

Mouse House Portfolio

Directions: Pretend you have a pet mouse named Mickey. He lives in your backyard and is not allowed in your house. When it rains, Mickey gets wet. When it hails, Mickey gets a headache. You decide to protect Mickey by building a small house for him. The roof of the house needs to be made of a material that will protect Mickey.



Predict

What do you predict might be a good material to use for the roof of Mickey's house? Why?

Plan

You will need to choose a material to use for Mickey's roof. You will test different materials for properties that you think the roof should have. Before you test, you need a plan. Answer each question. Then, create a plan for testing the materials.

1. Choose 5–7 materials that you want to test. Possible roof materials include paper towels, aluminum foil, a plastic bag, a towel, cardboard, or paper.
2. What two properties do the materials need to have in order to protect Mickey from the rain and hail?
3. How will you test your materials for these properties?

4. How will you keep track of your results? How will you record your observations?

5. Write a plan. List all of the materials and tools you will need. Be sure to write the steps you will follow to test each roof material.

Investigate

Follow the steps in your plan. Test each of your materials for the two properties that you chose in your plan. Record your observations in the tables as each material is tested.

Note: You will use the third column in the table in the next part of the assignment.

Property Test 1

Property:

Material	Observations	Statement
Ex: paper towel	Ex: The paper towel ripped.	Ex: Mickey will get wet. I cannot use the paper towel.

Material	Observations	Statement

Property Test 2

Property:

Material	Observations	Statement

Conclude

Analyze the testing data. Decide which material is best for building Mickey's roof. Then, state your conclusion. Be sure to use evidence to explain why you think that material is best.

1. Carefully look at each test result in the tables. Think about what your observations tell you. Write a statement for each test. Say what would happen to Mickey if you used this material for your roof. Use the last column in the tables above.
2. Which material is best for building Mickey's roof?
3. Write your conclusion statement. Explain why you think the chosen material is best for building Mickey's roof.