



“Enjoying God’s World of Nature”

*Nature’s Workshop Plus! Inc.
3055 E Main Street
Danville Indiana 46122
317-745-0443
mail@workshopplus.com
www.workshopplus.com*

Apologia’s Physical Science, 3rd Edition

Alphabetical listing of items in the kit, quantity, location of item within the kit, and in which lesson items are used.

Item Number	Item Name	Quantity	Bag	Used in Module
40236-3ft	Aluminum Foil, 3 Ft	1	2	7, 11
E40262-3tb	Baking Soda, 3 tbsp	1	2	2, 5, 7, 13
40220-lg	Balloons	8	3	2, 4, 7, 7, 11, 13
40820	Batteries, 9 Volt	2	6	2, 5
40229-ba	Batteries, D Cell, 1 single	1	6	11
40229-ba	Batteries, D Cell, 2 pk	1	6	10
40646-2tbsp	Beads, Green, 1 tbsp	1	3	3
50652	Beakers, 100 ml	1	8	2, 7
50653	Beakers, 250 ml	4	8	1, 2, 4, 5
40738	Candle, Tealight	1	5	9
40282	Cardboard, Chipboard, 8 ½ x 11”	1	1	6
40528-1	Cardstock	1	1	1
40284-1	Chalk Pieces	2	3	12
40475-1/4	Construction Paper, Black ¼ sheet	1	1	10
E40241-1/2c	Cooking Oil, 120 ml, ½ c, 4 oz	4	4	2, 4
40250	Cork	4	3	2
E40721-1/2c	Corn Syrup, 120 ml, ½ c, 4 oz	2	4	2
40825-box	Cornstarch, 16 oz	1	2	12
40354-red	Crayon, Red, 1 crayon	1	3	10
40420	Cup, Plastic, 12 oz	7	7	13, 14
40471	Cup, Styrofoam, 10 oz	1	7	4
45020	Digital Scale	1	8	1
E40264-10ml	Dish Soap, 10 ml	1	4	4
E40264-2	Dish Soap, 60 ml, ¼ c, 2 oz	1	4	5
46915	Dropper Pipettes, Plastic	4	7	4, 12, 14
40272	Effervescent Antacid Tablet	1	2	1
40270	Electrical Tape	1	6	11
E40822-3	Epsom Salt, ¼ cup	2	2	5
22562	Flashlight, large	1	6	10
41230	Food Coloring, 4 pk	1	2	2, 4, 5
51723	Funnel	1	7	14
23603	Glue Stick	1	1	3
46615	Hanger, metal	2	x	3
E41223-120ml	Hydrogen Peroxide, 120 ml, ½ c, 4 oz	2	4	5
40341-1 Bulk	Index Cards, single	2	1	7, 13

Item Number	Item Name	Quantity	Bag	Used in Module
C50699	Iodine (no dropper needed)	1	4	14
E40732-1/2c	Isopropyl Alcohol, 120 ml, ½ c, 4 oz	2	4	2
40461	Jar, Glass, 12 oz	1	4	4
40728	Limestone	1	9	1, 7, 12
64008	Magnifier, Economical	1	7	1
40238-bulk	Marbles	4	5	2, 7
40224-1	Marker, Black	1	1	10
40256-roll	Masking Tape, roll	1	1	1, 2, 6, 8
40276	Matchbook	1	3	9
40747	Measuring Cup, Plastic, 2 cup	1	7	2, 12, 14
22551	Measuring Spoons, metal	1	2	5, 12, 13
40042	Microscope Slides, 2 pk	1	8	4
23555	Mirror, 3x4", rectangle	1	3	10
45054	Mirror, 4x6", large	1	3	10
40826	Nail, 3 in	1	3	11
46181	Nylon Casting Line	1	5	3, 7
51748	Packing Peanut, single	1	3	5
40450-1	Paper Towels, 1 oz	1 oz	2	4, 6
40233	Paper, White	3	1	10
40530-5	Paperclips, 5 pk	1	1	2, 4
40531-2	Paperclips, lg, 2 pk	1	1	1, 11
40421	Pen, retractable	1	1	4, 10
40239-5	Pencils	5	1	1, 7, 8
40827	Pie Pan	1	5	12
40920	Ping-Pong Ball	1	5	14
40835	Pipe Cleaners, white	30	3	3
40281	Plastic Bag 10x13"	1	7	13
40277	Plastic Bag 6x6"	3	7	12
40922	Plastic Tub	1	7	9
40933	Plate, Styrofoam, 6"	2	5	12
41233	Prism, Acrylic	1	3	10
40833	Protractor	1	1	1, 10
40836	Pumice, Lava Rock	1	9	12
40839	Push Pins, Red and Blue pk	1	3	3
40832-1	Rice, 1 tsp	1	2	9
40840	Rocks	2	9	9
50620	Rubber Stopper, 25 mm, no hole	1	3	7
40245-lg	Rubberbands, lg, 5 pk	1	1	8, 9, 13
40333	Ruler	1	1	1, 6, 8, 10
50681	Safety Goggles	1	6	multiple modules
E40778-1tbsp	Salt Substitute	1	2	15
E40240-1/4	Salt, ¼ cup	1	2	12
40221-lg	Scissors, large	1	1	multiple modules
40247-7	Skewers, 7" with point	2	3	3

