



weather guidebook

Are you curious about the weather? Then come along! Let's do the experiments in this kit together to learn all about it!

In this guidebook, you will see a lot of things that you already recognize. But there are so many things left to discover about them! The pictures will guide us in doing our experiments and projects. And whenever you see a Try It box, you will see more ideas for other exciting experiments.

Inside the kit, you will also find a color Knowledge Wheel. You can quiz yourself with it to see if you remember all the things that you discovered while doing your experiments.

And now, let's begin!



Instructions for Parents, Adults, and Children

Caution! Individual parts of this kit are designed with sharp points, corners, or edges. There is a danger of injury. We reserve the right to make technical changes. Keep the experiment kit out of the reach of small children.

Dear Parents and Adults,

This experiment kit is designed for children ages 5 and up. For each experiment, first ask your child the question at the beginning of the experiment. Then present the various pictures to him or her as possible answers. In this way, your child can start to develop ideas about how to explain everyday experiences. Next, your child can follow the pictures to do the experiment mostly by him or herself, to test his or her ideas. That will let your child discover firsthand the answer to the question posed at the beginning. Finally, read your child the answer summary at the end of the experiment to confirm or correct his or her own conclusions.

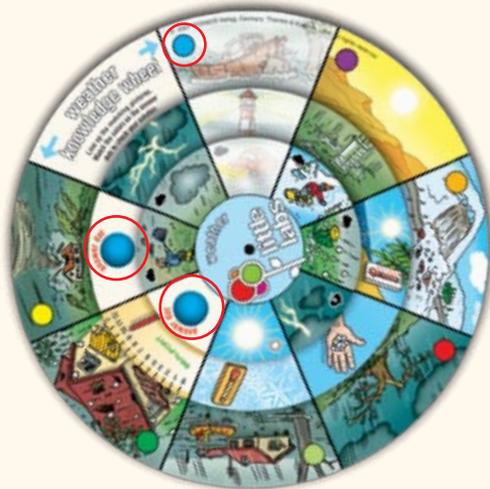
Because the curiosity and powers of comprehension of children at this age are often more fully developed than their manual skills, your assistance will sometimes be needed. Support your little researchers when they need it. If an experiment doesn't work correctly, encourage your child to try it again.

+ Please be sure to provide the children with any extra materials not contained in the box. These are designated with a red plus sign.

Spanish language instructions are available online at: www.thamesandkosmos.com/littlelabs

Knowledge Wheel Instructions:

Place the three disks on top of one another, ordered according to their size, and secure them together with the supplied brass fastener. Line up the matching weather pictures! Use the two answer dots to check the result. They have to be the same color as the dot on the outermost disk. You can see an example of a solution here:



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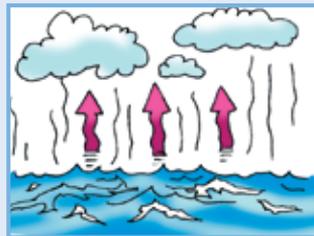
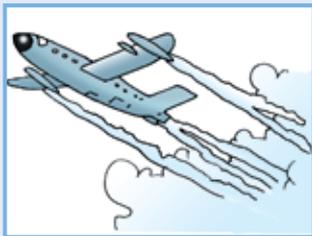
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Experiment 3: Where do clouds come from?



Or do you have other ideas?

Figure it out like this:

dirt



small plant with root



small cup of water



rubber band



plastic wrap

1



2



3



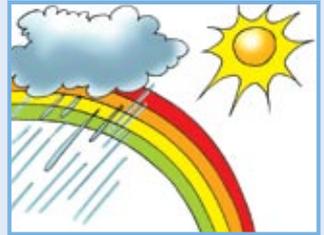
Answer:

You have created a miniature world. The water forms droplets on the plastic wrap, which fall back down to the Earth again.





Experiment 6: What creates a rainbow?



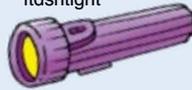
Or do you have other ideas?

Figure it out
like this:

small mirror



flashlight



glass bowl with water



white paper



tape

