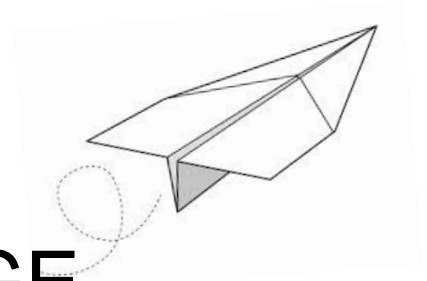
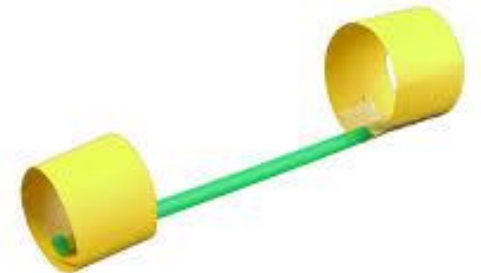
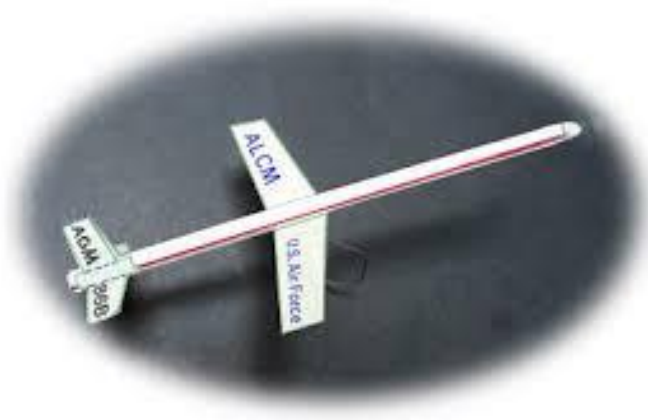
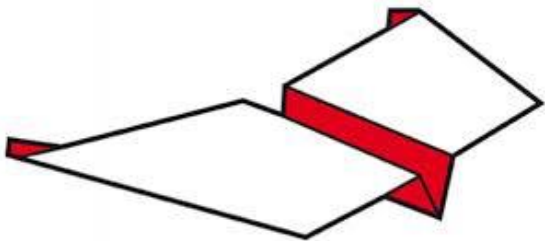


PAPER AEROPLANE CHALLENGE



WHAT MAKES FOR A GOOD PAPER AEROPLANE?

Have a discussion with someone in your household about what makes for a good paper aeroplane.



LEARNING OBJECTIVES.

We Are Learning To:

**To understand the
design cycle.**

**To create the best
paper aeroplane.**



WHAT I'M LOOKING FOR:

DESIGN SKETCHING.

DESIGN IMPROVEMENTS.

EFFECTIVE FLYING MACHINES.



WHAT YOU'LL NEED:

Some pieces of paper – A4 works well.

