WHAT IS COMPOSTING? Pages 12-14





WHAT IS COMPOSTING?

Waste reduction. Composting allows you to recycle kitchen scraps instead of tossing them, which reduces food waste and helps minimize your environmental impact.

A great example of decomposition occurs on the forest floor. Although leaves fall from the trees each year, you don't see giant leaf piles in the forest. This is because decomposers such as worms, beetles, fungi, and bacteria break down the leaves.

HOW TO MAKE COMPOST FOR KIDS

- Choose a compost bin. Bins have the advantage of being neat, preserving heat and keeping animals out.
- 2. Choose your compost location. Choose a site that is sunny and well-drained.
- 3. Making great compost. Collect compost-able materials which listed above in containers.
- 4. Add Water.
- 5. Maintain Your Compost Bin.
- 6. Compost is ready.
- 7. Use your compost.
- 8. Composting for Kids My Garden Kid



HOW TO MAKE AN INDOOR WORM COMPOST

Vermicomposting With a Worm Bin



Composting helps reduce food waste and makes vermiculture. Plus, kids can observe how valuable worms are to the ecosystem by creating tunnels for water and nutrients to go deeper into the earth.

Step 1: Gather your Materials

- 2-3 buckets one with a lid
- a drill or sharp knife
- shredded paper, cardboard, dried leaves
- soi
- spray bottle with clean water
- Red Wiggler worms

Step 2: Prepare the Buckets

- The buckets should stack, rather than nest into each other. The bottom bucket will collect excess liquid. You can dilute this compost tea for gardening.
- Use a drill or knife to cut holes in the bottom of the upper bucket. The holes should be big enough for the worms to travel up and down easily and for moisture to drip.
- Also poke holes in the lid. Enough for good airflow, but not so big that the worms can escape.









Compost Care

- The most important part about composting is checking the ratio of wet and dry everyday.
 When your first bucket gets full, simply get another one, prepare it the same way with holes and loose bedding, and stack it on top. The worms will find their own way up.
- It will take around 6-8 weeks for your compost to turn into vermicompost that you can mix into your organic garden or put in your plant pots.

Step 3: Create a Bedding

 Take strips of paper (not glossy!) and line the bottom of the upper bucket. Mix shredded paper, leaves, and soil to create a few inches of loose bedding. Use a spray bottle to mist water inside. It should be moist enough for the materials to stick together but not so much that it drips. Keep the spray bottle near the compost to moisten when needed to keep the worms hydrated and happy.

Step 3: Add Worms

 Place the Red Wigglers into the bucket and put the lid on. Give them a few minutes to burrow. Now your compost is ready to use!

Step 3: Feed the Worms

• Most kitchen scraps can be fed to your worms. After settling in, they can eat about half their body weight a day! Keep an equal ratio of wet and dry so they neither drown nor get dehydrated. Dry materials can be biodegradable shredded paper and cardboard (best if they don't have ink), dry leaves, and garlic and onion peels.

Kitchen scraps you can compost:

- Raw fruits and veggies
- Cooked pasta
- Eggshells
- Mushrooms

These will harm the worms:

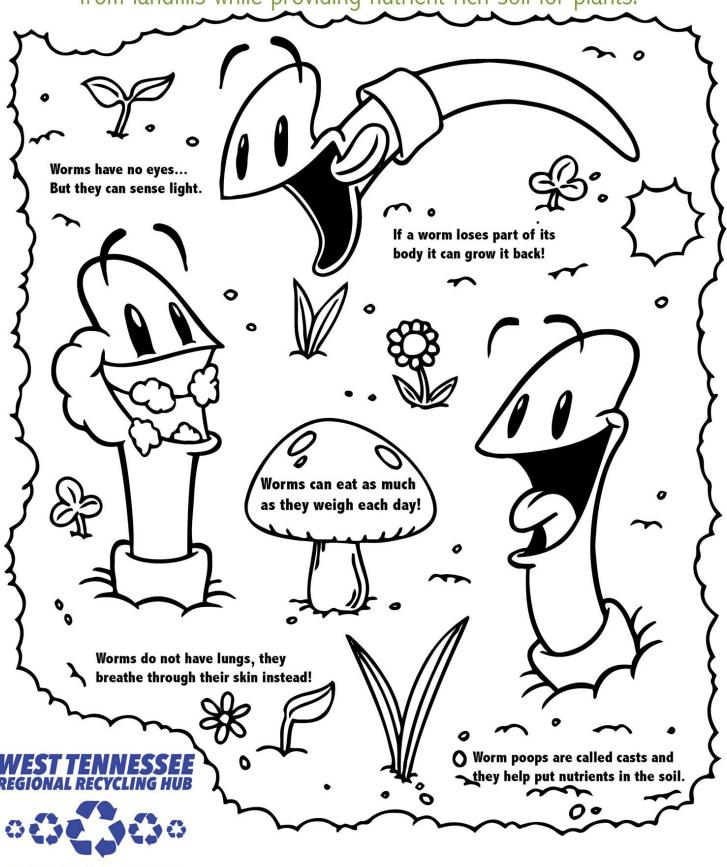
- Salty food
- Spicy food
- Meat
- Dairy
- Processed food (anything with chemicals and preservatives)

References:

https://www.epicgardening.com/composting-worms-types/

WORM COMPOSTING HELPS THE ENVIRONMENT

Fun Fact: Worm composting helps divert food waste from landfills while providing nutrient-rich soil for plants.



