

Activity 1	
What You Need	
For the whole class:  2 water misters 2 sponges	
For each team of four students:  1 cup of garden soil 1 or 2 plastic sandwich bags (to contain soil) 4 pieces of white scratch paper (to use as soil observation mats) 4 pencils 2 magnifying lenses 4 plastic spoons	
newspapers 4 journals or blank booklets for recording observations throughout the unit Optional: 1 tray for organizing team materials	
Soil Profile Test (Optional)	
(recommended for 4th-6th grade students)	
What You Need	
For each team of four students:  4 clear plastic vials with lids (approximately 1" in diameter, 3" high)  4 plastic spoons  1–2 tablespoons of alum (available from a well-stocked grocery store)  1 cup or plastic sandwich bag to contain alum  1 measuring cup containing 1 cup of water  newspapers	
Activity 2	
What You Need  (For each team of four students)  Note: If you would like to make a demonstration terrarium, plan as if you had one extra team.  1 small, clear plastic storage box with lid, or a clear plastic salad container  1 push pin for making holes in terrarium lids  enough soil to fill 1/3 of the container when mixed with sand  sand equal to 1/4 the amount of soil  1 teaspoon of birdseed or grass seed  1 handful of dry leaves from fruit, oak, birch, maple or leaves from other deciduous trees  1 small plant such as strawberry, sweet alyssum, violets, or other small garden plants  1-2 twigs or pieces of bark  2-3 plastic spoons for mixing soil	<ul> <li>□ 1 spray bottle for water</li> <li>□ 1 piece of black construction paper large enough to cover one side of the box</li> <li>□ 1 white self-adhesive label or strip of masking tape to stick on piece of black construction pape</li> <li>□ 1 roll of transparent tape for attaching black paper to terrariums</li> <li>□ 4 journals or blank booklets for recording observations throughout the unit</li> </ul>

## **Activity 3** What You Need For the whole class: 2 water misters ☐ 1 tray or piece of cardboard for sorting earthworms ☐ 1 push pin for making holes in lids of worm containers ☐ Optional: 2 sponges or newspaper to cover tables For each pair of students: 2 earthworms (redworms or bait worms) ☐ 1 half-gallon milk carton tray or other small tray with sides (see Getting Ready for how to make milk carton trays) 2 clear plastic cups ☐ 2 pencils 1 magnifying lens ☐ 1 or 2 damp dried leaves or moist 2" x 2" paper towel pieces 2 journals or blank booklets for recording observations throughout the unit ☐ Optional: 2 earthworm student sheets for older students (master on page 31) ☐ Optional: 1 plastic spoon Optional: 1 small plastic ruler Optional: 1 nightcrawler earthworm **Activity 4** What You Need or the whole class: ☐ 2 water misters 1 push pin for making holes in lids of isopod containers ☐ Optional: 2 sponges or newspaper to cover tables For each pair of students: ☐ 4 isopods: 2 sowbugs and 2 pillbugs (See Getting Ready for where to get isopods.) ☐ 1 half-gallon milk carton tray or other small tray with sides (see Getting Ready for how to make milk carton trays) ☐ 1 clear plastic cup with lid ☐ 2 pencils □ 1 chunk of raw potato at least the size of a large marble □ 2" x 2" damp paper towel or 2 damp dried leaves of about the same size $\square$ 1/4 of a cardboard tube from a roll of toilet 2 journals or blank booklets for recording observations throughout the unit

☐ Optional: 2 isopod student sheets	for older
students (master on page 41)	
☐ Optional: 1 plastic spoon	
☐ Optional: 1 small plastic ruler	

## **Activity 5**

## What You Need

small animals collected by students such as: garden snails
slugs, beetles, garden crickets, garden spiders, millipedes,
etc.
☐ food items brought in by students such as: potato, carrot,
apple corn, eggshells, lettuce, dried beans
inanimate objects brought in by students such as: rocks,
shells, sand more dried twigs, wood, leaves, plants (even
weeds), bird and grass seed.
☐ time for your students to observe and describe (orally or
in their journals) their new discoveries!!