

# Level 3 Module 1 Materials

## Earth Changes with Spotlight Lessons on Matter

The lists below summarize the materials necessary to implement the Level 3 Module 1 curriculum. The lists compile items from the Materials Tables for each lesson set but separate items available for purchase in *PhD Science*® kits from those items the schools provide. The suggested quantities are for a class of 24 students and up to 6 groups of students.

Schools that purchase kits receive materials in the Kit Items list. Schools may also purchase refill kit items, identified by ♻️, for subsequent years of implementation. Schools that do not purchase kits must provide those materials in addition to the materials in the School Supplied list. School supplied items are commonly available in classrooms or in stores. In addition to the listed materials, teachers may need access to such items as sunlight, electricity, uncarpeted areas, and sturdy level surfaces (tables or desks).

To learn more about the resources for this module as well as other components of *PhD Science*®, visit [greatminds.org/texas](http://greatminds.org/texas).

## Earth Changes

Kit Items		School Supplied Items	
<input type="checkbox"/> Balloon pumps, handheld	6	<input type="checkbox"/> Bags, resealable plastic, 1 qt	39
<input type="checkbox"/> Bin, clear plastic, 34" × 16" × 6"	1	<input type="checkbox"/> Boxes or bags	8
<input type="checkbox"/> Bins, clear plastic, 6 qt	8	<input type="checkbox"/> Bucket, plastic, 10 qt	1
<input type="checkbox"/> Building blocks, plastic, blue, red	48 each color	<input type="checkbox"/> Chart paper	22 sheets
<input type="checkbox"/> Cheesecloth	9 sq ft ♻️	<input type="checkbox"/> Crayons, blue, brown, green, orange, red	24 each color
<input type="checkbox"/> Chenille stems	120 ♻️	<input type="checkbox"/> Cups, paper, 8 oz	14
<input type="checkbox"/> Clay, natural	3 tbsp ♻️	<input type="checkbox"/> Dish soap	1 tsp
<input type="checkbox"/> Clothespins, 3"	6	<input type="checkbox"/> Drill with $\frac{3}{8}$ " bit	1
<input type="checkbox"/> Globe, inflatable	1	<input type="checkbox"/> Equity sticks	Class set
<input type="checkbox"/> Gravel	$5\frac{1}{2}$ cups ♻️	<input type="checkbox"/> Glue stick	1
<input type="checkbox"/> Hook and loop fastener	3" ♻️	<input type="checkbox"/> Local soil sample	2 oz
<input type="checkbox"/> Jars with lids, clear plastic, 4 oz	19		

