



## Enzymes and Jell-O

**Problem:** How do an enzyme and its substrate interact?

**Materials:** Jell-O, plastic cups, canned and fresh pineapple.

### Procedure:

1. Label three small plastic cups A, B, and C. Write your names on the cups.
2. Prepare Jell-O according to package directions. Put one teaspoonful of pineapple from the container marked "A" into the cup labeled "A."
3. Put one teaspoonful of pineapple from the container marked "B" in to the cup labeled "B."
4. Cup C has no fruit added to it. Add about 2 ounces of prepared Jell-O to each of three cups and refrigerate overnight.
5. Check each cup of Jell-O the next day and record your observations.

### Observations:

- Describe Pineapple A (Is it fresh or canned? How can you tell?):
- Describe Pineapple B (Is it fresh or canned? How can you tell?):
- Cup A
- Cup B
- Cup C

### Conclusions:

1. Which cup is the control for the experiment? (Remember, the control is that part of the experiment that has no variable, it is not change, and should have the expected or "normal" result).
2. Why did you have a control for this experiment?
3. There are only three substances in this experiment: Jell-O, Pineapple A, and Pineapple B. Which was manipulated (or changed in some way) in this experiment? How is it different from the control?

