

# Nature's Recyclers Unit

## Teacher Masters:

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Dear Families,

Your child's class is starting a science unit about nature's recyclers.

Through a variety of hands-on investigations, the children will discover why the earth isn't buried in nature's waste and remains. In particular, they will focus on organisms that carry out the process of decomposition and recycle nutrients in an ecosystem.

During the Nature's Recyclers Unit, the children will:

- Discuss why the world isn't covered in nature's waste and remains.
- Examine organic remains and ponder where they came from and what will happen to them.
- Explore the sequence of decomposition in a variety of organisms.
- Study the functional structures and life stages of beetles, earthworms, and fungi.
- Examine and investigate earthworms, mushrooms, and mold.
- Look for evidence of decomposition in nature.
- Investigate how nutrient-rich earthworm castings (remains of digested food excreted by worms) affect the growth of plants
- Model how nutrients cycle through an ecosystem.

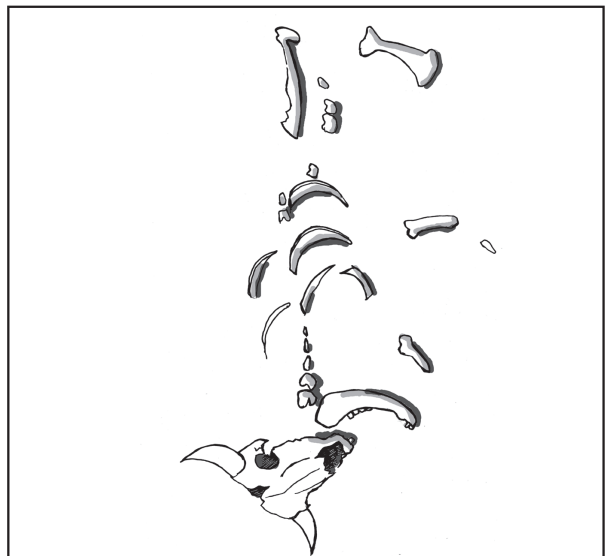
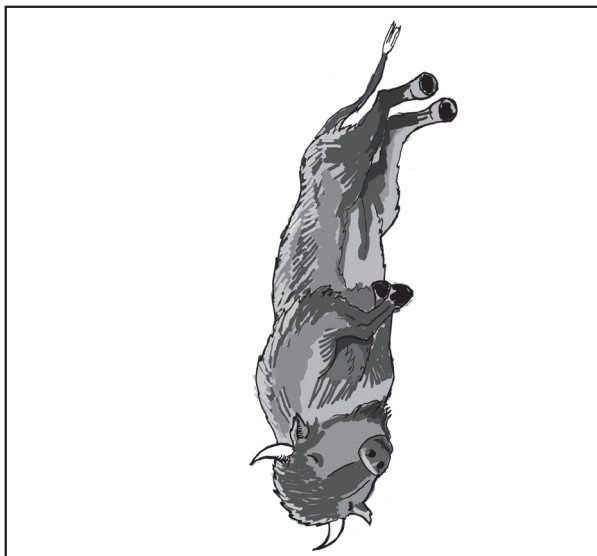
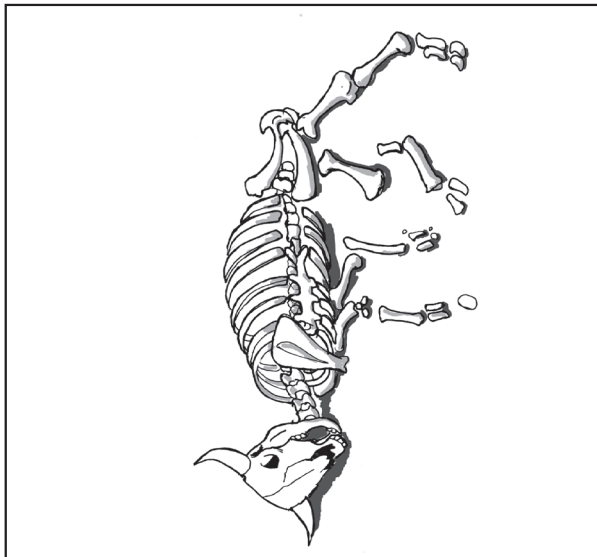
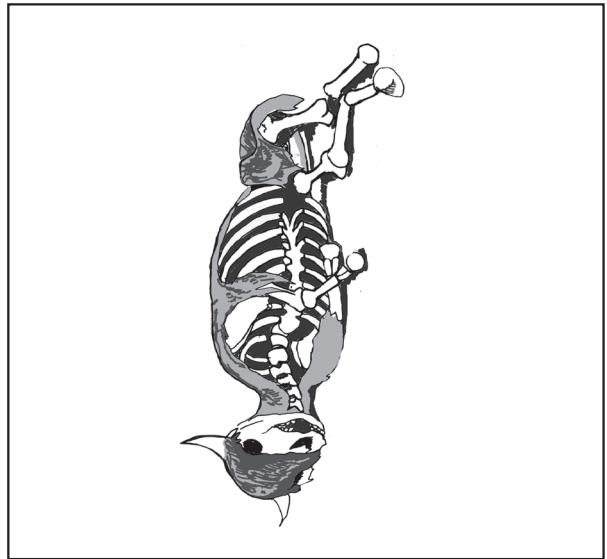
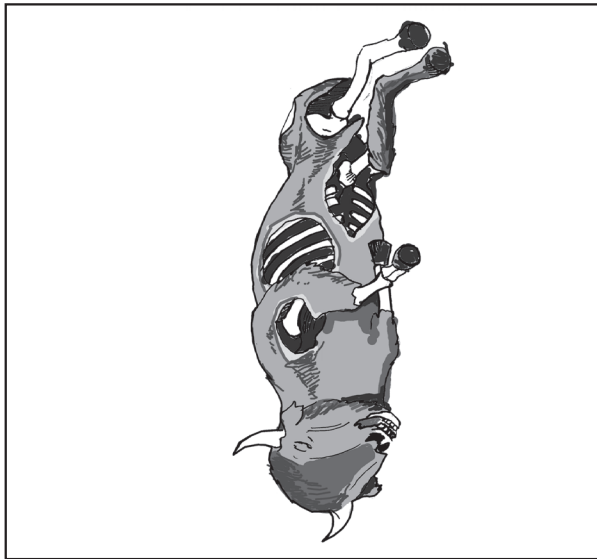
In addition to the work your child will do in class, you and your child can explore this rich topic together at home in the following ways:

- Read **science books** about nature's recyclers or decomposers together that your child checks out from the class Science Center or the local library.
- Peruse the **student reference book**, which provides readings, pictures, and other resources designed to enhance what your child learns in class.
- Visit the Science Companion web site at **www.ScienceCompanion.com/Links** to find a list and descriptions of recommended web sites about nature's recyclers
- Complete **Family Links** the teacher sends home from time to time.

