

Make Rain in a Bag!

“Rain, rain, go away”... but not yet! Help your budding scientist observe one of nature’s most intriguing phenomena. This experiment lets young learners explore the water cycle long before they can define the words precipitation, evaporation, and condensation. They’ll delight in watching the “clouds” form and “rain” fall in the bag. Be sure to connect what they see in the bag with what they see in nature!

What You Need:

- Zippered sandwich bag
- Half cup of dirt (potting soil, backyard dirt, etc.)
- Plant mister
- Tape
- Window



What You Do:

Note: Plan to work on a tray, newspaper, or a plastic liner since the assembly can get messy!

1. Ask your child to spoon the dirt into the sandwich bag.
2. Let your child generously “mist” the dirt inside the bag. The dirt needs to be moist, but not muddy.
3. Help your youngster zip the bag tightly shut.
4. Tape the bag in a sunny window.
5. Observe!

What’s Going On? Watch the bag! It will become cloudy as the moisture evaporates and forms a foggy cloud inside the bag. Depending upon your specific conditions (where the window is, how much sunlight is available, outside temperature at the window) this could take two to three hours, or could take overnight. Once the “cloud” inside the bag can hold no more moisture, your child will notice “rain” coming down the inside walls of the bag. Open and gently mist the bag again, re-tape to the window, and watch the whole cycle repeat itself.

Observing and predicting are two key skills that help your child become a more focused thinker. Extend his or her thinking by preparing several bags and taping to windows on opposite sides of the house. Also, let your child predict and then observe what happens when more or less moisture is misted into the bag.