

# From Scraps to Soil

Follow the five stages nature uses to turn waste into nutrients

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Each card below shows one stage in the process, in mixed-up order. Read the clue for each numbered step, find the card that matches, and write its **letter** in the box. Then write the stage's name using the word bank.

|          |                                                                                   |          |                                                                                   |          |                                                                                   |          |                                                                                     |          |                                                                                     |
|----------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|
| <b>A</b> |  | <b>B</b> |  | <b>C</b> |  | <b>D</b> |  | <b>E</b> |  |
|----------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|

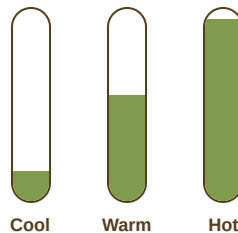
## What happens, in order

- Food scraps and dry browns just got added together — it looks like a jumbled mix of yesterday's leftovers and dead leaves. ☐ \_\_\_\_\_
- Billions of bacteria wake up and get to work fast. So much energy is released that the inside can get as hot as a cup of tea. ☐ \_\_\_\_\_
- The temperature starts to drop. Turning the mix brings in fresh air so decomposers can keep breathing and working. ☐ \_\_\_\_\_
- Things slow down. Worms, beetles, and other bigger decomposers move in to finish breaking down what's left. ☐ \_\_\_\_\_
- It's dark, crumbly, and smells like a forest floor after rain — rich in nutrients and ready to feed new plants. ☐ \_\_\_\_\_

Word bank: Fresh Start · Heating Up · Cooling & Turning · Curing · Finished Compost

## The heat curve

Compost doesn't just sit there — it warms up, cools down, and settles as decomposers do their work. Using the key below, shade in each thermometer to show whether that stage runs cool, warm, or hot.



|                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |
| Stage 1                                                                             | Stage 2                                                                             | Stage 3                                                                             | Stage 4                                                                               | Stage 5                                                                               |

**DID YOU KNOW?** A working compost system can heat up hotter than a warm bath — all from the energy released by billions of microbes eating at once. That heat is even strong enough to kill weed seeds.