VOLUNTEER TO RECYCLE

WHAT IS A LANDFILL? Pages 21-22





WHAT IS A LANDFILL?



A landfill is a disposal site where waste is buried, and is one of the most common methods around the world used to dispose of and manage waste.

Modern landfills are well-engineered and managed facilities for the disposal of solid waste. Landfills are located, designed, operated and monitored to ensure compliance with federal regulations. They are also designed to protect the environment from contaminants, which may be present in the waste stream. Landfills cannot be built in environmentally-sensitive areas, and they are placed using on-site environmental monitoring systems. These monitoring systems check for any sign of groundwater contamination and for landfill gas, as well as provide additional safeguards.

As trash is laid down into the growing pile, it is compacted into a tightly packed mound. Each day a layer of soil is hauled into cover the garbage to prevent odors and rodent problems. Therefore, the landfill is mostly made up of compressed layers of trash and soil. The decomposition process produces methane, a dangerous and flammable gas. In modern landfills, the methane is collected in pipes so that it can be vented, burned, or even used as an energy source.

LANDFILL GAS

Gases are produced in landfills due to the anaerobic digestion by microbes. In a properly managed landfill, this gas is collected and used. Its uses range from simple flaring to landfill gas utilization and generation of electricity. Landfill gas monitoring alerts workers to the presence of a build-up of gases to a harmful level. In some countries, landfill gas recovery is extensive; in the United States, for example, more than 850 landfills have active landfill gas recovery systems.

Reducing waste and recycling are ways to reduce the amount of waste sent to landfills.

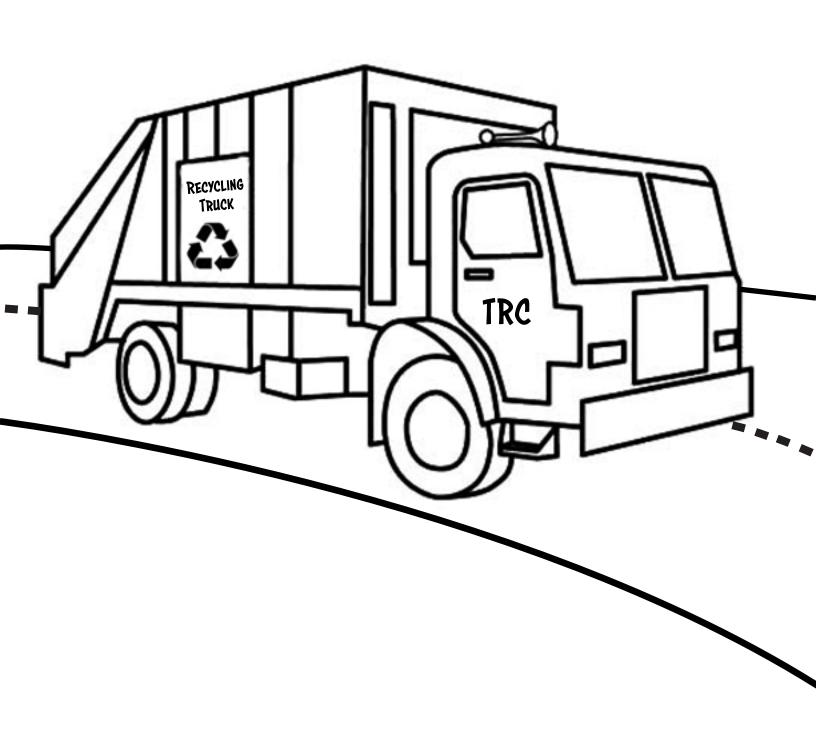
LANDFILL FACTS

- There used to be far more active landfills than there are today. In 1986, there were nearly 7,700 landfills in the United States. ...
- 2. One thing that helps divert materials from a landfill is recycling.
- 3. Reducing the amount of waste sent to landfills is important as they are running out of space around the world.
- 4. It is estimated that of all the trash sent to landfills roughly 30% is paper (recyclable), 18% is food waste (recyclable), and 16% is plastic. Most of this is recyclable and should not be ending up in landfills.
- 5. Popular visitors to some landfills are bears, raccoons, and other wildlife.

HOW LONG IT TAKES FOR TRASH TO DECOMPOSE



RECYCLING TRUCK



THANK YOU TO OUR SPONSORS

FOR HELPING SUPPORT ENVIRONMENTAL EDUCATION IN TENNESSEE

If you have any questions, please email info@tnrecycles.com or visit our website at tnrecycles.com.







HELPFUL ENVIRONMENTAL LINKS

- chestercountytn.org/recycling.html
- General 1 Keep Tennessee Beautiful (keeptnbeautiful.org)
- Join The Movement Nobody Trashes Tennessee
- https://tdec.tn.gov
- 22 Fun and Free Recycling Games for Schools (pepsicorecycling.com)
- Solving for Circularity | The Recycling Partnership
- Earth911 More Ideas, Less Waste
- Environmental Education (EE) | US EPA
- Environmental Education in Tennessee News and Events (eeintennessee.org)
- Southeast Recycling Development Council Home (serdc.org)
- Recycling Webinars | Busch Systems | Recycling and Waste
- (23) How to Do a Waste Audit in 5 Easy Steps YouTube