

Who Can Use Science Experiments in a Bag?

Below are some ideas for using *Science Experiments in a Bag*.
Get creative and think of some on your own. Have fun!

Missionary Families

Homeschool Families

Co-Op School Groups

Schools

Babysitters

Grandparents

Teachers

At Home

NOTE TO THE PARENTS

The experiments in this book are safe with appropriate supervision. Some require help from an adult. Children can carry out other experiments alone, if they are old enough. Look over the instructions first to see if your child may need supervision. Be sure your children who can read know which activities you do not want them to try by themselves.

Young children may not fully understand that bad things can happen to them. We don't want to scare our children away from science, but we must:

- Provide supervision when it is appropriate--for example, when using heat or mixing chemicals
- Teach children not to taste anything unless they know it is good for them and is sanitary
- Insist children wear goggles whenever fire or splatter could endanger eyes
- Teach children to follow warnings on manufacturers' labels and instructions
- Keep toxic or other dangerous substances out of the reach of young children
- Teach children what they can do to minimize the risk of accidents; and
- Teach children what to do if an accident occurs.

Results

Each experiment comes with an experiment log to record all your findings. We suggest putting all the logs in a binder to keep them together so they can be a record of what you have done. Keeping records is an important part of science. It helps us remember what didn't work as well as what did work. Someone asked Thomas Edison if he was discouraged after trying thousands of experiments, without results, to make the incandescent light bulb work. He replied:

“Results! Why, I have gotten a lot of results. I know several thousand things that won't work.”

So before starting, get a binder to store your experiment observations. If your children cannot write yet, they can draw pictures of what they see, or you may want to take notes for them.

We should remember, too, that seeing isn't the only way to observe. Sometimes we use other senses; we hear, feel, smell, or taste some things (children should be careful, of course, about what they taste).

Science can be learned in many places and environments and just as easily from everyday experiences as from formal projects and experiments. We can get our children interested in science with simple toys, books, and objects around the house and have fun while we're doing it.

Every experiment log sheet contains:

- 1) Experiment description, experiment type, supplies provided, and supplies needed
- 2) Experiment instructions
- 3) Observation questions
- 4) Experiment notes

So, pick out some experiments, find something that looks like fun, and go for it!

SCIENCE EXPERIMENT CATEGORIES


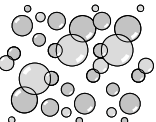

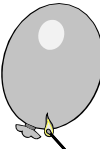
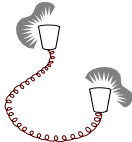

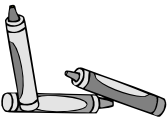


Below is a list of categories for each experiment.
It will also tell you if the experiment can be done inside our outside.



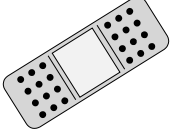
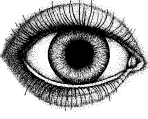


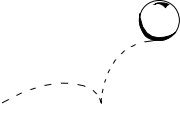
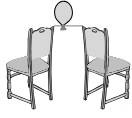



	INSIDE OR OUTSIDE	CHEMISTRY	HUMAN BODY	GENERAL SCIENCE
1. Antifreeze	IN	X		
2. Big Bubbles	OUT	X		
3. Blob	IN	X		
4. Burning Balloons	OUT	X		
5. Calling Long Distance	IN or OUT		X	
6. Chemical Reaction	IN or OUT	X		
7. Color Confusion	IN		X	
8. Copper Attraction	IN	X		
9. Cork It	OUT	X		
10. Crayon Creations	OUT	X		
11. Dancing Peanuts	IN	X		
12. Effects of Light	IN		X	
13. Eye Parts	IN		X	
14. Finger the Culprit	IN or OUT		X	
15. Five Senses Game	IN		X	
16. Ping Pong Pop	IN or OUT			X
17. Rocket Reaction	IN or OUT			X
18. Sensitivity	IN		X	
19. Siphon It	IN or OUT			X
20. Smelly	IN		X	
21. Sparky Sparker	IN			X
22. Spinning Around	IN			X
23. Static Electricity	IN			X
24. Static Roller	IN			X
25. Taste Test	IN		X	
		10	8	7




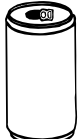
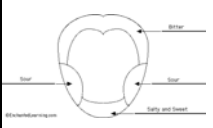
We color-coded the cardstock used for the experiment logs, to make it easy when filling the experiment kits. **Chemistry** experiment logs are printed on **TAN** cardstock, **Human Body** experiment logs are printed on **ORANGE** cardstock, and **General Science** experiment logs are printed on **YELLOW** colored cardstock. Color-coding the experiment logs make it easy to file them in the student's science binder.

EXPERIMENTS AT A GLANCE

Below is a list of the experiments in alphabetical order. We included a description of each experiment, area of science, and general supplies needed. Please note that ALL the experiments below require a copied experiment log and answer sheet. Some of them, but not all, have some master graphics that will need to be copied.

