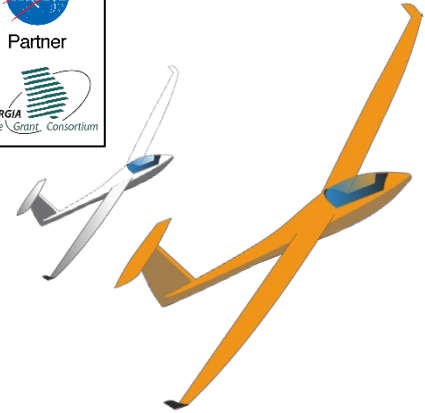
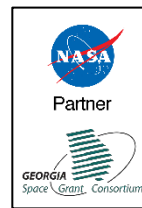


MAKE YOUR OWN GLIDER

Gliders are aircraft that are launched in some way to start their flight but have no propulsion system of their own. Instead, they are pulled slowly back to earth by gravity. Their fall is slowed by using long wings that produce lift from their motion through the air. Your gliders will be hand-launched, meaning you will create their initial motion by throwing them.



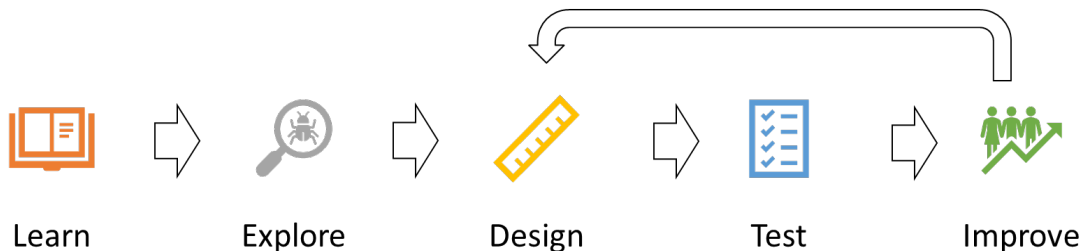
PROJECT GOAL

To build your glider, you have:

- 1) A sheet of cardboard to construct wings and a tail
- 2) A thin rod to be the fuselage (body) of your glider
- 3) Playdoh (to help you balance the weight for a smoother flight)
- 4) Tape to hold it all together

Using these supplies and what you will learn about the forces of flight, your mission is to design and build a glider that will **fly straight for at least 10 feet.**

DESIGN PROCESS



- 1) **LEARN:** Watch the videos to learn about gliders and the forces of flight
- 2) **EXPLORE:** Look at examples of gliders. What is similar between the designs? Why do you think that is? What is different?
- 3) **DESIGN:** Design your glider by choosing a shape for your wing and tail and deciding how your glider will go together. Build your glider!
- 4) **TEST:** Go to the test course to test your glider. How far did it fly? Did it fly straight?
- 5) **IMPROVE:** What could you do to make your glider fly better? What is one way you could change your design? Try it out and see what happens!