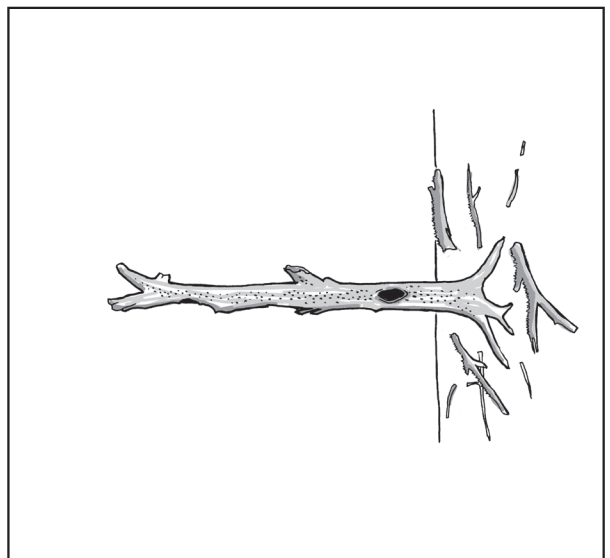
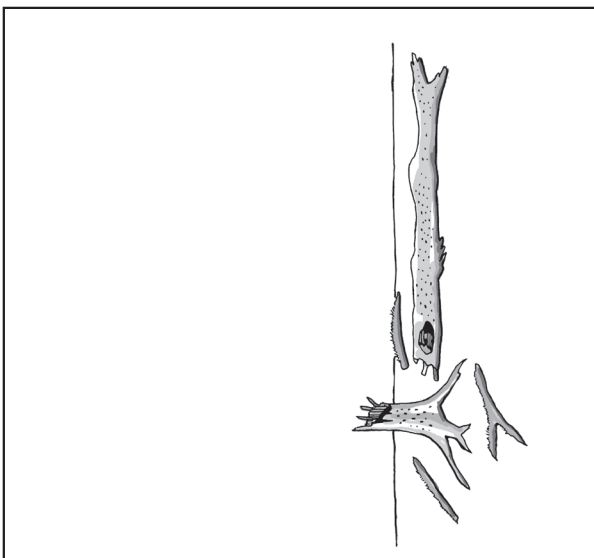
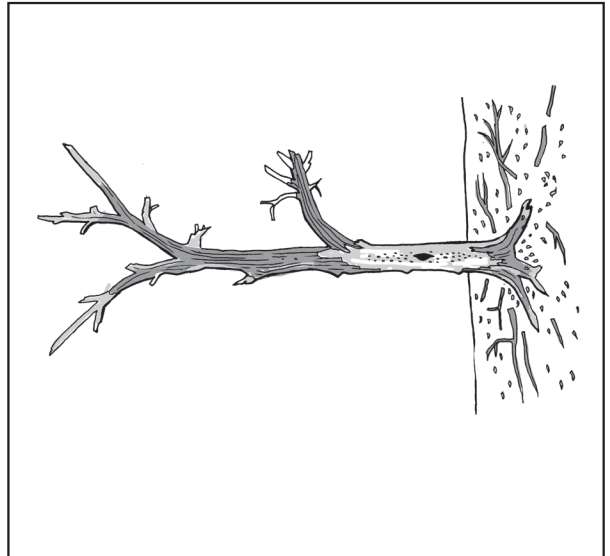
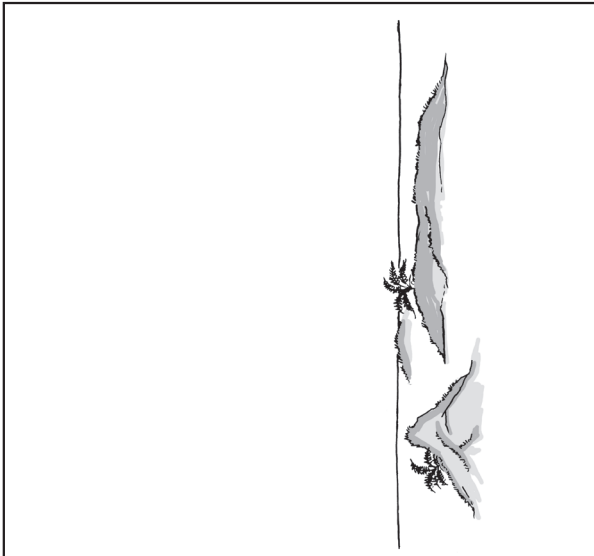
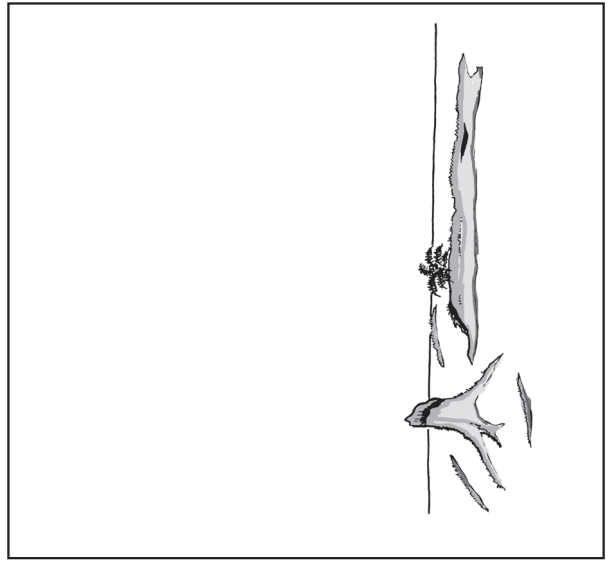
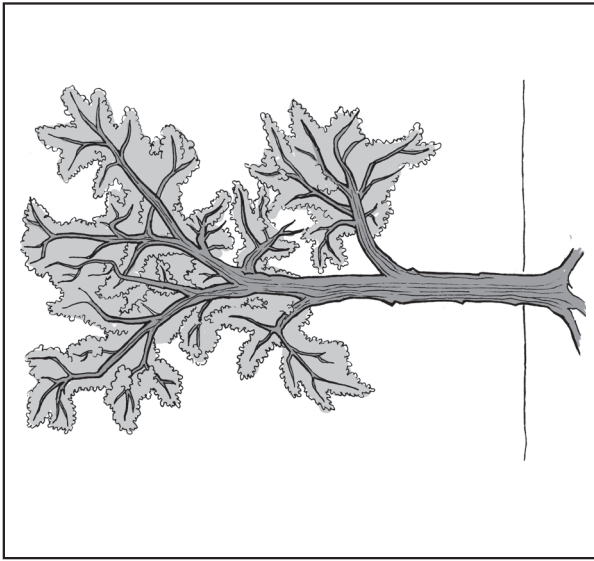
The Nature's Recyclers Unit will be fun. We hope your child will bring their discoveries and enthusiasm home, inviting you to learn alongside them—asking questions, discussing their work, and sharing their adventures in science.

Sincerely,

# Bison Decomposition



# Tree Decomposition



# Setting Up the Worm Bin

To assemble a worm bin you will need the following:

*Teacher Note: Make sure you order worms as soon as possible, using the voucher in the ExploraGear. Consider having the students help you set up the worm bin as described in session 1 of Lesson 4.*

## Materials:

Item	Quantity	Notes
<b>ExploraGear</b>		
Extra lid for drip tray	1	To place under the worm bin to collect moisture. Flip the lid over before you set the bin on it.
Plastic bin with lid	1	To hold the worms.
Composting worms	as per voucher	To put in the bins. If you don't have your worms, you'll need to order them using the voucher provided in the ExploraGear.
<b>Classroom Supplies</b>		
Bowl or other container	1	To hold water for soaking newspaper.
Brown paper bags, grocery size	2	To provide a dark environment for the worm bin
Eggshells, crushed	2	To put in the worm bin.
Food scraps	500 ml (2 cups)	To put in the worm bin. Coffee grounds, shredded or chopped vegetables, and pieces of fruit work well. Do not use meat or dairy products.
Newspaper	Several sheets	To make worm bedding.
Scissors (optional)	1 pair	To cut newspaper into strips.
Soil	250 ml (1 cup)	To mix with newspaper strips for bedding.
Tape	1 roll	To tape together paper bags for bin cover.
Water	500 ml (2 cups)	To moisten newspaper strips. More or less water may be added.