Item Number	Item Name	Quantity	Bag	Used in Module
40449-4	Spoons, Plastic, 4 pk	1	7	2
40729-1/2	Steel Wool, ½ pc, lg. pc	1	2	5
50711-6	Stirring Rod, 6"	1	8	1
40533	Stopwatch	1	8	multiple modules
40288-2lg	Straws, lg, 2 pk	1	7	4, 7
40544-6	String, 6 ft	1	3	1, 8
40231	Styrofoam Balls, 2"	2	5	3
40225	Tape Measure	1	3	6, 7, 8, 9
40235	Tape, Clear	1	1	7, 8, 9, 10, 11
23607	Tennis Ball	1	5	8
51745-2	Test Tubes, Plastic, 2 pk	1	7	5
50631	Thermometer, Dual Scale	1	In Box	5
40350	Thermometers, Student	3	8	10, 13
40223	Thread	1	3	11
40549-100	Toothpicks	1	2	4, 14
40261-32	Vinegar, qt	1	x	5, 7, 12, 13
41028-1	Vitamin C, 2 pk	1	2	14
40271-5	Washers, 5 pk	1	5	1, 2
40551	Water Bottle Lid, Plastic	1	7	13
40269	Water Bottle, Plastic	1	7	13
40445	Wax Paper, 12x12"	1	2	4
40538-2	Wire, 2 ft, insulated	1	6	11
40538-9in	Wire, 9", insulated	2	6	2
40735-2	Yeast, 1 Tbsp	1	2	5

Apologia's Physical Science, 3rd Edition

Lesson-by-lesson chart of what you will need, in which bag to find it, and what you will need to provide.

Note: YDS = You Do Science

Module 1 In Your Kit:	Bag #	You Provide:
Beaker, 250 mL	8	Water
Cardstock	1	
Digital Scale	8	
Effervescent Tablet (in place of Alka-Seltzer)	2	
Limestone Rock (small object)	9	
Magnifier	7	
Masking Tape	1	
Paper Clip, large	1	
Pencil	1	
Protractor	1	
Ruler	1	
Stirring Rod	8	
Stopwatch	8	
String (cut as needed)	3	
Washers	5	

Module 2 In Your Kit:	Bag #	You Provide:
Baking Soda	2	A Helper
Balloon, large, 9" YDS	3	Grapes or Raisins
Battery, 9-volt	6	Hot and Cold Water
Beaker, 100 mL	8	Jar, quart size
Beakers, 250 mL	8	Ice
Cooking Oil (use 2 1/2 C bottles, save excess)	4	Paper Towel
Cork	3	Pennies
Corn Syrup (use 2 1/2 C bottles, save excess)	4	
Food Coloring set	2	Note: 2/3 C = 150 mL
Isoprop. Alcohol (use 2 1/2 C bottles, save excess)	4	
Marbles	5	
Masking Tape	1	
Measuring Cup	7	
Paper Clips, small	1	
Safety goggles	6	
Spoons, plastic	7	
Stopwatch	8	
Washers	5	
Wire, Insulated, 9"	6	

Module 3 In Your Kit:	Bag #	You Provide:
Fishing Line	5	Color Cards
Glue Stick	1	
Pipe Cleaners	3	
Plastic Beads	3	
Pins, blue	3	
Pins, red	3	
Scissors	1	
Skewers, bamboo	3	
Styrofoam Balls	5	
Wire Hangers	In Box	

