Name Class Period 

**Scientific Method: Which jacket retains the most heat?**

**Assignment**: Answer questions about jacket color using the scientific method

**Is this for a grade?** YES! You are **required** to **type up your answers on this word document** and **attach it** to an email.

Go to: <http://goo.gl/SVjUrt> and define:

1. Define hypothesis:



1. What format is a hypothesis written in? 
2. Give at least 1 example:



Go to: <http://goo.gl/aVpkMq> and define:

1. Independent variable



1. Dependent variable



1. Constant variable



Type into URL bar: <http://goo.gl/1p9rbN>

Read the first paragraph. \*choose coat type WOOL\*

1. What **question** are you trying to answer?



1. Name the **5** steps of the scientific method



1. Name the **independent variable** (remember it is the one that **“I”** am **changing**)



1. Name the **dependent variable** (remember it is the one that is **measured**)



1. Name at least **3 constants** (what stays the **same** in each experiment)



1. **Predict**: which color will be the warmest?



1. Write a hypothesis:



**IF** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (I change the coat color to be **lighter or darker** color)

**THEN** \_\_\_\_\_\_\_\_\_\_\_ (the temperature will **increase or decrease**)

1. Test your hypothesis. Test each of the different colored coats
2. Results

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Trial | Type of coat | Coat color | Coat 1Temperature  | Coat 2Temperature | Coat 3Temperature | Average (add up the 3 temps and divide by 3 |
| 1 | Wool  |  Black  |  |  |  |  |
| Wool  | Green  |  |  |  |  |
| 2 | Wool | Blue  |  |  |  |  |
| Wool  | White  |  |  |  |  |
| 3 | Wool | Yellow |  |  |  |  |
| Wool | Green  |  |  |  |  |

1. Analyze: Which color coat had the warmest temperature average?



1. Analyze: Why is using the average temperature of the coat more reliable than using just one coat temperature?



When you have completed the lab, save this paper as: **Your Name. Class Period. Teacher Name**

Email this paper as an attachment from your student WCPSS account. Email to: \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

The subject should be: Scientific. Class Period. Teacher

Email Body: Scientific Method practice, Your Name