## Directions:

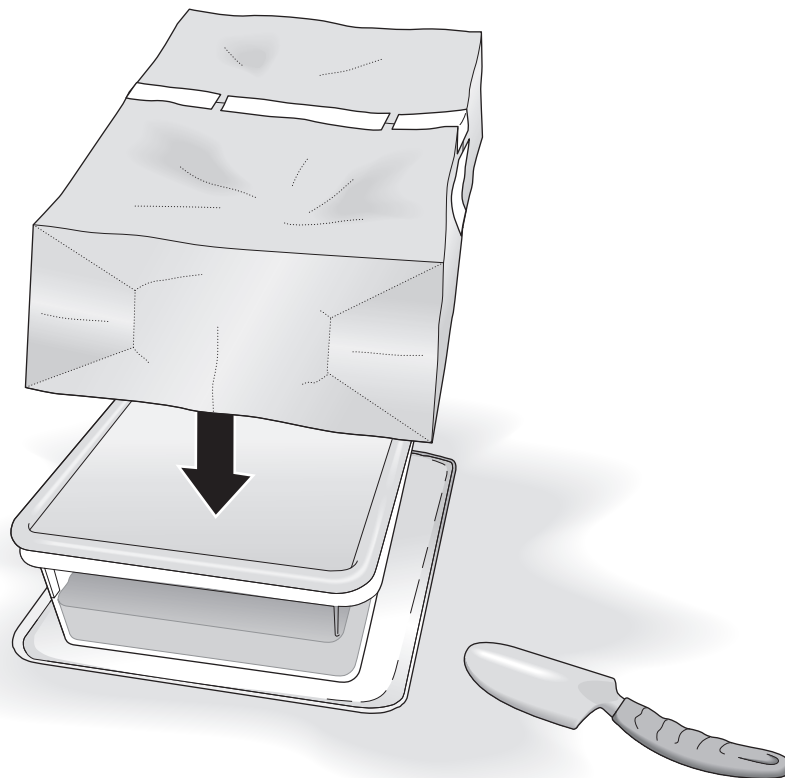
Once you get your composting worms, follow these directions to set up your worm bin:

1. Decide where you will store your worm bin. Don't put it where there are major fluctuations in temperature. If possible, put it near or in the Science Center as a way of increasing observation time and sharing maintenance details. If you choose an outdoor site, make sure that it is inaccessible to outside critters.

# Setting Up the Worm Bin

## Directions (continued):

2. Make worm bedding by cutting or tearing newspaper into approximately 1 inch (2.5 cm) strips. Moisten the strips of newspaper with water. Squeeze out any excess water and pull apart the dampened strips. The newspaper should be damp like a wrung-out sponge but not soggy.
3. Loosely fill the bin with the dampened newspaper strips. Adjust the amount of newspaper, if necessary.
4. Add 250 ml of soil to the bin and mix it thoroughly with the newspaper.
5. Pull back the bedding in one corner and bury 500 ml of chopped-up food scraps. Cover the scraps with shredded newspaper and soil mix. Coffee grounds, vegetables, and fruit are the recommended food for worms. Avoid bones, dairy products, meat, and oils since they can cause odors as they decompose.
6. Sprinkle crushed eggshells on top of the bedding. The eggshells will keep the bin from becoming too acidic.
7. Add the composting worms to the bin. Cover the bedding with a dampened section of newspaper folded in half.



# Setting Up the Worm Bin

## **Directions (continued):**

8. Flip over the extra lid without the air holes, and put the bin on it for a drip tray. Put the other lid securely on the bin.
9. Cut one side off of two paper grocery bags. Tape them together to make a bin cover. Place the cover over the bin to keep the bin dark.

*Teacher Note: For more information about worm bins, see the "Science Library and Web Links" section on pages 49-50.*

# Maintaining the Worm Bin

In this unit, an important part of understanding environmental stewardship is accomplished by maintaining the worm bin. Consider giving most of the responsibility for maintenance to your students. This could be done as a routine, rotating classroom job for individuals or teams.

If necessary, review the Teacher Master “Setting Up the Worm Bin” for specific information on the initial setup of the worm bin. For future purposes, see the Teacher Masters “Harvesting Worm Castings” and “Disassembling the Worm Bin.”

When composting worms are living comfortably in the worm bin, check on them every three to four days. Use the following guidelines while checking and maintaining the worm bin.

## Feeding the worms

Dig gently through the bedding to see how much food was eaten.

- If the amount of food seems to be significantly depleted, add more food to another corner of the worm bin.
- If there seems to be enough food still in the bin, check again in a couple of days, before adding more food.
- If you want faster consumption, cut the food into smaller pieces.

## Monitoring moisture content of the bin

Feel around the bin and decide if the bedding is too dry, too wet, or just right.

- If the bedding feels too dry, moisten it with a little water. Mix lightly until the bedding is slightly damp.
- If the bedding feels too wet, add more dry newspaper strips. Loosely mix in the newspaper and check again later when the newspaper absorbs some of the moisture.
- If condensation frequently covers the lid of the bin and makes the bedding too damp, try leaving the lid off for a day or two to let the excess moisture evaporate.



# Maintaining the Worm Bin

## Aerating the worm bin

About once a week, turn over the bedding in the bin. This prevents the material from compacting. Students can simply use their hands to lightly scoop up bedding and dump it back into the bin. Discourage them from picking up the bin, shaking it, or flipping it over!

## Common Questions and Answers About the Worm Bin

Q: What if the worm bin is moldy?

A: Mold on the worm bin or on the food scraps may mean that there's too much food for the worms to eat before it gets moldy. If you don't put any more food in the bin for a few days, the worms will eventually eat the moldy items. The mold will not hurt the worms. Consider removing the moldy items and adding some dry newspaper to absorb moisture.

Q: Can I use a garden fork or trowel to dig through the worm bin?

A: Yes, if you're careful and unhurried. Move the tool slowly and gently through the bin material so the worms have time to move out of the way. If students use their hands, however, it increases their comfort level around earthworms and enhances their sensory knowledge. It also makes it less likely that the worms will be damaged. In using either method, you should enforce the idea of careful stewardship.

Q: Why are the worms trying to leave the bin?

A: If your worms are escaping, it may be because the mixture in the bin is too acidic. Try adding some more crushed eggshells to neutralize some of the acidity. You might also cut back on the amount of citrus and coffee grounds added.

# Maintaining the Worm Bin

## Common Questions and Answers About the Worm Bin (continued):

Q: Ick, the worm bin has flies. What can I do?

A: While fruit flies can be a bit annoying, they are harmless. If the temperature of the place you're storing the worm bin is warm, this might be encouraging the fruit fly production. You can try moving the bin outside during the day or putting the bin in a cooler setting. When the material that is most conducive to the flies is eaten, they become less abundant.

You can try setting up a simple fruit fly trap, consisting of a plastic bag near the worm bin with a piece of fruit in it. The flies go in the bag, but don't necessarily find it easy to get out. Dispose of the entire bag at the end of the day.

Also, you can try freezing the food and then thawing it before you put it in the worm bin. Freezing should kill the fruit fly eggs.

