**Mathapults Part B**



**Important Words**

Projectile Arm

Base Fulcrum

Acute Angle Right Angle Obtuse Angle Concave

Convex Distance

Median Forces

Air Resistance

**The Scientific Method**

The Scientific Method is a way to research and explore your observations of the world around you in order to gain knowledge.

**Follow the method:**

1. Make observations
2. Form Hypotheses (the word scientists use to say predictions)
3. Conduct the experiment
4. Record the results
5. Make Conclusions

**1. Draw or write down your observations:**

What did you see happen when you fired your catapult?

**2. Make a hypothesis:**

What do you think will happen if you use a heavier projectile compared to a lighter one?

**3. Conduct the experiment:** Use something light like a pom pom then something heavier like a ball of playdoh for the projectile. Do not fire sharp or dangerous objects.

**4. Record your results:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Projectile** | **Light Object** | | **Heavy Object** | |
| **Trial #** | **1** | **2** | **1** | **2** |
| **Distance (cm)** |  |  |  |  |
| **Median (cm)** |  |  |  |  |
| **Time (seconds)** |  |  |  |  |

**5. Conclusion:**

What actually happened? Did the lighter or heavier object travel further?

We explored the mass of our projectiles but what other variables might have influenced the results of our experiment?

In what ways could you modify your catapult to influence the results of the experiment?



