make a difference? What method helped you find the most? Did you come up with your own idea? Was it successful?

We will have to purchase worms for our vermicomposting bins because we need special worms called red wigglers. but let's see how we do this week on being worm charmers. **If you have a compost bin at home you can put any worms you find in there, if not-relocate the worms you find to your flower or garden beds to help nourish the soil there.** We are trying to find out which method works best for finding worms so get creative, get busy and get outside.



Here are some methods you might want to try:



### Sprinkler:

Turn on a sprinkler or soak the ground using a watering can or bucket when it begins to get dark. Let the water soak into the ground and then go out and look for worms. You might have to wait for your eyes to adjust to the dark before you begin to see them. If you use a flashlight remember that we learned worms are sensitive to light.



### Walnut Tea

Look for walnuts lying around on the ground. They will look like light green balls and be near a walnut tree. Place the walnuts into water. **BE CAREFULL-walnuts stain** and will stain your hands, clothes, container and even your deck if you spill it there. Let the walnuts soak until the liquid turns blackish. Pour the liquid onto soil you think worms might be in & wait for them to surface. Have a cup of water handy to rinse off the worms so the walnut tea does not harm them.



## Coverboard

You can use a piece of wood you may have at your house or even a square or rectangular piece of cardboard as a coverboard. Find an area in your yard and place the coverboard on the ground. Leave it in place-maybe put a rock on top if it is lightweight to hold it down. Come back the next day and carefully lift the coverboard. What did you find? Count the number of worms. If you feel like another spot in the yard might be better, experiment by moving it to a different location. Use the knowledge you already have about worms when considering where to place the board.



## Leaf Litter

Go to an area where there are fallen leaves. Carefully lift the leaves with your hands or a small rake or shovel and search for worms. Get ready to count!



## Rocks and Logs

You can often find worms under large rocks or decomposing logs. You can do this carefully without harming any critters or yourself. Roll the log or lift the rock **towards you** & after you investigate carefully put it back the way you found it.

## Worm grunting

This is really cool and you will need to be think about this to make your own 'worm gitter'. The idea is that vibrations sent into the ground cause the worms to surface. How can you create vibrations that reach down into the soil? People who fish & use worms as bait often buy a worm gitter but you can probably figure out your own method to produce vibrations in the soil. Scientists recently discovered that the reason the worms surface is they think moles are tunneling towards them when they hear the vibration and moles love to eat worms. So, think about how you can do it at home and look for a good area where there might be worms and give worm grunting a try.