Q: How do I know if the worms are getting too much or too little food or if they like the food I'm giving them?

A: This is a good question for your students. Encourage students to experiment and remind them that decomposition takes time. Have them take notes and discuss what they think is working and not working.

Q: Can I use plant based material that humans don't eat for worm food?

A: Yes, you can. Dry leaves, straw, flowers, and a number of other things will work for worm food. Encourage students to speculate about these items and let them decide if the worms should eat them.

Q: Will the ink on the newspaper hurt the worms?

A: Most newspaper ink will not hurt the worms; however, you might check with the publisher to see if they use soy-based inks. Try to avoid glossy inserts or magazine pages.

# Maintaining the Worm Bin

## Common Questions and Answers About the Worm Bin (continued):

Q: What should I do with the discolored water in the drip pan?

A: The water collected in the drip pan is “compost tea” and it’s very good for plants. If you’d like, give it to some lucky plant. Otherwise, you can pour it out.

Q: The worm bin is getting really full of composted material. What should I do?

A: See the Teacher Masters “Harvesting Worm Castings” or “Disassembling the Worm Bin” for specific instructions on what to do next.

Q: How can I find out more about earthworms, composting, and worm bins?

A: For more information, visit **[www.sciencecompanion.com/links](http://www.sciencecompanion.com/links)**

# Harvesting Worm Castings

If you keep the worm bin over time, you will reach a point where you can collect the worm castings. These can be used to help plants grow. You can use the castings in combination with potting soil or put it directly on planting beds as fertilizer.

Harvest the worm castings when the bin is quite full and the majority of newspaper and food waste is gone.

*Teacher Note: If you don't need the castings or are uncomfortable harvesting them, consider contacting parents or interested gardeners who may be able to offer assistance.*

To harvest castings from your classroom worm bin, you will need the following:

## Materials:

Item	Quantity	Notes
<b>ExploraGear</b>		
Drip pan	1	To place under the worm bin to collect moisture.
Worm bin	1	To hold the red worms.
Vinyl gloves (optional)	1 per person	To handle the worms and castings.
<b>Classroom Supplies</b>		
Bucket or container	1	To collect the castings.
Plastic sheet or tarp, large size	1	To mound the worm bin material.
Screen or sieve (optional)	1	To sift the castings.

*Teacher Note: If your students are interested in harvesting the casting, remind them to wash their hands before and after handling the worms and the worm bin materials. If you'd like, you can send home the castings with students. Provide them with information on how to use the castings.*

## Directions:

1. Find a well-lit, warm, preferable sunny spot that won't be disturbed for a few hours. Spread out a large tarp or plastic sheet.
2. Place small mounds or piles of the worm bin material on top of the tarp or plastic.
3. Leave the mounds out just long enough for the worms to work their way towards the bottom of the pile, closer to the tarp or plastic.

# Harvesting Worm Castings

## Directions (continued):

4. Carefully, scoop the top part of the mound off and put the material in a container. If you pick up worms, let a smaller mound sit out a little longer in the sun. Come back later and scoop a little more off the top of each mound.
5. Put the worms back into the bin and add freshly soaked newspaper strips and new food scraps. It's okay if you add the material left on the tarp or plastic back into the bin.
6. If you'd like a finer casting material, use a large webbed screen, sieve, or colander and sift the larger pieces out.
7. For more information and other resources on collecting and using worm castings, visit **[www.sciencecompanion.com/links](http://www.sciencecompanion.com/links)**.

# Disassembling the Worm Bin

When you have completed the Nature's Recyclers Unit, you have a few ideas to consider concerning your worm bin.

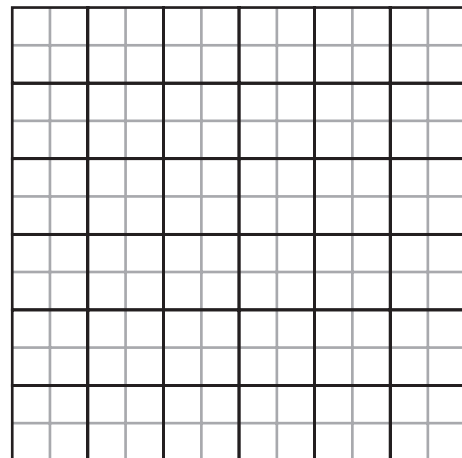
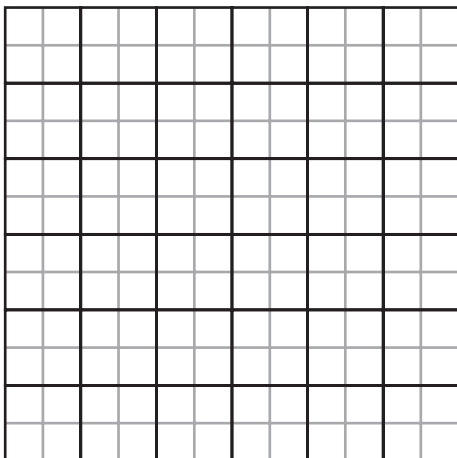
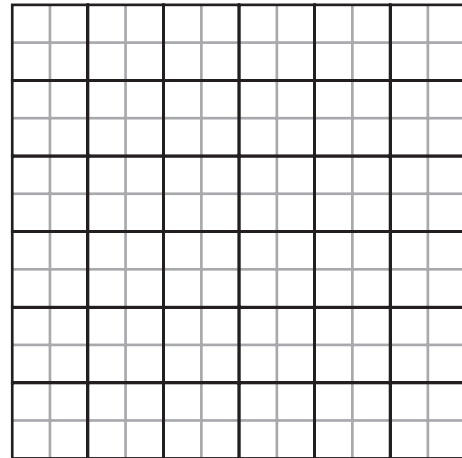
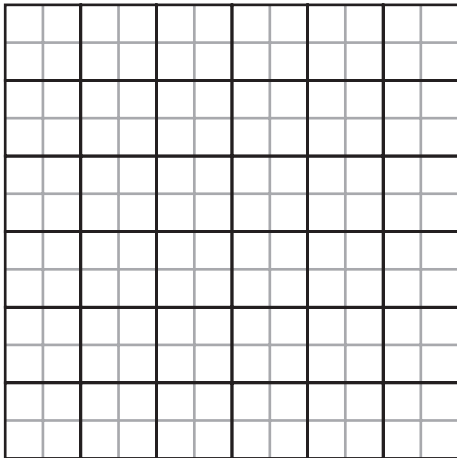
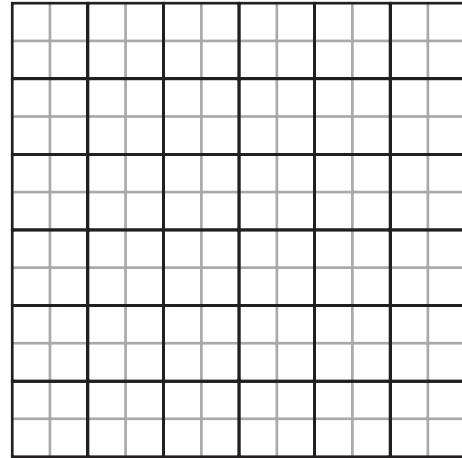
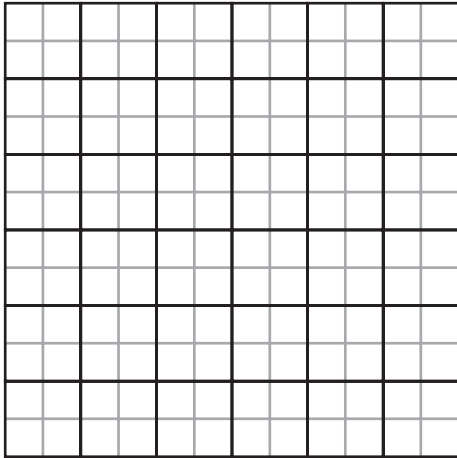
*Safety Note: It is not recommended that you simply release your live composting worms in your garden, yard, or field. This may be stressful and possibly lethal for the worms as well as potentially harmful to other native organisms in your area.*

