

Name: _____

PRESERVED FRUIT

The conditions in certain environments, such as bogs, can help preserve organic matter. In this activity, you'll design an experiment to preserve another type of organic matter—an apple.

STEP 1: MAKE PREDICTIONS

1. What do you think would happen to an apple slice if it were left exposed to the air?

2. How do you think the apple slice would be affected if it were coated in one of the following liquids: acids, bases, or neutral liquids?

3. What types of liquids do you think would best prevent the apple from reacting to the air: acids, bases, or neutral liquids?

- Acids have a pH less than 7. They taste sour. Lemon juice and vinegar are acids.
- Bases have a pH greater than 7. They often taste bitter and can have a slippery texture. Milk of magnesia and baking soda mixed with water are examples of bases.
- Neutral liquids have a pH around 7. They don't have properties of acids or bases. Pure water is a neutral liquid.

STEP 2: PLAN AN EXPERIMENT

Design an experiment that will compare how different liquids affect how an apple slice reacts when it is exposed to the air. Think about what materials you will need. What factors will you change in your experiment? Which factors will you keep the same? What type of data will you collect? Describe the steps of your experiment on a separate piece of paper.

STEP 3: CONDUCT YOUR EXPERIMENT

Gather the necessary materials and carry out your experiment. Record the data you collect.

STEP 4: DRAW CONCLUSIONS

Summarize the results of your experiment below. Use data from the experiment to support your conclusions.

STEP 5: ANALYZE IT

How does your experiment support what you learned in "Mystery of the Bog Bodies" about how bodies are preserved in bogs?