

What do we know about flight already? Think about things you know of that have the ability to fly.

Introduction to Flight

Vocabulary:

Force: a push or pull that causes an object's motion to change.

Gravity: the force of attraction between an object and the Earth's surface. The more mass the object has, the greater the force of gravity between the Earth and that object.

Lift: a force that goes against gravity. For something to fly, there must be enough lift to overcome the force of gravity. The lighter the object, the less lift required.

Thrust: the scientific name of the force that pushes any animal or object forward.

Birds and insects get their thrust and lift from flapping their wings. (Think of how you move to tread water and move forward in a pool)

Drag: a force that slows you down. Drag resists motion. (Think of when you try to run through water, it pushes against your motion)

What do you think will happen if the drag on a plane is larger than its thrust?



Let's explore how different shapes and sizes of wings affect the amount of drag when flying and the ease when turning.

4 Types of Wings:

- long and wide *Nix Casey*
- short and wide *Chloe Kaylee*
- long and narrow *Sam Brooklyn*
- short and narrow *Naya Brady*

Materials:

Cardboard

String

Tape

Wings must be made so they can be easily detached and reattached to someone else's arms.

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