*Teacher Note: Contact your local county extension agent or a neighborhood nursery specializing in organic growing methods for suggestions specific to your region. Share this information with the students and others that take worms home.*

## **Some ideas to consider:**

- If possible, continue maintaining the worm bin until the next school year. While this may mean taking it home, it will save you time and effort in setting one up again. It also provides opportunities for further observation for your present and future classes.
- If there isn't one already happening, consider starting a school-wide composting project. Contribute your composting worms to start or add to the project.
- Send home the worm bin with one of your interested families or fellow teachers. Provide them with a copy of the maintenance directions and the library references specifically about worms and worm bins.
- See the Family Link Home Activity "A Worm Bin at Home" and distribute the composting worms among interested students.
- To have the bin available next year, have recipients build a separate bin and return yours when they transfer the worms.
- Contact your local county extension agent for suggestions on someone who may be looking for composting worm donations and other suggestions about disposal.
- Ask any neighborhood or local nursery if they would be interested in your worms.

# Area Measurement Grids



# Variables in a Fair Test of Bread Mold Growth

Variables	Conditions of Variables

## Fair Tests

Constant	Test 1 Moisture	Test 2	Test 3	Test 4	Test 5



# Variables in a Fair Test of Bread Mold Growth

See page 33 in the science notebooks.

## Constant Table

Variables	Constant Conditions of Variables

## Fair Test Table

Variables	Test group # ____ Conditions of Variables

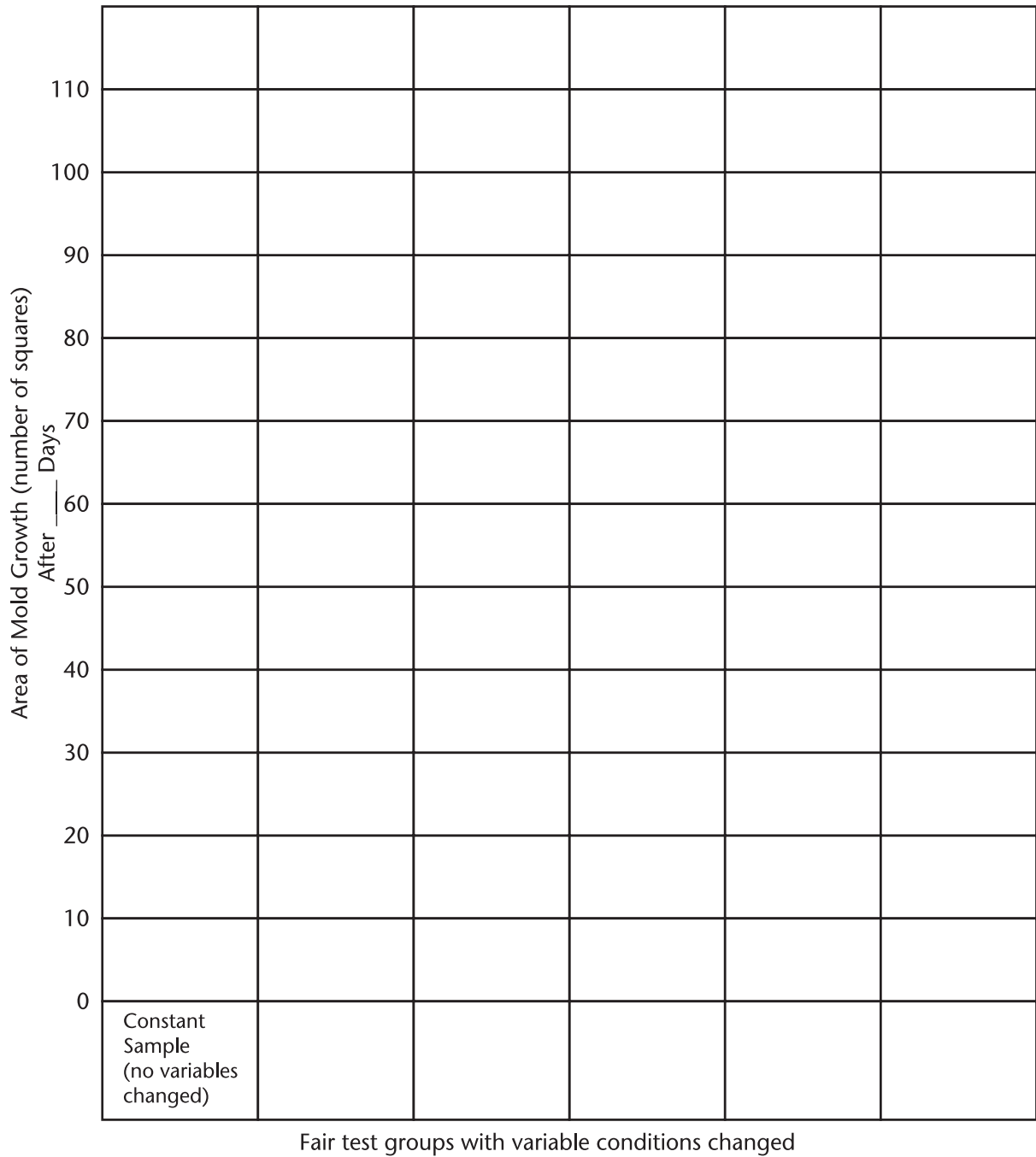
# Class Data Table

Area of Mold Growth (number of squares)							
Variables tested	Test 1	Test 2	Test 3	Test 4	Test 5	Total Values	Mean

Find the mean by adding each group's data values, and then dividing by the number of groups.

