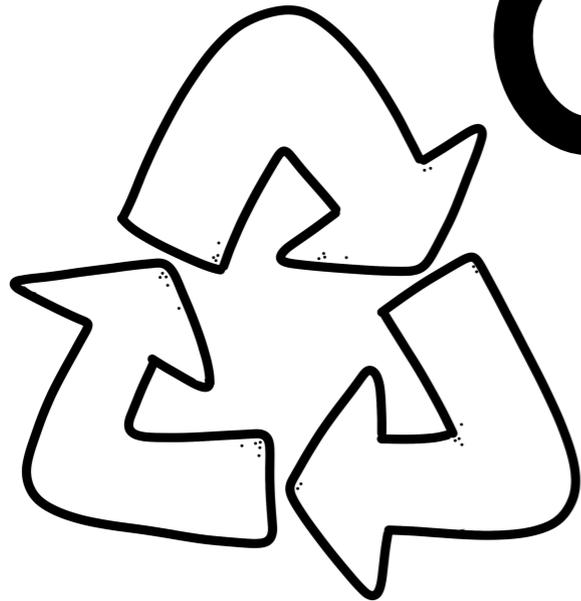
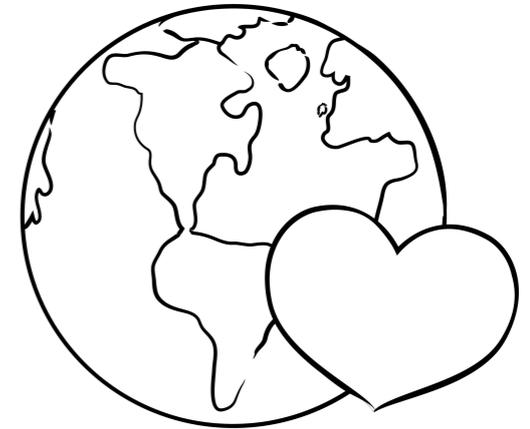


Composting

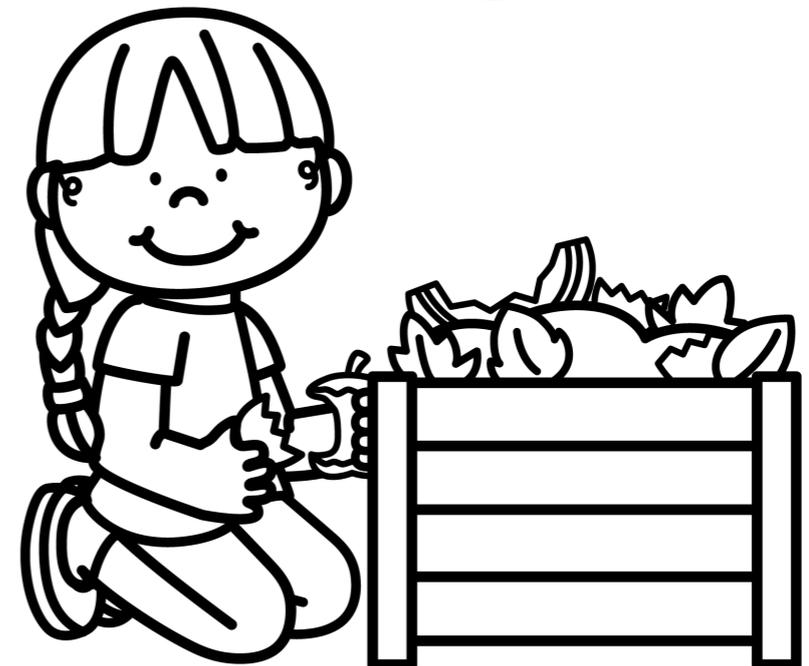
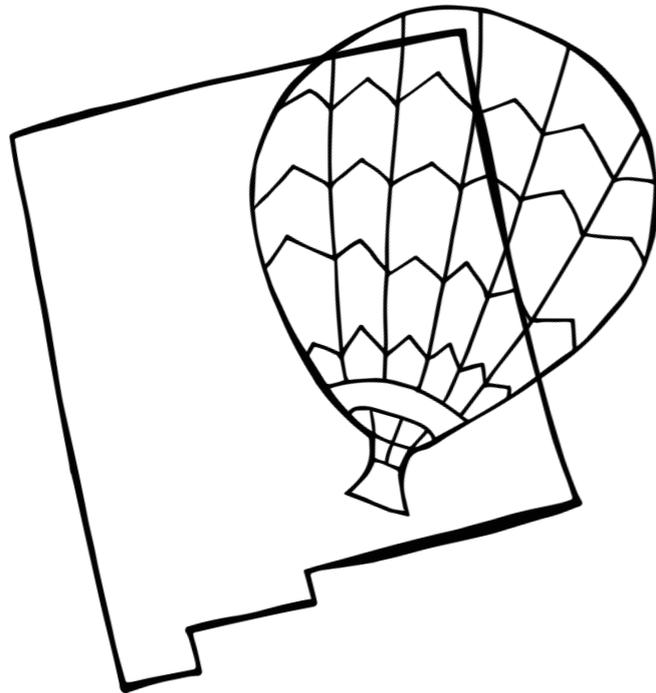


