

"Enjoying God's World of Nature"

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24090 - Earth Science Laboratory Kit

Designed to use with the text Discovering Design with Earth Science, by Dr. Jay Wile

Things You Need To Know.

Enclosed is a *Quick Reference Chart* where all items from this kit are listed alphabetically and include the quantity, the bag number where the item is found, as well as the chapter number where the item will be used.

Following the *Quick Reference Chart*, you'll find *Supplies Organized by Chapter*. There are 2 catagories: *Lab Kit* and *You Provide*

- 1. *Lab Kit* refers to the supplies in this household labratory supplies set, customized for use with *Discovering Design with Earth Science* by Dr. Jay Wile. Items within the kit are organized and bagged according to common household catagories. The number to the right of the item, on this chapter-by-chapter list, coresponds to the bag number where the item is located within the kit.
- 2. *You Provide*. Every effort has been made to create a complete kit, however there are some items that are not practical to include. You will find the items, which you will need to provide, listed in this catagory.

Many items in your kit will be used for several experiments. Once you have completed an experiment, return reusable items to their original bag. This will maintain the organization of the kit throughout the course. Items labeled *LIB* are too big for the bags. They are found loose in the box (LIB)

General Safety Rules

- Before you do any experiment, read these instructions and the instructions for that experiment completely.
- Always recap each bottle when you are through with it, and keep all bottles and other materials away from younger children and pets.
- Handle chemicals with care. Observe all Caution notices. In the event of misuse (ingestion, inhalation, skin contact) immediately contact the United States National Poison Control Hotline @ 800-222-1222.
- A list of materials precedes each experiment. Some experiments require the use of common household items and materials. Common household chemicals not supplied in this kit can be purchased at local stores.
- Avoid contact between any chemical and your skin. Never rub your eyes or put your fingers in your mouth after handling a chemical. Always wash your hands immediately with soap and warm water after working with any chemical.
- Before you begin any activity, roll up your sleeves, put on an apron or smock, or other protective clothing. Tie long hair back from your face so it doesn't block your view or get caught in any equipment. Also, cover your work area with newspaper or a plastic sheet. Avoid splashing chemicals on wood surfaces, vinyl flooring, carpet, etc. Keep chemicals away from food areas.
- Always clean your equipment and work area after each activity. Clean your lab equipment, such as pippets and scoops, with warm, sudsy water. It's okay if a small amount of liquid or solid waste goes down the drain, but you should not dispose of waste material by flushing it. After your equipment is clean, be sure to wash the sink with lots of water. Be careful not to use a kitchen towel for clean up. Use a rag or paper towels that can be disposed of.

This kit is designed for use with the "Discovering Design with Earth Science" textbook.

Instructions for the experiments are found in the student textbook.

Nature's Workshop Plus! Inc., assumes no liability for any damage or injury incurred through accidental or intentional misuse or abuse of any of the chemicals or other products contained in this kit. All experiments should be performed under adult supervision exactly as outlined in the textbook "Discovering Design with Earth Science", by Dr. Jay Wile

Quick Reference Chart of items contained in this kit

Item Number	Item Name	Quantity	Bag
40732-2	Alcohol, Rubbing	1	2
B11710-9	Aluminum Pie Pan	1	LIB
40735-1/4c	Baker's Yeast, ¼ cup	1	3
40262-1/4	Baking Soda, ¼ cup	1	3
40220-lg	Balloons, Large	2	4
40220-sm	Balloons, Small	2	4
40229-C	Battery C-Cell	1	4
40282-4x6	Cardboard, Corrugated 4x6"	1	1
40253	CD	1	4
40744	Coffee Filter	3	1
40475-1	Construction Paper, Black	1	1
40241-16 oz	Cooking Oil	1	2
40721-1/4c	Corn Syrup	1	2
40544-1	Cotton String, 1 ft	1	4
40354-2pk	Crayons, 2pk	1	4
50647	Cylinder 50 ml, plastic	1	5
24099-Density	Density Specimens	1	7
45020	Digital Pocket Scale	1	5
46915	Dropper Pipette	2	5
40822-1/2c	Epsom Salt, ½ Cup	1	3
40229-fl	Flashlight, Small	1	4
40236-1f	Foil, 1 ft	3	1
40236-4	Foil, 4x4	1	1
40263-blue	Food Coloring, Blue	1	2
40263-red	Food Coloring, Red	1	2
50707	Funnel	1	5
24099-Set	Geology Basics Kit	1	LIB