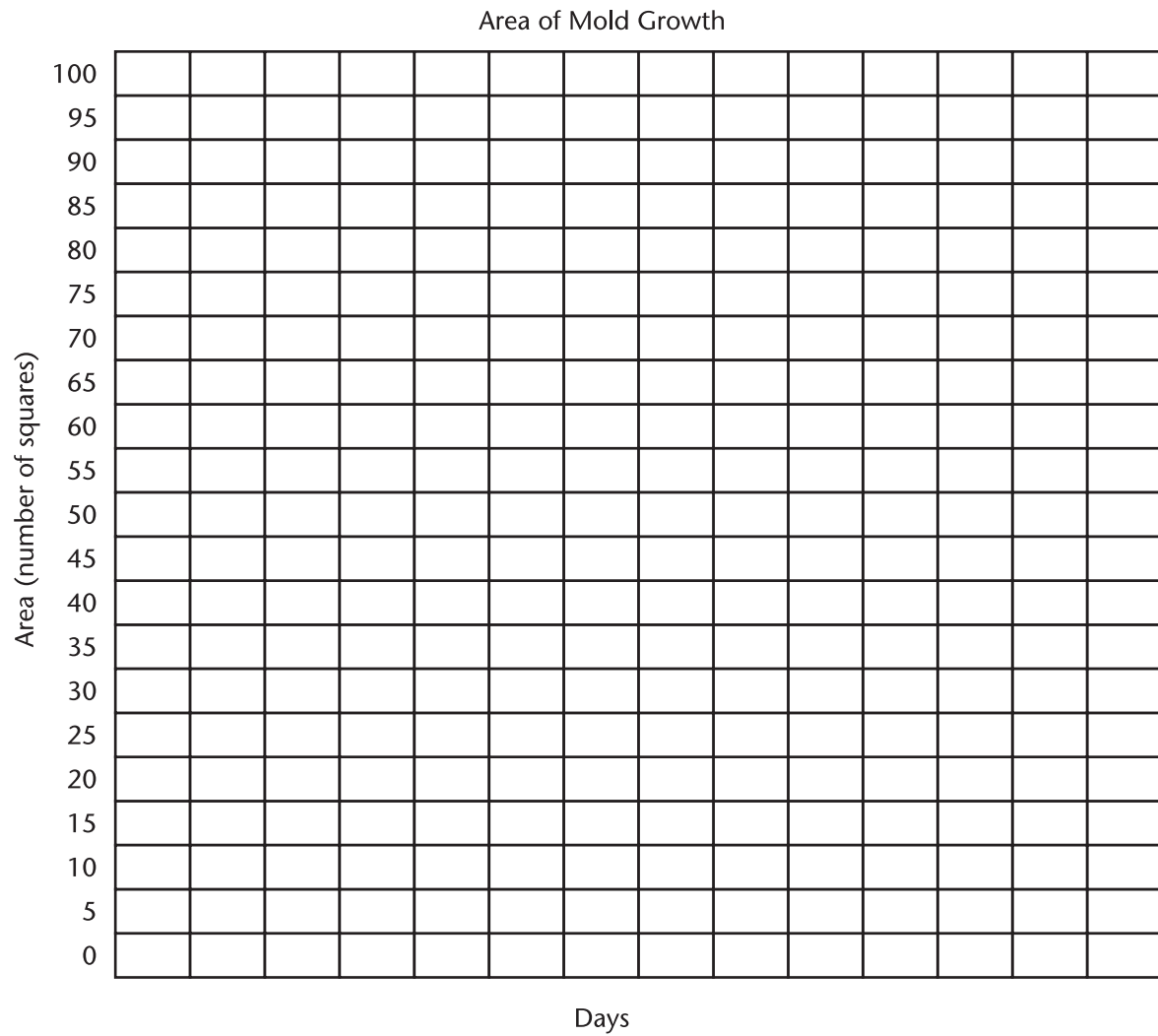
# Comparing Bread Mold Growth

## Bar Graph with Class Data



# Mold Growth Over Time

## Line Graph with My Data



# Playing the Nutrient Cycle Game

Student roles:

Plants—12 students

Herbivores—6 students

Carnivores—3 students

Recyclers—9 students

Tub of blocks = nutrients in soil

Stack of three blocks = plant

## Directions:

1. Direct each Plant to collect 12 blocks and make four “plants” that have used nutrients. Have them stand in a “meadow,” holding the plants in their hands.
2. Send the Herbivores to the meadow to eat plants. Each Herbivore should collect six stacked plants. (If a Plant is left without any blocks, it should walk back to the open tub of extra nutrients and build new plants.)
3. Direct the Herbivores to drop two stacks of blocks on the floor as dung or droppings.
4. Send in the Recyclers to collect all the dropped stacks, pull apart the nutrients, and bring them back to the tub. Plants can continue to build new plants with these extra nutrients (with a limit of four plants each).
5. Send in the Carnivores to eat Herbivores. Each Carnivore should take the nutrients from one Herbivore. Tell the “eaten” Herbivores to step out of the game.
6. Direct the Carnivores to drop one stack of blocks on the floor as dung or droppings.
7. Again, send in the Recyclers to collect the dropped stacks, pull apart the nutrients, and bring them back to the tub.

# Playing the Nutrient Cycle Game

## Directions (continued):

8. Tell all of the Herbivores and Carnivores to look at their identifying tags or ribbons. Inform them that those with the extra symbol are now “dead” of natural causes. The dead should drop their block stacks on the floor and step out of the game.
9. Once again, send in the Recyclers to collect the dropped stacks, pull apart the nutrients, and bring them back to the tub.
10. Call a “time out” in the game, and ask the students to look at where the nutrients are. Explain that what is missing in the game are all the Herbivore and Carnivore offspring that would continue the cycle of feeding.
11. Invite the “eaten” and “dead” Herbivores back into the game, to be followed by the “dead” Carnivores. Continue the nutrient cycling for as long as students are interested.

## Playing Variations

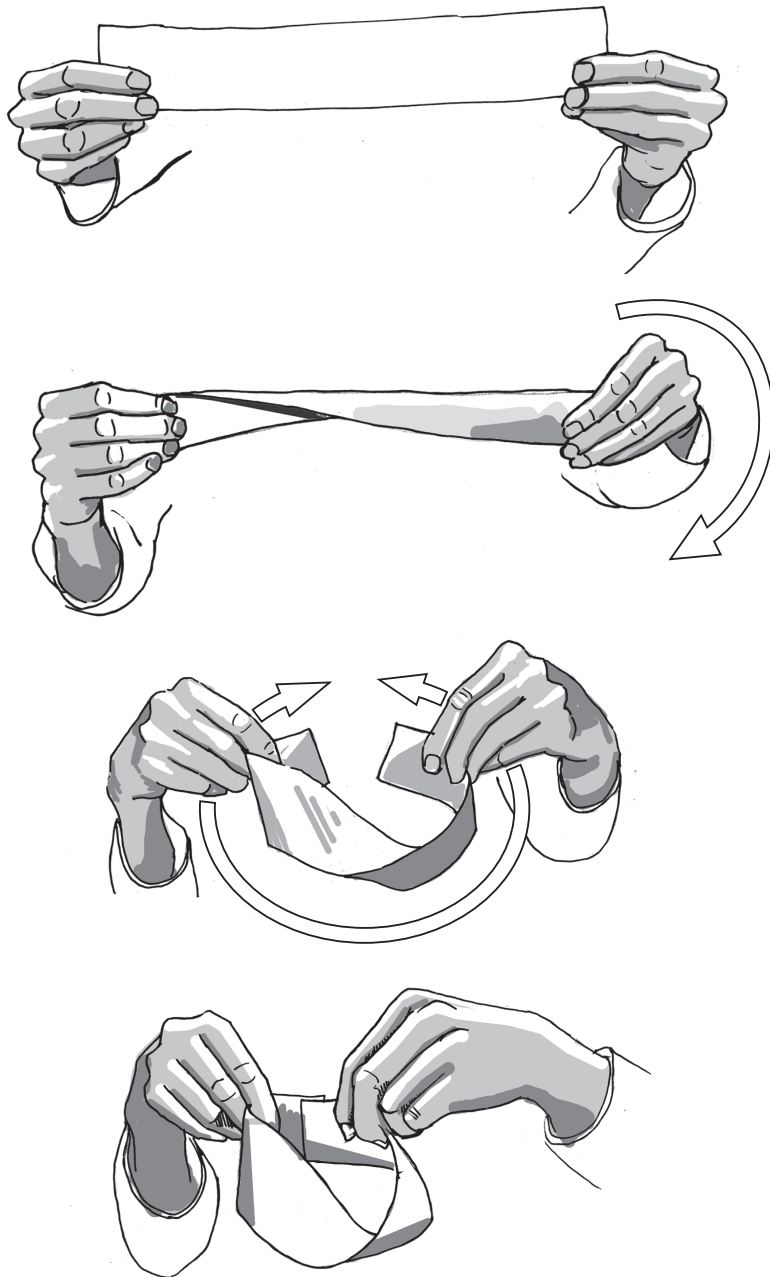
After the first round of this game, you can invite students to exchange roles. You might also have the class play (or discuss) these variations:

- What would happen if Herbivores took all of the nutrient block stacks from the Plants (in other words, what if they ate all of the plants)?
- What would happen if Carnivores took all of the nutrient block stacks from the Herbivores (in other words, what if they ate all of the herbivores)?
- What would happen if there were no Recyclers?
- What would happen if humans—or a drought—killed all of the plants?