Module 4 In Your Kit:	Bag #	You Provide:
Balloon, large, 9"	3	Bowl
Beakers, 250 mL	8	Butter
Cooking Oil, 1/2 C (2 containers are allocated)	4	Ice Cubes
Cooking Oil, (Exp. 4.3, use excess from Module 2)	4	Knife, serrated
Dish Soap, 10 mL	4	Microwave
Food Coloring, blue and red	2	Pan
Jar, glass, 12 Oz. YDS	8	Paper Towel
Paper Clip, small	1	Spoon
Paper Towels	2	Toilet Paper
Pen	1	Water
Pipettes	7	

Continued on next page

Module 4 - Continued In Your Kit:	Bag #	You Provide:
Safety Goggles	6	
Salt, YDS	2	
Scissors	1	
Straw, large	7	
String, YDS	3	
Styrofoam Cup	7	
Toothpicks	2	
Wax Paper	2	

Module 5 In Your Kit:	Bag #	You Provide:
Baking Soda, 1 TB	2	1 or 2-Liter Soda Bottle
Battery, 9-volt	6	Stirring Spoon
Beaker, 250 mL	8	Water
Dish Soap, 1/4 C, YDS	4	
Epsom salts, 1/4 C	2	
Food Coloring, YDS	2	
Hydrogen Peroxide, 1/2 C	4	
Hydrogen Peroxide, 1/2 C YDS	4	
Measuring Spoons	2	
Packing Peanut	3	
Safety Goggles	6	
Salt Substitute	2	
Steel Wool	2	
Stopwatch	8	
Test Tubes, plastic	7	
Thermometer	In Box	
Vinegar	In Box	
Yeast, 1TB, YDS	2	

Module 6 In Your Kit:	Bag #	You Provide:
Cardboard	1	4 Eggs
Masking Tape, YDS	1	A Helper, YDS
Paper Towels	2	Books
Ruler	1	Cookie Sheet
Safety Goggles	6	
Scissors	1	
Stopwatch, YDS	8	
Tape Measure, YDS	3	

Module 7 In Your Kit:	Bag #	You Provide:
Aluminum Foil	2	2-liter Bottle
Balloon, large, 9", YDS	3	Aluminum Pie Pan
Baking Soda, 2 tsp	2	Egg, hard-boiled
Beaker, 100 mL	8	Egg, raw
Fishing Line, YDS	5	Chair, YDS
Index Card	1	Coin
Limestone Rock, YDS	9	Heavy book
Marble	5	Small Piece of Paper
Pencils	1	
Rubber Stopper	3	
Safety Goggles	6	
Scissors	1	
Stopwatch, YDS	8	
Straw, large, YDS	7	
Tape, clear, YDS	1	
Tape Measure, YDS	3	
Vinegar	In Box	

Module 8 In Your Kit:	Bag #	You Provide:
Masking Tape	1	A Helper
Pencil	1	Basketball, YDS
Rubber bands, large	1	Bathroom Scale
Ruler	1	Hand Weight, 1 pound
Safety Goggles	6	Stairway
Stopwatch	8	
String	3	
Tape, clear	1	
Tape Measure	3	
Tape Measure, YDS	3	
Tennis Ball, YDS	5	

Module 9 In Your Kit:	Bag #	You Provide:
Balloon, large, 9", YDS	3	1 or 2 Liter Soda Bottle
Candle, tealight	5	A Helper
Matchbook	3	Bowl
Rice	2	Glass bottle
Rocks, med-sz	9	Plastic Wrap
Safety Goggles	6	Pot
Scissors	1	Sidewalk
Stopwatch	8	Water
Tape, clear	1	Wooden Spoon
Tape Measure	3	

Module 10 In Your Kit:	Bag #	You Provide:
Batteries for Flashlight, D-Cell	6	Bowl, opaque, YDS
Construction Paper, black, 1/4 sheet	1	Cake Pan
Flashlight	6	Dark Room
Mirror, 4x6"	3	Glass Pan
Mirror, small (remove plastic covering before use)	3	Milk
Pen	1	Quarter, YDS
Prism, YDS	3	Spoon
Protractor	1	Sunny Window
Red Crayon	3	Water
Ruler	1	Water, YDS
Safety Goggles	6	
Scissors	1	
Stopwatch	8	
Tape, clear	1	
Thermometers, plastic backed, 3	8	
White Paper	1	
White Paper, YDS	1	