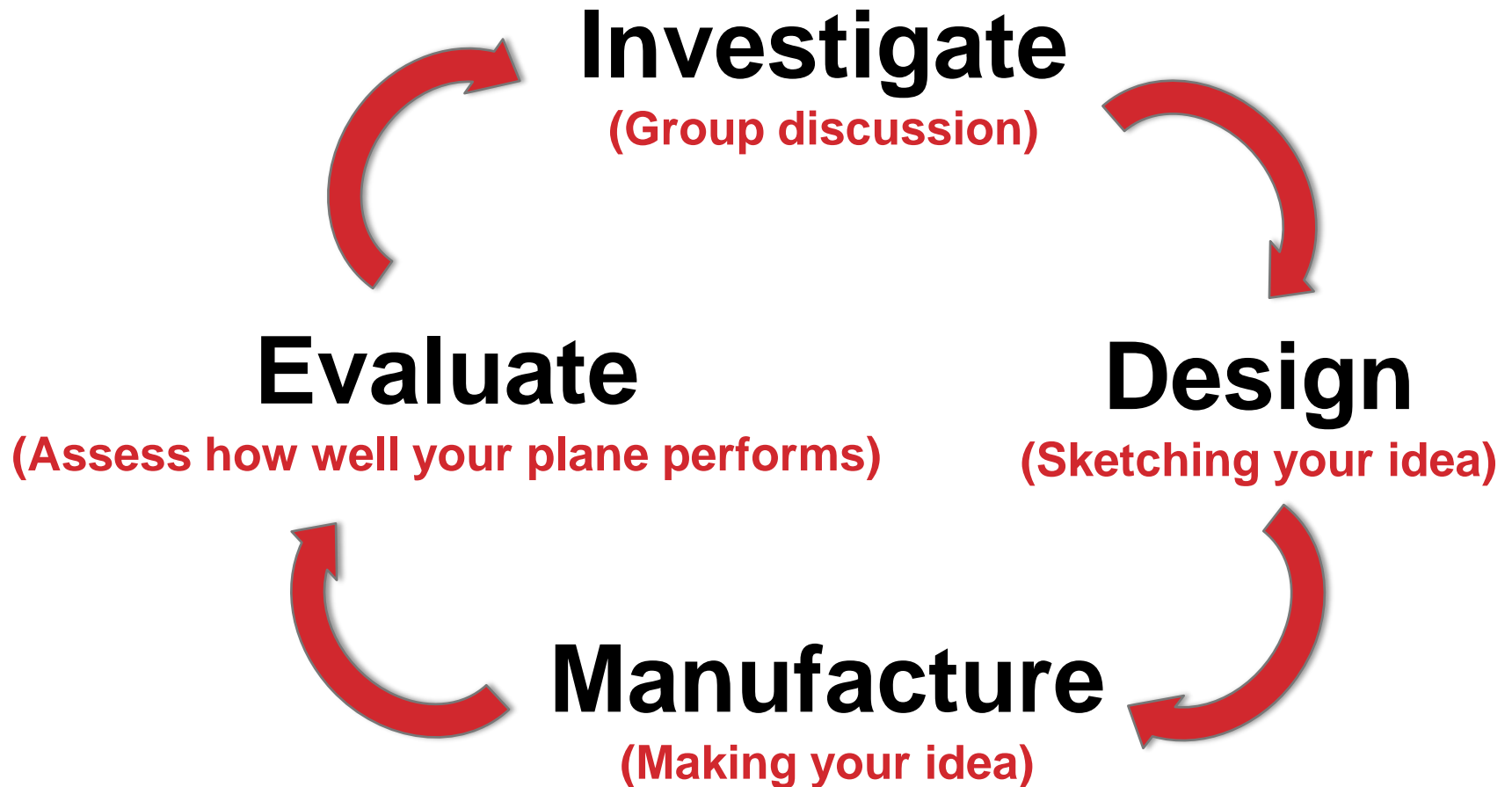
A pencil or pen.

A paper clip and some tape.

Drinking straws (optional).



DESIGN CYCLE.



DESIGN CYCLE EXPLAINED

Lots of professional designers follow the design cycle to help them design and make the best products possible.

By doing some **RESEARCH** you can determine the requirements your product should meet in order to be successful.

You can then **DESIGN** some ideas for a product.

You **MANUFACTURE** your chosen design.