<input type="checkbox"/> Knife, putty	8	<input type="checkbox"/> Markers	
<input type="checkbox"/> Magnifiers, handheld, plastic	24	<input type="checkbox"/> Dry erase, 2 colors	6 each color
<input type="checkbox"/> Moss, Spanish	8 cups ☉	<input type="checkbox"/> Permanent	1
<input type="checkbox"/> Paintbrushes, medium	6	<input type="checkbox"/> Measuring spoon, tbsp	1
<input type="checkbox"/> Rocks		<input type="checkbox"/> Newspaper	6 sheets
<input type="checkbox"/> Basalt	3	<input type="checkbox"/> Pencils	
<input type="checkbox"/> Gneiss	3	<input type="checkbox"/> Unused, sharpened	1
<input type="checkbox"/> Granite	3	<input type="checkbox"/> Unused, unsharpened	1
<input type="checkbox"/> Limestone	1	<input type="checkbox"/> Used, short, sharpened	1
<input type="checkbox"/> Pumice	3	<input type="checkbox"/> Plates, paper, 10"	50
<input type="checkbox"/> Sandstone	3	<input type="checkbox"/> Pocket chart	1
<input type="checkbox"/> Tuff	3	<input type="checkbox"/> Potting soil	12 cups
<input type="checkbox"/> Rubber stoppers, size #00	6	<input type="checkbox"/> Rocks, 1-2"	160
<input type="checkbox"/> Sand, coarse	3 tbsp	<input type="checkbox"/> Ruler	1
<input type="checkbox"/> Sandpaper, 3" × 3"	20 ☉	<input type="checkbox"/> Sand, fine	30 $\frac{1}{2}$ cups
<input type="checkbox"/> Sentence strips	8 ☉	<input type="checkbox"/> Scissors	1
<input type="checkbox"/> Shower caps, clear plastic	6 ☉	<input type="checkbox"/> Scissors, blunt tip	8
<input type="checkbox"/> Sifting screens, plastic	6	<input type="checkbox"/> Small objects (e.g., rocks or shells)	6
<input type="checkbox"/> Silt	3 tbsp ☉	<input type="checkbox"/> Stickers, small	10
<input type="checkbox"/> Straws, 1 cm diameter, 2" pieces	8 ☉	<input type="checkbox"/> Sticky notes	2 pads
<input type="checkbox"/> String	9 ft	<input type="checkbox"/> Sugar cubes	2
<input type="checkbox"/> Twigs, 6" pieces	80 ☉	<input type="checkbox"/> Tape	1 roll
<b>Items Required from Other Level 3 Kits</b>		<input type="checkbox"/> Tape measure	1
<b>Safety</b>		<input type="checkbox"/> Toothpicks	400
<input type="checkbox"/> Safety goggles	24	<input type="checkbox"/> Topsoil	2 $\frac{1}{2}$ cups
		<input type="checkbox"/> Water	Access
		<input type="checkbox"/> Whiteboard, teacher's (optional)	1

## Spotlight Lessons on Matter

Kit Items	School Supplied Items
<input type="checkbox"/> Ball, rubber, 1" 1	<input type="checkbox"/> Balloon 1
<input type="checkbox"/> Beaker, glass, 250 mL 1	<input type="checkbox"/> Chart paper 3 sheets
<input type="checkbox"/> Clay, modeling, nonhardening, gray 1 lb ↻	<input type="checkbox"/> Small objects, 3 different kinds 12 of each
<input type="checkbox"/> Containers, clear plastic, rectangular, 6 oz 4	<input type="checkbox"/> Cotton ball 1
<input type="checkbox"/> Containers, clear plastic, round, 8 oz 4	<input type="checkbox"/> Cups, clear plastic, 9 oz 12
<input type="checkbox"/> Dot die 1	<input type="checkbox"/> Dime coin 1
<input type="checkbox"/> Hot plate 1	<input type="checkbox"/> Ice cubes, clear 54
<input type="checkbox"/> Jars with lids, clear plastic, 4 oz 8	<input type="checkbox"/> Index card, 3" × 5" 1
<input type="checkbox"/> Marbles 7	<input type="checkbox"/> Orange juice, pulp free 2 fl oz
<input type="checkbox"/> Peppermint oil 10 drops ↻	<input type="checkbox"/> Paper clip, metal 1
<input type="checkbox"/> Pony beads, plastic, blue 4 fl oz	<input type="checkbox"/> Paper towels 1 roll
<input type="checkbox"/> Scales, digital, ± 1 g 1	<input type="checkbox"/> Penny coins 1
<input type="checkbox"/> Thermometers, Celsius, plastic back 13	<input type="checkbox"/> Plastic wrap 1 piece
<input type="checkbox"/> Tongs, utility 1	<input type="checkbox"/> Ruler, plastic 1
<input type="checkbox"/> Washers, steel 6	<input type="checkbox"/> Scissors 1
<input type="checkbox"/> Watch glass 1	<input type="checkbox"/> Sticky notes 1 pad
<b>Items Required from Other Level 3 Kits</b>	
<b>Earth Changes</b>	
<input type="checkbox"/> Bins, clear plastic, 6 qt (optional) 6	<input type="checkbox"/> Vegetable oil 2 fl oz
<b>Safety</b>	
<input type="checkbox"/> Safety goggles 24	<input type="checkbox"/> Water Access
	<input type="checkbox"/> Whiteboard, teacher's (optional) 1