in



New Mexico

An Introduction



Developed by Olivia Gutierrez (2019 Master Composters Final Project)

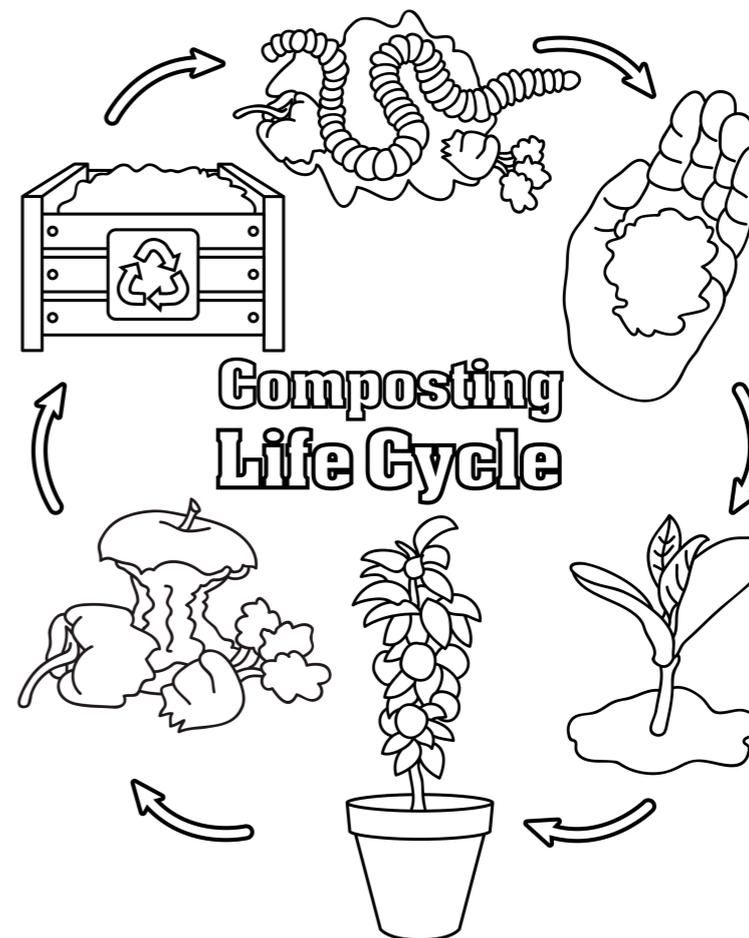
What is Composting?

Composting is a way we can recycle nutrients from the food scraps and plants we use.

When leaves fall from a tree, they go to the forest floor, where they break down into smaller and smaller pieces in a process called decomposition. Many different living things, some that we cannot even see, help break down the leaves. Insects, worms, fungi, and bacteria and other microorganisms are part of the decomposition process. The nutrients that were in the leaves become a part of the soil. New plants can grow using the energy, water, food storage, and nutritious materials from the leaves that are now in the soil.