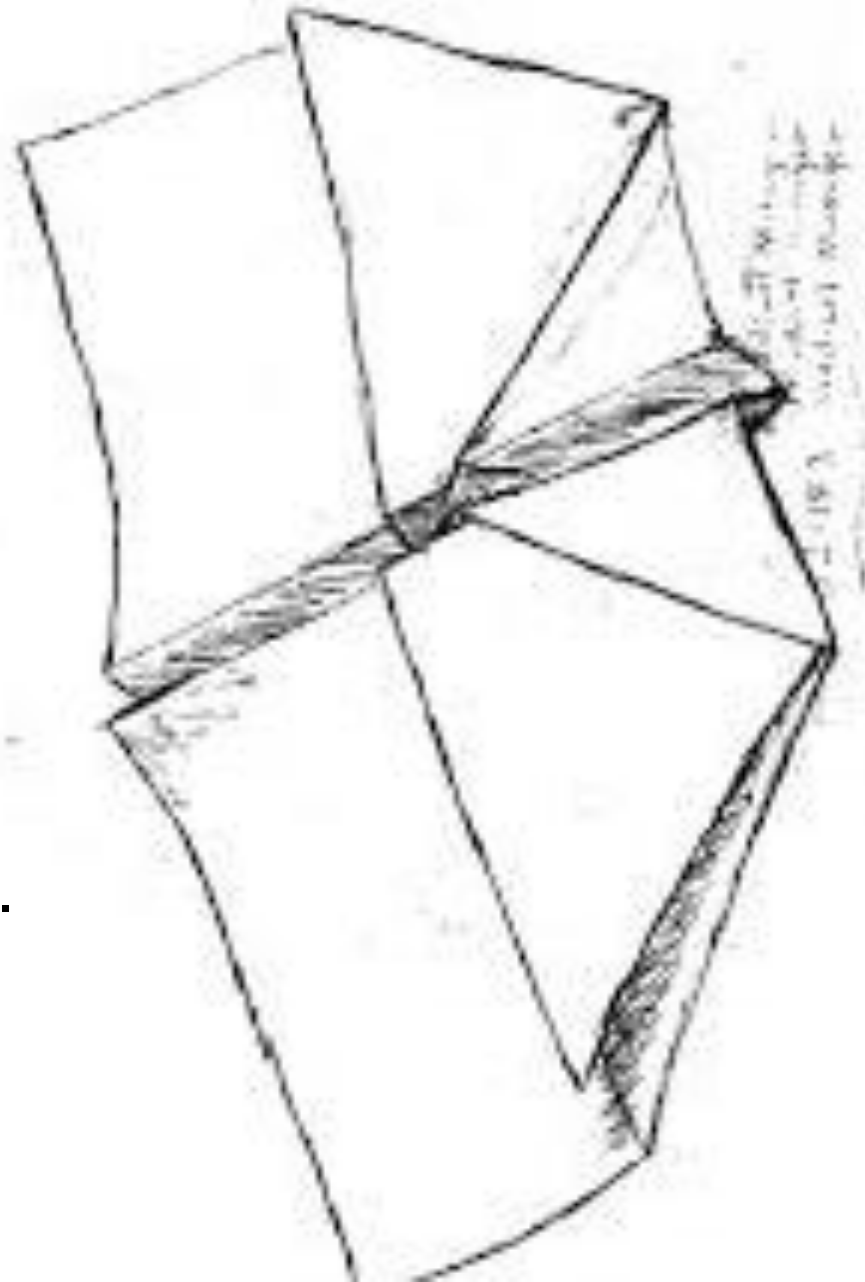
You **EVALUATE** what you've made to see if it's suitable.

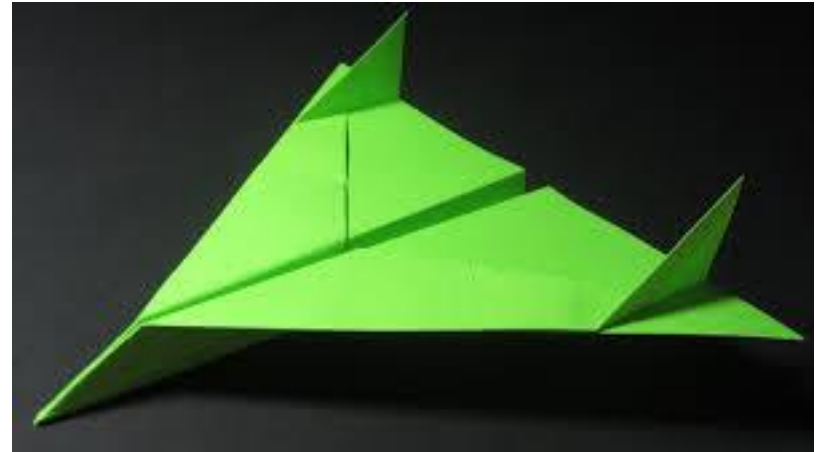
You can follow this cycle over and over again until you have the best possible product to use.

DECIDE UPON A DESIGN FOR YOUR PLANE.

Decide upon a design for your plane and sketch it on your paper. When you have finished your design make it from the materials on you have collected.

