Name: _____ Date: _____

Build a Compost Pile in Four Steps

Circle group

Every kitchen and yard makes scraps that can feed a garden. A compost pile turns leaves, peels, and grass clippings into dark, crumbly soil. You can build one in four steps.

Step one: pick a spot. A corner with some shade and good drainage is best. A bin or a pen made of boards keeps the pile neat.

Step two: gather two kinds of stuff. Greens are wet and have a lot of nitrogen. Fruit and vegetable scraps, coffee grounds, and fresh grass are greens. Browns are dry and have a lot of carbon. Dry leaves, shredded paper, and straw are browns. A good pile has more brown than green. Do not add meat, bones, dairy, or oily food. They bring pests and smell bad.

Step three: layer the stuff and add water. The pile should feel like a wrung-out sponge. If it is too dry, the tiny living things that do the work slow down. If it is too wet, it turns slimy and smelly.

Step four: turn the pile with a fork every week or two to let in air. Bacteria, fungi, worms, and other small creatures break down the scraps and give off heat. So the middle of the pile feels warm. After a few months, you have compost. It is dark and smells like earth. Spread it around plants to feed them and help the soil hold water.

If your pile is not working, a few easy fixes help. A pile that smells sharp, like ammonia, often has too many greens. Mix in more browns. A pile that stays cool and dry may need water or more green scraps. Be patient, too. Small pieces break down faster than big ones. So chop your scraps into smaller bits to speed up the work.

Questions

1. What are some browns for a compost pile?

_____

_____

2. What foods should stay out of the pile, and why?

_____

_____

3. How wet should the pile be?

_____

_____

4. Why should you turn the pile every week or two?

_____

_____

5. Why might the middle of an active pile feel warm?

_____

_____

6. Why would a very dry pile break down slowly?

_____

_____

Words to know

compost: rotted plant material that makes soil richer
drainage: the way water flows away so the ground does not stay soggy
nitrogen: a nutrient found in many fresh green scraps
carbon: a basic material found in dry plant matter such as leaves
layer: to place one thing on top of another

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Build a Compost Pile in Four Steps

Triangle group

Every kitchen and yard produces scraps that can become food for a garden. A compost pile turns leaves, vegetable peels, and grass clippings into dark, crumbly soil, and building one takes only a few steps.

First, choose a spot, because a corner with some shade and good drainage works well, and a bin or a simple pen of boards keeps the pile neat.

Second, gather two kinds of material. Greens are wet and rich in nitrogen, such as fruit and vegetable scraps, coffee grounds, and fresh grass clippings. Browns are dry and rich in carbon, such as fallen leaves, shredded paper, and straw. A good pile has more brown than green. Leave out meat, bones, dairy, and oily food, which attract pests and smell bad.

Third, layer the materials and water the pile until it feels like a wrung-out sponge. If it is too dry, the tiny living things that do the work will slow down, but if it is too wet, the pile can turn slimy and smelly.

Fourth, turn the pile with a fork every week or two to let in air. Bacteria, fungi, worms, and other small creatures break down the material and give off heat, so the center of an active pile feels warm, and after a few months you will have compost, a dark material with an earthy smell that you can spread around plants to feed them and help the soil hold water.

If your pile does not seem to be working, a few simple fixes usually help. A pile that smells sharp, like ammonia, often has too many greens, so mix in more browns. A pile that stays cool and dry may need water or more green scraps. Patience matters, too, because small pieces break down faster than large ones, so chopping scraps into smaller bits speeds up the work.

