**Appendix 6**

**Paper Airplane Science**

**Step 1:** Design and construct 2 paper airplanes. Be creative!

**Step 2:** Predict which plane will fly farther.

|  |  |  |
| --- | --- | --- |
|  | Plane A | Plane B |
| List three different design features of each airplane |  |  |
| Which airplane is more likely to fly farther and why? |  |  |

**Step 3:** Design your experiment

1. Choose and mark your launching point
2. Determine how you will measure the flight path (it needs to be something you can keep consistent, such as the length of your foot, a measuring tape, a book-length, etc.)
3. Determine how many times you will launch each plane (we recommend at least 5)
4. Create a table to record your data (below is a sample)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Trial 1 | Trial 2 | Trial 3 | Trial 4 | Trial 5 |
| Plane A |  |  |  |  |  |
| Plane B |  |  |  |  |  |

1. Determine which plane flew farther in each trial. If you want to challenge yourself, determine the average distance each plane flew (total the distances of each trial and divide by the number of trials).
* Why do you think one plane flew farther than the other plane?
1. Determine how to share your results
* Create a video or a photo journal that shares your results
* Draw a sketch of the planes that includes a description of the features
* Write a report on your results (include your prediction, observations and conclusion)
1. Using what you learned, build new planes that you predict will fly farther and repeat the steps!