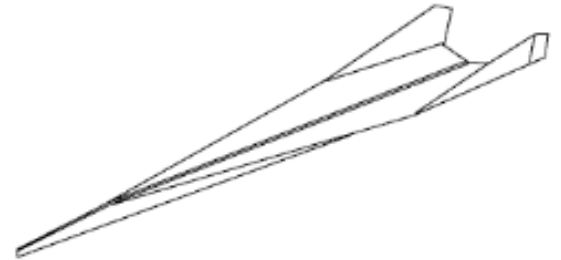
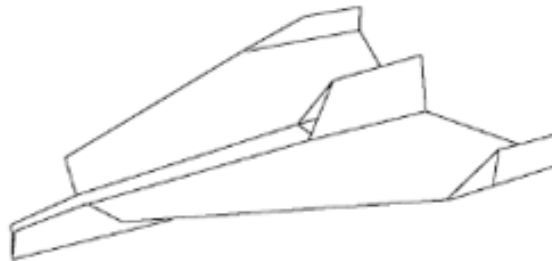
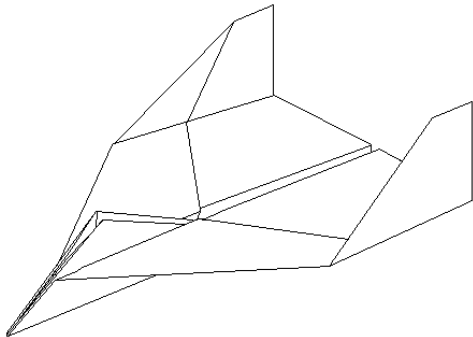
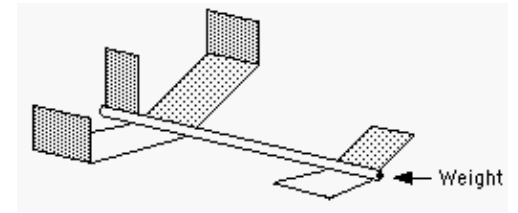
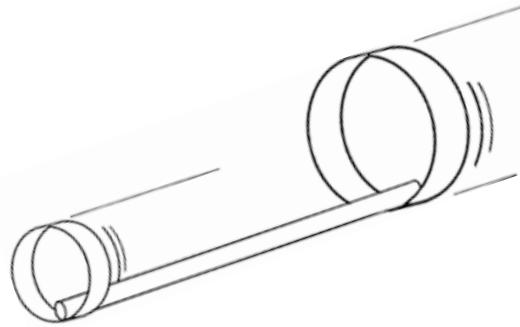
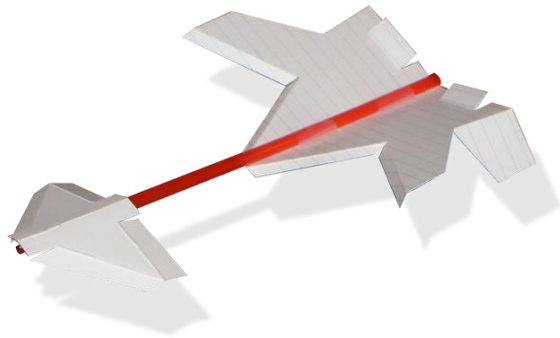
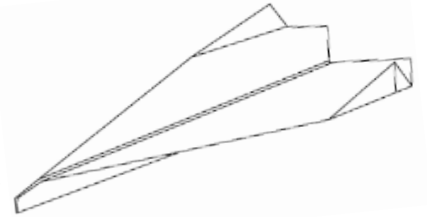
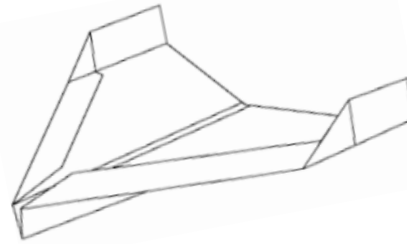
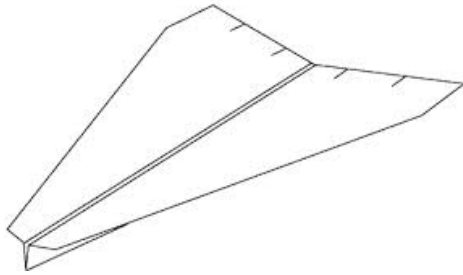
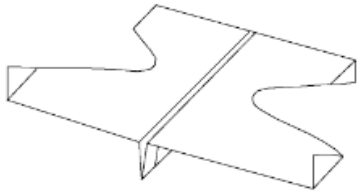
Prepare for the maiden flight!





Example Ideas (there are loads more online) – Google paper planes and see what you can find!





THROW YOUR PLANE!



HOW CAN YOU MAKE YOUR PLANE BETTER?

In light of your test flight discuss and decide upon one modification to your original design (a bit of weight on the nose can help you plane fly further – see the image below)

Add your modification to your sketch and label the reason for the change.



FLYING HIGH

This is it, having made your modifications to your planes you must now throw your plane as far as possible.

Does the improvement work or not?

Good luck!



WWW & EBI

All good designers evaluate their work when it is complete.

Please write a **What Went Well** and an **Even Better If** on your sketch to evaluate your design and modifications.

Once you are finished you can start over with a new design or keep improving the one you made until it is as good as you can get it.