Questions

1. What are some examples of browns for a compost pile?

_____

_____

2. Which foods should be left out of a compost pile, and why?

_____

_____

3. How wet should the pile be?

_____

_____

4. Why should the pile be turned every week or two?

_____

_____

5. Why might the center of an active pile feel warm?

_____

_____

6. Why would a very dry pile break down slowly?

_____

_____

Words to know

compost: rotted plant material that makes soil richer
drainage: the way water flows away so the ground does not stay soggy
nitrogen: a nutrient found in many fresh green scraps
carbon: a basic material found in dry plant matter such as leaves
layer: to place one thing on top of another

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Build a Compost Pile in Four Steps

Square group

Every kitchen and yard produces scraps that can be transformed into food for a garden. A compost pile converts leaves, vegetable peels, and grass clippings into dark, crumbly soil, and building one requires only a handful of straightforward steps.

First, choose a suitable location, because a corner with some shade and good drainage works well, and a bin or a simple pen of boards helps keep the pile tidy.

Second, gather two kinds of material. Greens are wet and rich in nitrogen, and they include fruit and vegetable scraps, coffee grounds, and fresh grass clippings. Browns are dry and rich in carbon, and they include fallen leaves, shredded paper, and straw. A healthy pile contains more brown material than green. Leave out meat, bones, dairy, and oily food, all of which attract pests and produce unpleasant smells.

Third, layer the materials and moisten the pile until it feels like a wrung-out sponge. If the pile is too dry, the tiny living things that do the work will slow down, but if it is too wet, the pile can turn slimy and foul-smelling.

Fourth, turn the pile with a fork every week or two so that fresh air can reach the center. Bacteria, fungi, worms, and other small creatures break down the material and give off heat, which is why the middle of an active pile feels warm, and after a few months you will have finished compost, a dark material with a pleasant earthy smell that you can spread around your plants to nourish them and to help the soil retain water.

If your pile does not seem to be working, a few simple remedies usually help. A pile that smells sharp, like ammonia, often contains too many greens, so mix in more browns. A pile that stays cool and dry may need water or additional green scraps. Patience matters as well, because small pieces break down faster than large ones, so chopping scraps into smaller bits speeds up the work considerably.

Questions

1. What are some examples of browns for a compost pile?

_____

_____

2. Which foods should be left out of a compost pile, and why?

_____

_____

3. How moist should the pile be?

_____

_____

4. Why should the pile be turned every week or two?

_____

_____

5. Why might the middle of an active pile feel warm?

_____

_____

6. Why would a very dry pile decompose slowly?

_____

_____

Words to know

compost: rotted plant material that makes soil richer
drainage: the way water flows away so the ground does not stay soggy
nitrogen: a nutrient found in many fresh green scraps
carbon: a basic material found in dry plant matter such as leaves
layer: to place one thing on top of another

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Build a Compost Pile in Four Steps

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Build a Compost Pile in Four Steps

Easier · 297 words · Flesch-Kincaid grade 2.5

1. Dry leaves, shredded paper, and straw.
2. Meat, bones, dairy, and oily food, because they bring pests and smell bad.
3. About as wet as a wrung-out sponge.
4. Turning lets in air for the creatures that break down the scraps.
5. The bacteria, fungi, worms, and other creatures give off heat as they work.
6. The tiny living things that do the work slow down when it is too dry.

Triangle: Build a Compost Pile in Four Steps

This passage · 308 words · Flesch-Kincaid grade 7.5

1. Fallen leaves, shredded paper, and straw.
2. Meat, bones, dairy, and oily food, because they attract pests and smell bad.
3. About as wet as a wrung-out sponge.
4. Turning lets in air for the living things that break down the material.
5. Bacteria, fungi, worms, and other creatures give off heat as they break down the material.
6. The tiny living things that do the work slow down when it is too dry.

Square: Build a Compost Pile in Four Steps

Harder · 334 words · Flesch-Kincaid grade 9.1

1. Fallen leaves, shredded paper, and straw.
2. Meat, bones, dairy, and oily food, because they attract pests and produce unpleasant smells.
3. About as moist as a wrung-out sponge.
4. Turning allows fresh air to reach the center for the creatures that break down the material.
5. Bacteria, fungi, worms, and other creatures give off heat as they break down the material.
6. The tiny living things that do the work slow down when the pile is too dry.