# How to Make a Mobius Strip

A Mobius strip is an object that has one continuous surface, even though it appears to have two sides. To put a Mobius strip together, complete the following steps:

1. Hold the strip at both ends.
2. Give one end of the strip a half twist.
3. Bring both ends of the strip together to form a loop.
4. Use tape or glue to secure both ends.



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

# Setting Up a Fair Test

## Investigative Question:

1. What are you trying to discover?

## Variables:

2. What is the one **variable** you will test?

3. How will you change that variable?



# Setting Up a Fair Test

Use the chart and questions on this page to help you organize the fair test.

What variable are you going to change? _____	
What variables will you keep the same?	How will you keep the variable the same?

4. What are you going to measure?

5. How will you measure this?

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

# Setting Up a Fair Test

## Materials:

6. What materials do you need?

## Procedure:

7. List the steps you will follow to do your experiment.

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

## Setting Up a Fair Test

### Data:

8. Record observations and data in the space provided below.

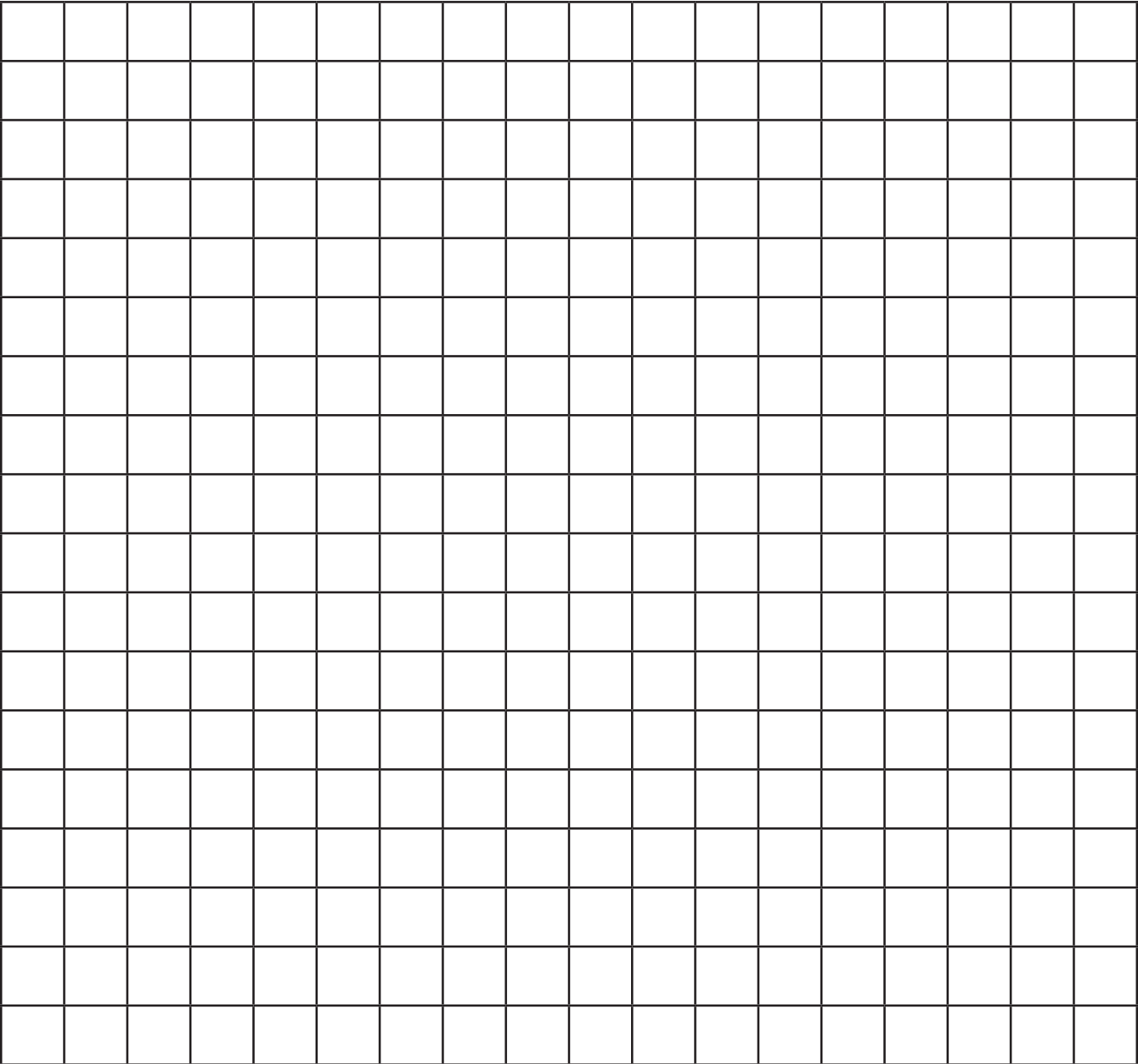
### Conclusion:

9. What did you learn from your test?

# Graphing the Height of a Fern

The chart below lists a fern’s height, in centimeters, at the end of each month from January 2012 to June 2013.

Jan 2012	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2013	Feb	Mar	Apr	May	Jun
5	7	10	15	20	30	45	53	59	65	68	70	70	72	75	80	86	95



**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## Family Link with Science—Home Activity

# Decomposing Nature in the Neighborhood

*Your child is studying the role of decomposition in nature. This optional activity gives your child a chance to look for examples of natural decay in your neighborhood.*

With a family member, look around your neighborhood for an example of something in nature that is decomposing.

1. Describe or draw your example in the space below.
2. Carefully look for organisms or evidence of organisms in the thing you found decomposing. Try not to disturb these organisms or damage their habitat. Identify, describe, or draw them in the space below.

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

## Family Link with Science—Home Activity

# Earthworm Search

*Today in science class your child examined earthworms. This optional activity gives your child an opportunity build on their classroom experience by looking for and observing earthworms.*

With a family member, look for earthworms in your neighborhood. Fill out the chart below with your observations.