Item Number	Item Name	Quantity	Bag
24099-Test	Geology Test Kit	1	LIB
40348-1	Gloves, 2 pair	1	5
41223-16 oz	Hydrogen Peroxide	1	2
40341-1	Index Card, Single	2	1
24099 – Limestone	Limestone	1	7
23922	M&M Candies Packet	1	3
40238-3	Marble, Medium	1	4
24099-Pegmatite	Mass Specimen	1	7
40276	Matchbook	1	4
22550-1	Measuring Cups Set	1	3
22551	Measuring Spoons, Metal	1	3
40555-2	Modeling Clay, Single	1	4
40785-1	Navy Beans, 1 Cup	1	3
40234	Needle	1	4
22559	Newspaper, 2 pk	1	1
40530-25	Paper Clips, Small	1	4
40450-1	Paper Towel	13	1
40233-1	Paper, White	30	1
40522	Pepper Packet	1	3
50529	PH Indicator Paper	1	3
40463	Plastic Jar w/lid	1	5
24098-P	Powders Set	1	6
40245-3x1/16 th	Rubberband, Thin	1	4
40333	Ruler	1	1
50681	Safety Goggles	1	5
40221-lg	Scissors, Large	1	1
23550-2	Straw, Bendable, 2 pk	1	1
40288-2lg	Straw, Large, 2 pk	1	1
40471	Styrofoam Cup, 10 oz	3	3
40240-1/2	Table Salt, ½ cup	1	3
40235	Tape	1	4
40447	Tea Bag	4	3
40223	Thread	1	4
25006	Tongs, Plastic	1	3
40549-bulk	Toothpick	1	3
24088-4	Tums, 4 pk	1	3
Zip 3x4-2ml	Zipbag, 3x4", 2 ml	2	1
40277	Zipbag, 6x6", 2 ml	2	1
Zip 6x9-2ml	Zipbag, 6x9", 2 ml	1	1

Supplies Organized by Chapter

Supplies Needed - Chapter 1 Lab. Set:

Foil, 4x4"	1
Hydrogen Peroxide	2
M&M Candies	3
Measuring Cups	3
Measuring Spoons	3
Modeling Clay	4
Tape	4
Toothpick	3
White Paper	1
Yeast	3
Zip Bag, 6x6"	1
Zip Bag, 6x9"	1

You Provide:

Books Bowls Ice Pan Plates Spoon Stove Water



Supplies Needed - Chapter 2 Lab. Set:

Balloon, small	4
Clay	6
Coffee Filter	1
Foil, 1 ft.	1
Funnel	5
Goggles	5
Limestone	7
Measuring Cups	3
Paper Towels	1
Plaster	6
Sand	6
Scissors	1
Silt	6
Styrofoam Cup	3
Tape	4
Vinegar	LIB

You Provide:

Cutting Board
Freezer Bowl
Glass
Hammer
Knife
Potato, raw
Spoon for Digging
Water
Water Bottle
Yard

Supplies Needed - Chapter 3

Lab. Set:

Geology Basic Kit	LIB
Geology Testing Kit	LIB
Paper Clip	4
Paper Towel	1
Vinegar	LIB

You Provide: Nothing Additional

Supplies Needed - Chapter 4 Lab. Set:

Geology Basic Kit	LIB
Geology Testing Kit	LIB
Gloves	5
Paper Towel	1
Sand	6
Silt	6
White Paper	1
Vinegar	LIB
-	

You Provide:

Glasses Sink

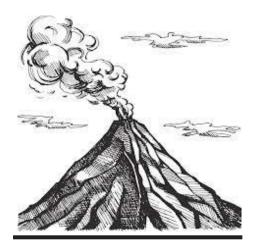
Supplies Needed - Chapter 5

Lab. Set:

