

Chapter 1 - Scientific Method (Pg. 10)

The Nature of Science

Name _____

How is a controlled experiment performed?

Question 1: What is the problem you are trying to solve?

Question 2: Form a hypothesis: What is the prediction you want to test?

Question 3: Test your hypothesis. How will you use the computer model to test your hypothesis? What steps will you follow? What data will you record? Conduct your experiment and record your results.

Question 4: Analyze the results of your experiment. Explain any patterns you observed.

Question 5: Draw a conclusion. Did the results of your experiment support your hypothesis? Why or why not?

Question 6: How does the material of the jacket affect heat absorption?

Question 7: Describe the strengths and weaknesses of the computer model you used in the experiment. What other parameters could you use in such an experiment to determine the effect of color on heat absorption?

How is a controlled experiment performed?

Jacket Color	Wool °C	Nylon °C	Denim °C
Black			
Blue			
Green			
Yellow			
White			

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