	<p>1. Antifreeze Area of Science: Chemistry Description: Learn how salt makes it harder for water to freeze. General Supplies Needed: paper cups, salt, plastic spoon, sandwich bag, copies</p>
	<p>2. Big Bubbles Area of Science: Chemistry Description: Make your own bubble frame and make some big bubbles! General Supplies Needed: kite string, straw, pie tin, plastic cup, copies</p>
	<p>3. Blob Area of Science: Chemistry Description: Learn how to make plastic strong and moldable, and discover how molecules move. General Supplies Needed: borax, paper cups, craft sticks, snack bags, copies</p>
	<p>4. Burning Balloons Area of Science: Chemistry Description: Find out how you can hold a flame directly under a balloon and not pop it! General Supplies Needed: balloons, copies</p>
	<p>5. Calling Long Distance Area of Science: Human Body Description: Making homemade phones to learn about sound waves and how sound travels. General Supplies Needed: plastic cups, string, paper clips, copies</p>
	<p>6. Chemical Reaction Area of Science: Chemistry Description: Learn how to test if something is an acid or a base using cabbage juice. General Supplies Needed: baking soda, sandwich bags, coffee filters, wax paper, paper cups, copies</p>
	<p>7. Color Confusion Area of Science: Human Body Description: This experiment will try to trick your brain. General Supplies Needed: crayons, copies</p>
	<p>8. Copper Attraction Area of Science: Chemistry Description: How can you clean a dirty, old penny and make it look new? General Supplies Needed: dirty pennies, cups, salt, steel nail, paper towel, copies</p>
	<p>9. Cork It Area of Science: Chemistry Description: Explain how mixing vinegar and baking soda can cause enough pressure to pop a cork. General Supplies Needed: empty water bottle, baking soda, tissue paper, cork, copies, plastic sandwich bags</p>

	<p>10. Crayon Creations Area of Science: Chemistry Description: How heat changes a solid to a liquid, and then by cooling the liquid, how it changes back into a solid. General Supplies Needed: wax paper, aluminum foil, broken crayons, string, copies</p>
	<p>11. Dancing Peanuts Area of Science: Chemistry Description: What happens when you add peanuts to baking soda and vinegar? General Supplies Needed: baking soda, plastic sandwich bags, peanuts, copies</p>
	<p>12. Effects of Light Area of Science: Human Body Description: Learn what effects light can have on your skin color. General Supplies Needed: band aid, copies</p>
	<p>13. Eye Parts Area of Science: Human Body Description: Learn all about the parts of your eye and their purposes. General Supplies Needed: copies</p>
	<p>14. Finger the Culprit Area of Science: Human Body Description: Learn how to collect and match fingerprints. General Supplies Needed: baby powder, paint brush, black paper, sandwich bag, copies</p>
	<p>15. Five Senses Game Area of Science: Human Body Description: This is a game that will help you tune in to your senses. General Supplies Needed: contact paper, copies, cardstock</p>
	<p>16. Ping Pong Pop Area of Science: General Science Description: Use your breath to play a game. General Supplies Needed: ping pong ball, plastic cup, copies</p>
	<p>17. Rocket Reaction Area of Science: General Science Description: Learn how unbalanced forces produce motion. General Supplies Needed: straw, string, balloons, copies</p>
	<p>18. Sensitivity Area of Science: Human Body Description: Discover the areas of your body that have all different levels of sensitivity. General Supplies Needed: wooden toothpick, blindfold, copies</p>
	<p>19. Siphon It Area of Science: General Science Description: Learn how a siphon works. General Supplies Needed: plastic cups, plastic tubing, copies</p>
	<p>20. Smelly Area of Science: Human Body Description: Identify substances by smell. General Supplies Needed: film canisters, stickers, copies</p>

	<p>21. Sparky Sparker Area of Science: General Science Description: Make your own tiny lightening by learning about electrons and how they spark. General Supplies Needed: stryofoam, pie tins, copies</p>
	<p>22. Spinning Around Area of Science: General Science Description: How can heat make a spiral turn? General Supplies Needed: paper plate, pencil, copies</p>
	<p>23. Static Electricity Area of Science: General Science Description: How can electrically charged objects attract or repel things around them? General Supplies Needed: paper, ping pong ball, nylon comb, copies</p>
	<p>24. Static Roller Area of Science: General Science Description: Watch a soda can race across the floor by using static electricity. General Supplies Needed: clean and empty soda can, balloon, copies</p>
	<p>25. Taste Test Area of Science: Human Body Description: Where do I taste different flavors on my tongue? General Supplies Needed: cups, straw, tea bag, sugar, salt, sandwich bags, copies</p>



Teacher #1

"I love using these **Science Experiments in a Bag** kits – they are making my job so much easier!!



Teacher #2

"You are telling me! I love them too. Everything we need is in the bag and I don't have to go shopping!"