

THE AMAZING ANTI GRAVITY EXPERIMENT

- 1. Try pouring your slime back and forth between the original Barrel you put it in and an empty one. You will start to notice a very strange effect.

 Once you start to pour the goo you just can't stop it flowing as it crawls up and over the sides of the Barrel in a "self-siphoning" action. Make sure that you keep the Barrel you are pouring from higher than the one you are pouring into.
- 2. As the slime continues to flow, you will find that you hardly need to pour it at all...it will climb up and out of the Barrel on its own. It's like a living blob that might take over your house! Gross!

IMPORTANT NOTE: If you get so caught up in the amazing effect you are witnessing and forget to aim well and spill your slime, don't worry it easily washes off hands, but be careful as washing it off clothes, carpets and furniture is very difficult — put down some newspaper before you start experimenting and wear old clothes is our advice for an easy life!

When you have finished playing with your slimy mess, get rid of it in the bin. Don't pour it down the drain or sink unless you want to have some very strange plumbing problems!

What's happening in this experiment: The goo that you have just made is actually an extraordinary polymer specially formulated for this kit to act in an unusual way. The big science words for what you have just witnessed are that the Slime Powder combines sponge-like properties of polyacrylamide polymers and the molecular linking properties of acrylic co-polymers. Confused? In plain English it means that your Slime Powder acts like a sponge and has soaked up lots of water and linked the molecules into long chains. Basically, you will see that it clings to itself and is really springy, so when you pour it from one Barrel to another, its molecules cling to each other, pulling the rest of the slime along.

LET'S MAKE DOZE-FILLED WORMS.

- 1. Pour cold tap water into the Worm Pool (I) until it is about 3/4 full.
- **2.** Using the Measuring Spoon **(h)** place ½ a scoop of the Worm Setting Powder **(8)** into the water and stir until all the Powder has dissolved.
- 3. Unscrew the lid of the Worm Goo Dispenser (k) and pour Worm Goo inside until almost full.
- 4. Add 20 drops of whichever Colouring you wish.
- **5.** Use the handle end of the Measuring Spoon to mix the Goo and Colouring together.
- 6. Replace the Dispenser lid and fix it back into its holder in the Slime Lab.
- 7. By turning the Worm Pool Spinner (m), get the Worm Pool Spinning.
- 8. Now squeeze the Worm Goo Dispenser which will drop a stream of Goo into the water NOTE: make sure you remover the end cap from the Dispenser nozzle.
- **9.** Use the Tweezers **(n)** to scoop your mutant worms from the Worm Pool. Give them a squeeze and see what happens.
- 10. Why not add your creation to your barrels of slime?

What's happening in this experiment: when the Worm Goo meets the Setting Powder solution, a chemical reaction forms. Molecules in the Goo link with molecules in the solution forming a gel. A gel is a soft substance that has the properties of both liquids and solids. The outer edges of the Goo stream react with chemicals in the Powder. The calcium ions in the Setting Powder solution cross-link with the polymers in the Goo, attaching them to each other at many points forming the outer gel skin of your worm shape. The inner parts of the worm are not in contact with the Powder solution so they remain liquid.

AFTER YOU HAVE FINISHED PLAYING

As the slime is very sticky it is important to clean your Slime Lab as follows:

- 1. Flush out the pipes with tap water to prevent the slime drying out and clogging them up. Fill the Water Mixer with tap water and pump it through into the Slime Mixer.
- 2. Unscrew the Slime Mixer and wash the parts with warm soapy water.
- 3. Empty the Worm Goo Dispenser, wash with warm soapy water and leave to air dry.
- 4. IMPORTANT: NEVER POUR THE SLIME, SLIME POWDER OR THE MUTANT WORMS DOWN THE SINK. ALWAYS DISPOSE OF THEM IN HOUSEHOLD WASTE.



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