***Year 8 Science - Practical 1***

**The Flammable Properties of Different Materials**

**Overview**

In this practical we will be examining the flammability of materials inclusive of Wool, Cotton, Polyester and Polypropylene. We will be testing our background knowledge and research results to determine how flammable each of the fabrics is, and their suitability for use as a sling back chair or a carry bag.

**Aim** *(What is the purpose of this experiment?)*

**Hypothesis** *(What do we predict is going to happen?)*

**Materials** *(list the materials used in dot points)*

**Method** *(How was the experiment set up? Display in a diagram)*

**Answer the following questions**

What are we changing?

What are we measuring?

What will we keep the same?

**Diagram 1. Flammability Experiment Set Up**

**Method Continued** *(What steps were followed to complete the experiment?)*

**Results** *(What occurred during the experiment? Complete results in the table and state what occurred.)*

**Table 1. Time in Which the Material Was Burnt**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Time Taken to catch fire and burn completely.** | | | |
| **Test Number** | **Wool** | **Cotton** | **Polyester** | **Polypropylene** |
| **Time Taken to Catch Fire** |  |  |  |  |
| **Time Taken to Burn Completely** |  |  |  |  |

**Analysis** *(Answer the following questions)*

1. Which Material Burned the Fastest? Why?
2. Which Material Burned the Slowest? Why?
3. Did all materials catch fire and burn? Explain using the results.
4. Did you notice any errors in the experiment? Explain what they were.
5. Was the aim achieved, and was the hypothesis correct? Explain.