

# Children's University Club Challenge

ESSEX  
2020

A YEAR OF  
SCIENCE +  
CREATIVITY

## Quick Time Building with Magic Slime!

Here's a fun way to make slime using only a few ingredients! This is sometimes called 'Non-Newtonian Slime'. A **non-Newtonian fluid** is a **fluid** that does not follow Newton's law of viscosity (this means it stays runny, even if you press it or squash it). In **non-Newtonian fluids**, viscosity (or how runny it is) can change when under force to either more **liquid** or more **solid**. Ketchup, for example, becomes runnier when shaken and is an example of a **non-Newtonian fluid**.



You will need –

- Cornflour
- Water
- Food Colouring (optional)
- Large bowl or tray

**Step 1:** Combine 2 cups of cornflour with 1 cup of water and mix until it makes a liquid gloop.

**Step 2:** When you pick up the gloop, keep it moving! It should start to turn solid in your hand. Now is the time to build your sculpture! What shapes or structures can you make? Keep your mixture moving in your hand.

**Step 3:** Now stop moving your hand and see what happens! Your mixture will slowly start to melt and become a liquid again!

**Step 4:** Try again. How long can you keep your sculpture solid for? How many different models could you make in one minute?

**Step 5:** Leave your mixture in the bowl until it settles. What happens if you hit it with something (a wooden spoon works well)? Is it a liquid or a solid?



You can get a rough idea of what consistency works perfectly, and what your gloop should look like at - <https://www.youtube.com/watch?v=wsde0YG9NrK>

You can collect 1 CU credit for completing this task. To claim your credits, please complete and return your Club Challenge Reflection Diary and submit it with evidence of your challenge.

