

EDP: Identify and Understand the Problem

Name:

Date:

Period:

Engineers follow a process to solve problems. The first step is to clearly understand who you are designing for, what problem you are solving, and what already exists. This sheet guides you through identifying the problem before you start designing your new wing.

Step 1: Know Your Customer

Who is your client (customer)?

What does your client need? Use evidence from the Wing Design RFP.

Step 2: Define the Problem

Write a clear problem statement. A good problem statement answers: WHO needs WHAT and WHY?

Step 3: Prior Research — Wing Configurations

Use your class data and the Wing Configurations Reference sheet to answer the questions below.

1. Which wing configuration had the best average glide distance in the Data Challenge?

2. Which wing configuration had the worst average glide distance? Why do you think that is?

3. Based on the class data AND what you know about aerodynamics, which wing shape are you considering for your design? Explain your thinking.