

WEATHER IN A JAR

3 SCIENCE EXPERIMENTS



INSTRUCTIONS

SNOWSTORM IN A JAR

- 1** Add your baby oil to the jar (fill about 3/4 of the way full).
- 2** Mix white paint with a bit of water. (A few squirts of white paint with about 1/4 - 1/2 cups of water). The exact measurements don't matter much here as you just want to have a thin water/paint mixture. This is a great time to test out a hypothesis - what happens if you add equal parts paint/water or more paint to water ratio?
- 3** Add your white paint to the baby oil.
- 4** Add glitter for some fun visual effects (optional).
- 5** Drop your Alka-Seltzer tablet one at a time in the jar. Watch as the white paint/water mixture bubbles up from the effervescent effects of the Alka-

SUPPLIES

SNOWSTORM IN A JAR

Water

A Jar

White Paint

Baby Oil

Glitter (optional, just pretty to watch swirl around)

Alka-Seltzer Tablets

RAIN CLOUD IN A JAR

Shaving Cream

Water

A Jar (we recommend a wide mouth shallow one as shown)

Pipette

Blue Liquid Watercolors*

*You can also use water with food coloring to experiment with different colors and create a rainbow cloud and rain

TORNADO IN A JAR

A Jar

Water

Dish Soap

Glitter (optional)

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INSTRUCTIONS

RAIN CLOUD IN A JAR

- 1 Add water to your jar leaving room at the top for shaving cream.
- 2 Squirt a few big blobs of shaving cream to fill the top of the jar.
- 3 Add your liquid watercolor in a bowl and suck up a bit with a pipette. Drop the liquid into the shaving cream.
- 4 Watch and observe the “rain” or liquid watercolor seep down the shaving cream cloud.

TORNADO IN A JAR

- 1 Pour water into your jar almost to the top.
- 2 Add a small drop of dish soap. Not too much or else there will be too many bubbles and it will be hard to see the tornado.
- 3 Add some glitter (optional but cool to see it swirl).
- 4 Cap your jar and make sure it's tight!
- 5 Shake your jar vigorously. First we shook it up and down, then side to side. Set the jar down and watch



What's the Science?

Snowstorm: Since water doesn't mix with oil, you can see the droplets of white paint that bubble up as “snow” appear.

Rain Cloud: As you drop your liquid watercolors down the shaving cream raincloud it saturates the cloud, making it heavy, and rain starts falling down. Just like in a real raincloud! Pretty cool to see the visual effects.

Tornado: Swirling or spinning what's in the jar (glitter and dish soap) creates a vortex like a tornado and centripetal force occurs which pulls all the elements inwards towards the center of the jar creating a tornado effect.