Battery, C-cell	4
Cardboard,	1
Cooking Oil	2
Corn Syrup	2
Cylinder, 50 mL	5
Density Rocks	7
Drannar Dinatta	5
Food Coloring, blue	2
Foil, 1 ft.	1
Geology Testing Kit	LIB
Geology Testing Kit Kitchen Tongs	<u>LIB</u> 3
Kitchen Tongs	3
Kitchen Tongs Mass Scale	3 5
Kitchen Tongs Mass Scale Paper Clip	3 5 4
Kitchen Tongs Mass Scale Paper Clip Rubberband	3 5 4
Kitchen Tongs Mass Scale Paper Clip Rubberband Scissors Sewing Needle	3 5 4
Kitchen Tongs Mass Scale Paper Clip Rubberband Scissors	3 5 4

You Provide:

Bowl Glasses Ice Sink Water



Supplies Needed - Chapter 6 Lab. Set:

Dropper Pipette	5
Jar	5
Pepper Packet	3
Tape	4
White Paper	1

You Provide:

Bowl
Can Opener
Coin
Glasses
Metal Can
Plastic Wrap
Sink
Spoon
Toilet Paper
Water



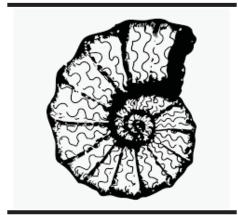
Supplies Needed - Chapter 7

Lab. Set:

Cooking Oil	2
Dropper Pipette	5
Epsom Salt	3
Geology Basics Kit	LIB
Geology Testing Kit	LIB
Hydrogen Peroxide	2
Measuring Spoons	3
Yeast	3

You Provide:

Glasses Sink Spoons Toilet Paper Water



Supplies Needed - Chapter 8 Lab. Set:

Baking Soda	3
Measuring Cups	3
Measuring Spoons	3
Paper Towels	1
pH Indicator Strips	3

You Provide:

Baking dish
Carbonated Beverage
Coins
Glasses
Oven
Oven Mitts
Plastic Container
Pot

Supplies Needed - Chapter 9 Lab. Set:

Cylinder, 50 mL	5
Mass Scale	5
Paper Towel	1
Tums	3
Vinegar	LIB

You Provide:

Freezer Glasses Pot Spoon Stove

Supplies Needed - Chapter 10

Lab. Set:

Cooking Oil	2
Cylinder, 50 mL	5
Dropper Pipette	5
Mass Activity Rock	7
Mass Scale	5
Measuring Spoons	3
Paper Clips	4
Paper Towel	1
Salt	3
Zip Bag, 6x6"	1

You Provide:

Bowl
Butter

3 Coffee Mugs
Fork
3 Freezer Container
Glass
Ice
Knife
Pan
Spoon
Stove
Toilet Paper

Tongs

Water

Supplies Needed - Chapter 11 Lab. Set:

LIB
2
2
4
4
1
1
3
4

You Provide:

Baking Pan
Ice
Pen
Toilet Paper
Water

Supplies Needed - Chapter 12 Lab. Set:

Baking Soda	3
Balloons, large	4
Cylinder, 50 mL	5
Geology Test Kit	LIB
Goggles	5
Kitchen Tongs	3
Mass Scale	5
Modeling Clay	4
Newspaper	1
pH Indicator Strips	3
Straw, bendable	1
Vinegar	LIB

You Provide:

Ammonia		
Bowl		
Ice		
Juice Glass		
Plate		
Soda Can		
Spoon		
Stick		
Toilet Paper		
Water Bottles		

Supplies Needed - Chapter 13 Lab. Set:

Dropper Pippette	5
Flashlight	4
Matches	4
Ruler	1
Scissors	1
String	4
Tea Bags	3
White Paper	1
1	

You Provide:

Glass
Milk
Pencil
Plate
Spoon
Water



Supplies Needed - Chapter 14

Lab. Set:

Balloon, large	4
Isopropyl Alcohol	2

You Provide:

Glasses Water Water Bottle

Supplies Needed - Chapter 15 Lab. Set:

Beans	3
CD	4
Cylinder, 50 mL	5
Flashlight	4
Foil, 1 ft.	1
Mass Scale	5
Paper Clips	4
Scissors	1
Straw, straight	1
Tape	4
Thread	4
Zip Bag, 6x6"	1

You Provide:

Cereal Box Knife Glass Water Water Bottle

Supplies Needed - Chapter 16 Lab. Set:

Cooking Oil	2
Crayons	4
Index Card	1
Paper Towel	1
Ruler	1
White Paper	1

You Provide:

Chair Hallway Lamps Long Stick

