**GROUP DATA SHEET**

Paper Airplanes and the Methods of Science

Your Name: Today’s Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Lab Team Roles**

*Assign each team member a role.*

|  |  |  |
| --- | --- | --- |
| **Plane**  **Number** | **Group Members**  (Student’s First Name) | **Lab Role Titles** |
| **1** |  | Director |
| **2** |  | Facilitator |
| **3** |  | Materials Manager |
| **4** |  | Technician |
| **5** |  | Participant |

**2. WHAT PLANE DESIGN DOES YOUR GROUP HAVE?**

Circle One

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sparrow  Hawk | Bald  Eagle | Dragonfly | Grasshopper | Big Brown  Bat | Flying  Squirrel |

**3. MAKE YOUR AIRPLANE!!!**

Don’t lose this Group Data Sheet-Just set it aside until your planes are complete.

Construct 3 airplanes one of each:copy paper, construction paper, and card stock.

***Write your NAME and PLANE NUMBER on your airplane.***

**4. MAKE A PREDICTION**

Which plane do you think will fly the farthest?

**5. JOB ASSIGNMENTS FOR GROUP EXPERIMENT**

|  |  |  |
| --- | --- | --- |
| **Plane**  **Number** | **Group Members**  (Student’s First Name) | **Job Assignment**  **Throw 1** |
| **1** |  | Thrower |
| **2** |  | Measurer |
| **3** |  | Measurer |
| **4** |  | Data Recorder |
| **5** |  | Helper |

**5. CONDUCT THE EXPERIMENT**

*Throw your planes and collect your data in the table below. Make sure you write the unit of measurement used.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Trials** | **Copy Paper Airplane**  **Distance (meters – m)** | **Construction Paper Airplane Distance (meters – m)** | **Card Stock Airplane**  **Distance (meters – m)** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |
| **Total** |  |  |  |
| **Average** |  |  |  |

The entire class will now share their data and interpret the results of the experiment.

**My Observations**

**Paper Airplanes and the Methods of Science**

Your Name:

**1)** Purpose of this lab:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2)** Name the plane design you tested: What animal group was represented by your plane model? (*circle one*)

Insect Bird Mammal

**3)** Name the **control plane paper** used in your class:

**4)** What unit of measurement did you use to measure length?

**5)** How far did your copy paper plane fly? \_\_\_\_\_\_-\_\_\_\_\_\_\_\_\_ How far did the construction paper plane fly?

How far did the cardstock plane fly?

**6)** Compare the distance flown by your airplaneswith the distances flown by the other plane designs.

Which of the two plane designs flew the farthest?

**7)** Name an **independent** variable tested in this experiment. (***Hint:*** think about the variables that

YOU or YOUR CLASSMATES manipulated in this activity.)

**8)** Name two additional **independent** variables that you could change on your plane that might make it fly farther.

(a) (b)

**9)** Name the **dependent** variable that you measured in this experiment.

**10)** What did you learn about being part of a team?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_