

a WOW Lab

BLUEPRINT

Recycled Paper

Lesson Logistics

Learning Outcomes

Kindergarten - Grade 3	Grades 4 - 6
Properties of objects and materials	Properties and changes of materials
Materials and our senses	
Liquids and solids	

Class Organization

Divide the students into groups of three or four.

Ensure that each group has a *Student Handout*.

Notes

Access to a stove or hot plate is needed to make pulp from fruits or vegetables. Alternatively, a slow cooker may be used, but will take longer.

Ideally, each group should be paired with a second group, with one group making the paper from recycled newsprint and the other group making the fruit/vegetable paper. The groups can compare and contrast their final products and the methods used to create them.

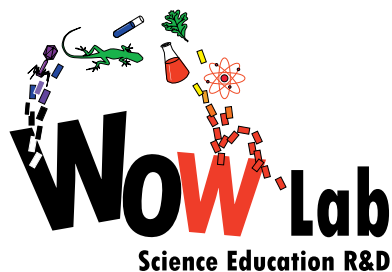
Prior to beginning the activity, the students may be assigned a role in the group. Ensure that the students understand their individual responsibilities before starting the activity. The following roles are recommended:

A **reporter** to read instructions to the group and present information to the class; a **recorder** to write down information on the activity sheet once discussed by the group; a **gopher** to collect and return materials; an **experimenter** to carry out the steps in the procedure following the reporter's instructions.

Recommended procedure:

Have the reporter read the questions on the *Student Handout*. Allow time for discussion between group members and let each group formulate a hypothesis. Have the recorder write down the hypothesis and ask each group to present their hypothesis to the class.

Have the gopher from each group collect the materials needed to carry out Part I of the *Activity Instructions* section. Have the reporter in each group read through the instructions for Part I. The experimenter will then perform Part I of the procedure.



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After completion of Part I, arrange a class discussion for students to reflect on the procedure.

Perform Part II and Part III so that each group has a piece of recycled paper. Have the reporter read out the procedure question and results questions. Allow time for the groups to discuss and record their answers.

Have each group present their paper to the class. Encourage the students to provide explanations for the potential advantages and disadvantages of the different types of paper. The students can also discuss alternatives to the papermaking process.

Further Exploration

Have the class think about other materials that they could make paper with and consider what steps would be necessary to make this paper and why. The students could then attempt to make this paper.