Module 11 In Your Kit:	Bag #	You Provide:
Aluminum Foil	2	
Balloons, large	3	A Clear Glass
Battery, 1.5V, D-Cell	6	Pliers
Electrical Tape	6	
Nail, 3 inch	3	
Paper Clip, large	1	
Safety Goggles	6	
Scissors	1	
Tape, clear	1	
Thread	3	
Wire, insulated	6	

Module 12 In Your Kit:	Bag #	You Provide:
Alluminum Pie Pan	5	Bowl, large
Bag, zip close, 6x6"	7	Freezer, YDS
Chalk, YDS	3	Pan with Lid
Cornstarch	2	Pot Holders
Limestone Rock, YDS	9	Spoon
Measuring Cup	7	Stove
Measuring Spoons	2	Water
Pipette, YDS	7	Water, YDS
Pumice (lava rock), YDS	9	
Safety Goggles	6	
Salt	2	
Styrofoam Plates, YDS	5	
Vinegar, YDS	In Box	

Module 13 In Your Kit:	Bag #	You Provide:
Balloon, large, 9"	3	1-Liter Plastic Bottle
Bag, zip close, 10x13"	7	Bowls, 2
Baking Soda	2	Empty Soda Cans, 2
Index Card, YDS	1	Frying Pan
Measuring Spoons	2	Ice Cubes
Plastic Cup, YDS	7	Stove
Rubber Band	1	Sunny Window
Safety Goggles	6	Tongs
Thermometer	8	Water
Vinegar	In Box	
Water Bottle with Lid	7	

Module 14 In Your Kit:	Bag #	You Provide:
Iodine	4	Juice, Apple
Funnel, YDS	7	Juice, Lemon
Measuring Cup	7	Juice, Grapefruit
Plastic Cups	7	Juice, Orange
Ping-Pong Ball, YDS	5	Marshmallows, YDS
Pipette	7	Quart Jar
Toothpicks, YDS	2	Raisins, YDS
Vitamin C Pill	2	Water

Things You Need to Know

Thank you for choosing our supplies kit to enhance your study through the *Science in the Ancient World* text. So that you might find the kit easy to manipulate, there are a few things that you will need to know.

First, you will find a chart of all items within the kit listed alphabetically. It lists the quantity of each item, where it is found in the kit, and in which lesson the item is used. It is to be used for easy location of any item regardless of which lesson you are studying. You will also find our office item numbers in case you need to phone for replacements of any items.

Second, you will find a lesson-by-lesson break down of what you need for each individual lesson, where it is found in the kit, and the items you will need to provide. Every effort has been made to provide all reasonable items within the kit so that your study is not hampered by an absence of supplies, however, some things are unreasonable for us to provide. This will be obvious as you proceed.

Third, the best way to locate necessary items as you progress through the course is to always return supplies to their original bag when the experiments are completed. Several items will be used multiple times throughout the course and the **Bag #** will be continually referenced.

Enjoy your study!

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. Caution notices and antidotes for chemicals are listed in these instructions. 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 pipets 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.

Disposal of Chemicals

None of the chemicals in this kit pose any significant environmental hazard. However, you should still use caution when you dispose of your waste chemicals. The waste materials from each experiment should be placed in a small plastic container, like a pill vial or film canister, and the container should be placed in a sealable bag. The contained material may then be placed in the garbage for disposal in a land fill. Never mix waste products from two different experiments in the same waste container.

Crushing and Grinding Chemicals

For some activities you will need to crush a solid chemical into a fine powder. One method is to wrap the solid in a cloth, tap the object with a hammer to break it into smaller crystals. Keep your fingers out of the way. Then pour the pieces into a clean dry jar lid, and grind them into a fine powder using the back of an old spoon.

Notebook

Even if you have a great memory, it helps to keep a written record of what you do. Include how you prepared, what steps you did, and what you observed during and after the activity. Good records often include notes, drawings, graphs, and even photographs.

Distilled Water

Unless the directions call for a specific type of water, it is best to use distilled water if possible.

**Please check your order for any shortages or damaged items upon receipt.
Contact us at Nature's Workshop Plus, Inc. for replacement items.**

Please observe all safety precautions when doing experiments.