Name: _____ Date: _____

Worms in the Compost Pile

Circle group

Banana peels, apple cores, and dead leaves may look like trash. But a gardener sees something valuable. Pile the scraps together and leave them alone. Slowly they turn into compost. Compost is a dark, crumbly material that looks like rich soil. It helps plants grow. It also keeps a lot of waste out of the garbage.

Many small living things work together to make compost. Tiny organisms called bacteria and fungi start to break down the scraps. Then bigger creatures come, such as beetles, sowbugs, and earthworms. Earthworms are very helpful. They eat bits of rotting plants. They leave behind droppings called castings. Castings are full of nutrients that plants need.

A worm moves by stretching and squeezing its long body. As it wiggles through the pile, it makes tiny tunnels. The tunnels let air and water reach deeper layers. Air is important, because the helpful bacteria need it to work fast.

To keep a pile healthy, a gardener mixes green scraps with brown material. Green scraps are things like fruit peels and grass clippings. Brown material is dry leaves and shredded paper. The pile should feel as damp as a wrung-out sponge. After a few months, the compost is ready. A gardener spreads it on a garden bed. It feeds the soil, and the soil feeds the next crop of vegetables and flowers.

Questions

1. What is compost?

_____

_____

2. Which tiny organisms start to break down the scraps?

_____

_____

3. What are worm castings?

_____

_____

4. Why are the tunnels that worms make helpful?

_____

_____

5. Why might a gardener add dry leaves to a pile of fruit peels?

_____

_____

Words to know

compost: rotted plant scraps that make soil richer
organisms: living things
castings: the droppings that earthworms leave behind
nutrients: substances that living things need to grow
tunnels: long passages under the ground

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: _____

Worms in the Compost Pile

Triangle group

Banana peels, apple cores, and dead leaves might look like trash. A gardener sees something valuable. When these scraps are piled together and left alone, they slowly turn into compost. Compost is a dark, crumbly material that looks like rich soil. It helps plants grow, and it keeps a great deal of waste out of the garbage.

Compost is made by many small living things working together. Tiny organisms called bacteria and fungi start breaking down the scraps. Then bigger creatures arrive, such as beetles, sowbugs, and earthworms. Earthworms are especially helpful. They eat bits of rotting plants. They leave behind droppings called castings, which are full of nutrients that plants need.

A worm moves by stretching and squeezing its long body, and as it wiggles through the pile, it makes tiny tunnels. These tunnels let air and water reach deeper layers. Air is important, because the helpful bacteria need it to do their work quickly.

To keep a compost pile healthy, a gardener mixes green scraps with brown material. Green scraps are things like fruit peels and grass clippings. Brown material is dry leaves and shredded paper. The pile should feel as damp as a wrung-out sponge. After a few months, the compost is ready. Spread on a garden bed, it feeds the soil, and the soil feeds the next crop of vegetables and flowers.

Questions

1. What is compost?

_____

_____

2. Which tiny organisms start breaking down the scraps?

_____

_____

3. What are worm castings?

_____

_____

4. Why are the tunnels that worms make helpful?

_____

_____

5. Why might a gardener add dry leaves to a pile of fruit peels?

_____

_____

Words to know

compost: rotted plant scraps that make soil richer
organisms: living things
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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: _____

Worms in the Compost Pile

Square group

Banana peels, apple cores, and fallen leaves might resemble garbage, but a gardener recognizes something valuable in them. When these scraps are heaped together and left undisturbed, they gradually decompose into compost, a dark, crumbly substance that resembles rich soil. Compost nourishes plants, and it also diverts an enormous amount of waste from the garbage.

Compost is produced by many small living things cooperating with one another. Microscopic organisms called bacteria and fungi begin breaking down the scraps. Larger creatures then arrive, including beetles, sowbugs, and earthworms. Earthworms are particularly helpful, because they consume bits of rotting plants and leave behind droppings called castings, which are packed with nutrients that plants need.

A worm moves by stretching and squeezing its long body, and as it wiggles through the pile, it creates tiny tunnels. These tunnels allow air and water to reach the deeper layers. Air is essential, since the helpful bacteria require it in order to work quickly.

To keep a compost pile healthy, a gardener combines green scraps, such as fruit peels and grass clippings, with brown material, such as dry leaves and shredded paper. The pile should feel as damp as a wrung-out sponge. After a few months, the compost is ready. When it is spread over a garden bed, it enriches the soil, and the soil in turn feeds the next crop of vegetables and flowers.

Questions

1. What is compost?

_____

_____

2. Which microscopic organisms begin breaking down the scraps?

_____

_____

3. What are worm castings?

_____

_____

4. Why are the tunnels that worms create helpful?

_____

_____

5. Why might a gardener combine dry leaves with a pile of fruit peels?

_____

_____

Words to know

compost: rotted plant scraps that make soil richer
organisms: living things
castings: the droppings that earthworms leave behind
nutrients: substances that living things need to grow
tunnels: long passages under the ground

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: Worms in the Compost Pile

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

Circle: Worms in the Compost Pile

Easier · 225 words · Flesch-Kincaid grade 4.5

1. A dark, crumbly material made from rotted scraps that looks like rich soil.
2. Bacteria and fungi.
3. The droppings left by earthworms, full of nutrients plants need.
4. They let air and water reach deeper layers, which the bacteria need.
5. A good pile needs a mix of green and brown material.

Triangle: Worms in the Compost Pile

This passage · 227 words · Flesch-Kincaid grade 5.6

1. A dark, crumbly material made from rotted scraps that looks like rich soil.
2. Bacteria and fungi.
3. The droppings left by earthworms, full of nutrients plants need.
4. They let air and water reach deeper layers, which the helpful bacteria need.
5. A good pile needs a mix of green and brown material.

Square: Worms in the Compost Pile

Harder · 230 words · Flesch-Kincaid grade 9.2

1. A dark, crumbly substance made from decomposed scraps that resembles rich soil.
2. Bacteria and fungi.
3. The droppings left by earthworms, packed with nutrients that plants need.
4. They allow air and water to reach deeper layers, and the bacteria require air.
5. A healthy pile needs a balance of green and brown material.