Location of Earthworms	Time of Day	Number of Worms	Other Observations

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

## Family Link with Science—Home Activity

# A Worm Bin at Home

*In science class, your child has been participating in the upkeep of a composting worm bin. This optional activity describes the process for setting up and maintaining a worm bin for your home.*

*Return the bottom of this form and your child will bring home some composting worms from our bin to get you started. You can also order composting worms from a number of online sources.*

### Materials:

Item	Quantity	Notes
Bowl or other container	1	To hold water for soaking the newspaper.
Composting worms	*About 1/4 lb.	To put in the worm bin.
Drill or nail	1	To make air holes in the worm bin.
Drip pan	1	To place under the worm bin to collect moisture.
Eggshells, crushed	2	To put in the worm bin.
Food scraps	500 ml (2 C)	To put in the worm bin. Coffee grounds, shredded or chopped vegetables, and pieces of fruit work well. Do not use meat or dairy products.
Newspapers	Several sections	To make worm bedding.
Plastic bin with lid, large size	1	To hold the worms.
Scissors	1 pair	To cut newspaper into strips.
Soil	250 ml (1 C)	To mix with newspaper strips for worm bedding.
Water	500 ml (2 C)	To moisten newspaper strips. More or less water may be added depending on the size of the bin.

\* The recommended ratio of worms to organic material is about 1:2. If you receive about ¼ pound of worms, put about ½ pound of food scraps, newspaper strips, and soil into the bin. This can be flexible, depending on the size of your bin and the number of worms you receive.

### Directions:

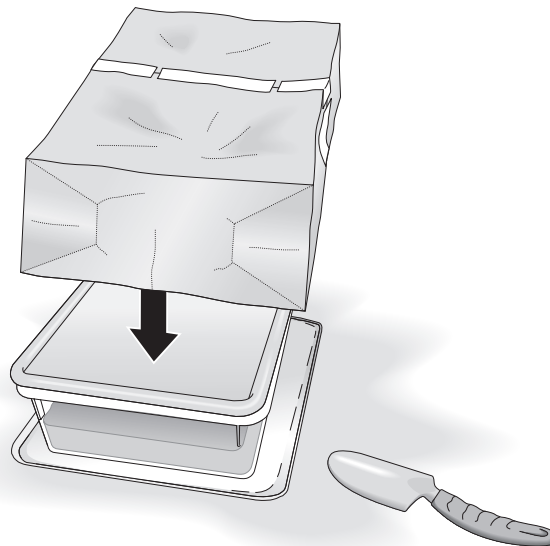
#### Setting Up the Worm Bin

1. Use a drill or large nail to make 10 holes in the lid and 10 small holes in the bottom of the bin for aeration (air). Don't make holes larger than ¼ inch in diameter, so the worms cannot escape through them.

## Family Link with Science—Home Activity

### Directions (continued):

2. Make worm bedding by cutting newspaper into 3 cm (1½ in) strips. Moisten the strips of newspaper with water. Squeeze out any extra water and pull apart the dampened newspaper. The newspaper should be damp like a wrung-out sponge but should not be soggy.
3. Loosely fill the bin with the dampened newspaper strips. Cut up and dampen more newspaper, if needed.
4. Add 250 ml (1 C) of soil to the bin and mix it thoroughly with the newspaper.
5. Pull back the bedding in one corner and put in 500 ml (2 C) of chopped-up food scraps. Bury the scraps with more bedding. Coffee grounds, vegetables, and fruit are the recommended food for red worms. Avoid bones, dairy products, and meat since they can cause odors as they decompose.
6. Sprinkle crushed eggshells on top of the bin. The eggshells will keep the bin from becoming too acidic.
7. Add the composting worms to the bin. Cover everything with a dampened section of newspaper folded in half.
8. Put the lid securely on the bin. If the bin is made of clear plastic, cover it with a brown paper bag to keep it dark.
9. Place the bin in a location where temperature doesn't go up or down too much. If you decide to keep it outside, make sure other larger critters won't be able to get into the bin.





## Family Link with Science—Home Activity

### Maintaining the Worm Bin

1. Check on your worms every three to four days. Dig into the bedding to see how much food has been eaten.
  - If a lot the original amount of food appears to gone, add more food scraps to another corner of the bin.
  - If there appears to be plenty of food remaining in the bin, check it again in a few days before adding more food.
  - If mold is growing in the bin, too much food has been added. Add some dry bedding and do not add food for several days.
2. Check the moisture content of your bin.
  - If the bedding feels too dry, use water to moisten it until it is slightly damp.
  - If you notice condensation on the lid, the bedding is too wet. Leave the lid off for a day to allow the excess water to evaporate, or add more dry bedding to the bin.
3. Turn over the bedding in the bin once a week. This aerates the bedding and prevents it from becoming compacted.
4. For more information about setting up and maintaining worm bins, check your local library and visit [www.sciencecompanion.com/links](http://www.sciencecompanion.com/links).

### Harvesting Worm Castings

If you keep the worm bin over time, you will reach a point where you can collect the worm castings for plants. This should be when the bin is quite full and the majority of the newspaper and food waste is eaten. You can combine the castings with potting soil or just put it right on flower or vegetable beds as an organic fertilizer!

1. Find a warm and sunny spot that won't be disturbed for a few hours. Spread out a large tarp or piece of plastic.
2. Place small mounds or piles of the worm bin material on top of the plastic.
3. Leave the mounds out just long enough for the worms to work their way towards the bottom of the pile, closer to the plastic.
4. Carefully, scoop the top part of the mound off and put it in a container. If you end up picking up worms, let a smaller mound sit out a little longer in the sun. Come back later and scoop a little more off the top.

## Family Link with Science—Home Activity

### Directions (continued):

5. Put the worms back into the bin and add freshly soaked newspaper strips and new food scraps. (It's okay if you add the material left on the tarp back into the bin.)
6. If you'd like a finer casting material, use a large webbed screen or colander and sift the larger pieces out.

### Disassembling the Worm Bin

*Safety Note: Releasing live composting worms in your garden, yard or field may be stressful and possibly lethal for the worms. Also, depending on your locale, you might introduce a species incompatible with other native organisms. In the spirit of good stewardship, please contact your local county extension agent, a local university agricultural department, or a neighborhood nursery specializing in organic growing methods for suggestions specific to your region.*

When you're ready to disassemble your worm bin, consider these ideas:

- Contact your local county extension agent for someone looking for composting worm donations and other suggestions about disposal or releasing worms in your region.
- Ask any neighborhood or local nursery if they would be interested in your red worms.
- Give the composting worms to interested friends or neighbors.

### Discussing the Worm Bin with Your Child

Having a worm bin in your home is a little bit like having a pet. While a composting worm bin is easy to care for, someone will need to be responsible for it and its contents. Since your child has experience with worm bins, it is preferable that they do the majority of the care. As you assist them:

- Encourage them to talk about what they know about composting worms and worm bins.
- Ask them to explain what they think is happening as the contents change.
- Let them direct the care.
- Ask them to explain why they are choosing to do what they do.
- Try different plant materials for food and different harvesting techniques.
- Research web sites and other resources to find out more about composting and worm bins.
- Have fun!

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

## Family Link with Science—Home Activity

# Worm Request

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We are interested in setting up a worm bin at home. Please send us some of the classroom's composting worms so we can get started.

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

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

## Family Link with Science—Home Activity

# Mold Search

*Today in science class your child examined mold. This optional home activity gives your child an opportunity to build on their classroom experience by looking for and observing mold and mycelium. (Do not participate in this activity if you or any of the other members of your family are allergic to molds.)*

With a family member, look for mold in your home and neighborhood. Fill out the table below with your observations.

Location of mold	How big?	Can you see mycelium?	What do you think helped the mold to grow?

Tell a family member about mycelium. Point it out if you see it.

Don't disturb the molds you find, but make sure you tell a parent or an adult about them. Let them decide whether it needs to be cleaned up!