Composting recycles nutrients in the same way. The only difference is that humans manage and organize the compost pile. This means that we are in charge of the compost pile and deciding what it needs to help it decompose and break down. For example, we can add more organic material (such as leaves, grass, fruit and vegetable scraps) or add water if we notice the pile is too dry. Over time, the organic material becomes a dark, soil-like matter called humus that is rich in nutrients and can be used to grow new plants.

By composting, we can use the nutrients in plants again instead of sending them to the landfill, where they are mixed into a big pile with plastics, metals, chemicals, and other garbage. The food scraps and yard waste in landfills produce a harmful gas called methane that goes into our air and traps the sun's heat in our atmosphere, which warms up our planet.



What is composting?

Name one reason to compost.

Draw the steps

Vocabulary Match

Directions: Draw a line from the vocabulary word to its definition.

decomposition

the finished product of the composting process

manage

a substance or ingredient that helps things grow, stay alive, or gives them energy

humus

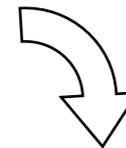
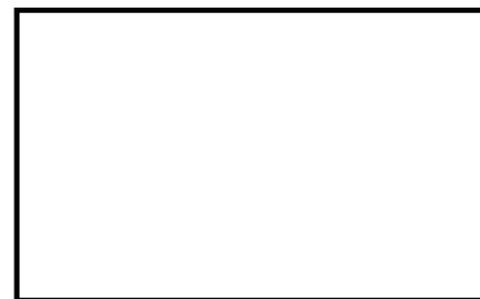
materials that are living or were once alive

organic

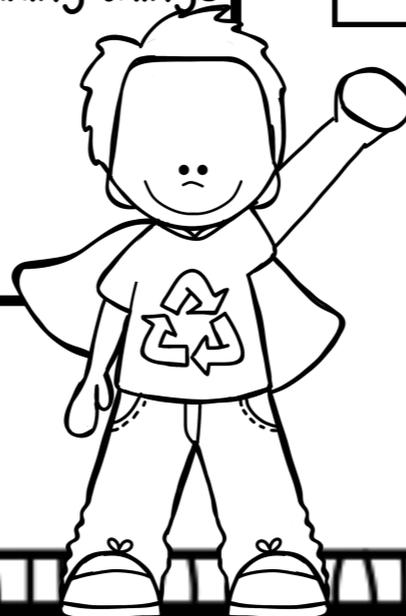
the process of breaking things into smaller pieces

nutrient

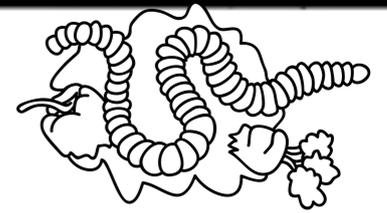
to be in charge of



Composting Life Cycle



HOW TO COMPOST



Think of food scraps or other items in your home or yard that you would usually throw into the trash after you are done with them. Now draw 10 things you can put into the compost pile instead. Make sure to include greens, browns, and bulking materials.

There are many different ways to compost. Compost can be made by burying organic matter in the ground, leaving the materials in a pile, or using purchased or homemade containers or bins. Some people even have special containers for worms that can be kept inside their houses.

Compost piles need air, water, brown materials, green materials, and bulking materials. When possible, organic materials should be in small pieces so that decomposition occurs faster.

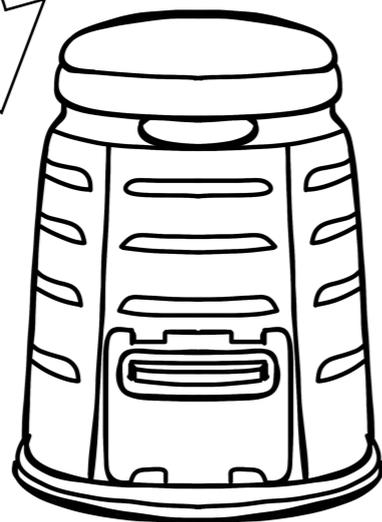
Brown materials have carbon in them. Paper towels, dried leaves and plants, nut shells, shredded paper, dryer lint, wood, cardboard, fabrics made of cotton, linen, and wool are brown materials that can be added to compost piles.

