



# Making Silly Putty Instructions

# Silly Putty: a Solid or a Fluid?

- You will make three batches of silly putty, each with a different concentration of borax (high, medium and low concentrations).
- Explain what effect you think the different borax concentrations will have. How will the material properties change? What do you think the borax does to the glue to form silly putty?
- In your groups, gather the following materials:
  - 2 containers
  - 3 spoons
  - 3 plastic bags



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1. In one container, mix together 1 ounce warm water with  $\frac{1}{4}$  teaspoon borax.
2. In the other container, mix together 2 ounces glue and 2 ounces warm water until you have a uniform solution.
3. Slowly pour the borax mixture into the glue mixture while stirring. Be sure that all borax is transferred to the glue solution.
4. When the solution starts to thicken, mix it with your hands instead of the spoon. Continue to mix until a uniform solution is achieved and **NO** water is present.
5. Store in a plastic bag and label “low concentration.”
6. Repeat steps 1-5 two more times, with 1 teaspoon of borax (medium concentration) and 2 teaspoons borax (high concentration), respectively.

# Silly Putty: a Solid or a Fluid?

**Explore the unique properties of silly putty  
and note your observations!**

- How is silly putty different from springs?
- Explain whether your hypothesis was correct about how the borax concentrations changed the material properties of the silly putty. Did you see any differences while making the three concentrations?
- Discuss whether you think silly putty is an elastic solid or a viscous fluid. Why?