Green materials have nitrogen in them. Green leaves, food scraps (banana peels, cucumber ends, egg shells, etc.), coffee grounds, and hair/feathers/fur are green materials.

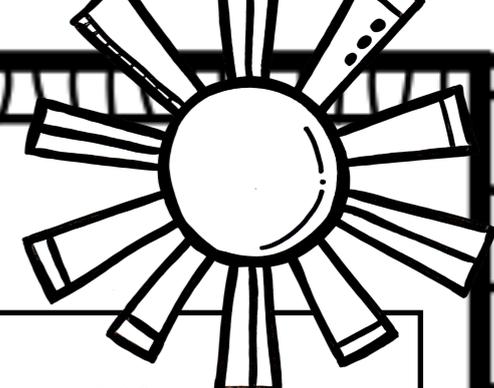
Bulking materials give space for **air** to move through the compost pile. Without air, compost piles can start to smell like a full trash bag. After adding a layer of greens and browns, add a layer of bulking materials to prevent the heavy materials on the top with lots of water from crushing the materials at the bottom, so air can still move through the pile. Corn cobs, sticks, pine cones, and twigs are examples of bulking materials.

Water also should be added to the pile. When squeezing the pile (with gloves), it should feel like a slightly wet washcloth. No more than a few drops of water should come out when you squeeze.

Styrofoam, glass, plastic, and chemicals (such as weed killers, pesticides, etc.) should not be added to compost piles. Pet manures, meat, dairy, and oils should not be added to most composts.



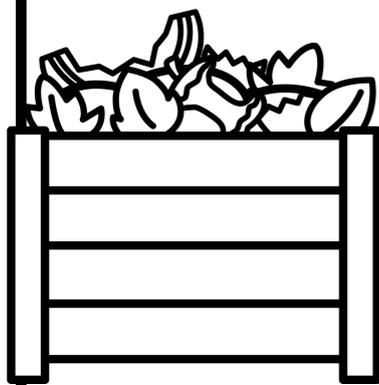
In the desert



New Mexico has a dry, desert climate that affects how we manage compost piles.

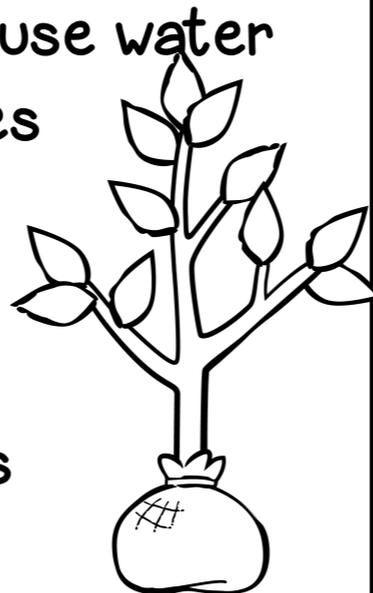


Hot temperatures, wind, and a low amount of moisture in the air mean that organic materials dry out very quickly when the water in them evaporates. More water needs to be added to compost piles in New Mexico compared to other climates.



However, finished humus can make our dry and sandy soils better.

Compost helps plants to use water more efficiently, and gives growing plants the nutrients they need to thrive.



This benefits all the plants and animals in our ecosystem!

Below are some common difficulties people encounter when composting in the desert. Think of possible solutions to these problems.

1) The compost pile gets too hot in the summer because of direct sun.

Solution: _____

2) The dry air and heat from the sun dries out the top of an uncovered compost pile very quickly.

Solution: _____

3) Adding dry materials (cardboard, paper, leaves) makes the compost pile too dry.

Solution: _____

4) There are too many holes in a container that Composter bought from a store.

Why is this a problem?

Solution: _____

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