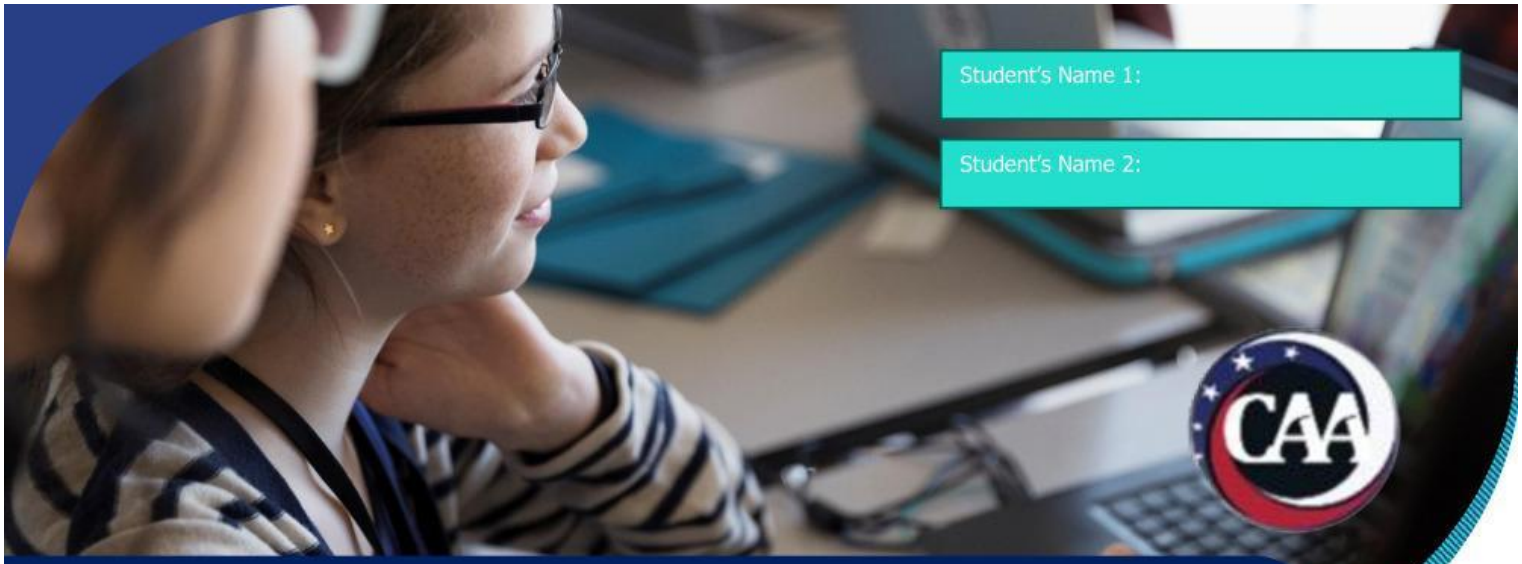

Student's Name 1:

Student's Name 2:

Colegio Anglo Americano | Engineering Design Process (Stage 2 & 3) – 2026

TECHNOLOGY | 5TH |CYCLE 2 | 2026

We imagine and plan solutions

"Engineers don't settle for the first idea… they explore several options and then choose the best one"

WARM UP:

What was the problem?

What were the components of the system?

FOLLOW UP:

Brainstorm solutions: (Ways to solve a problem)

Examples:

Does the sunflower turn based on a light sensor?

Does it move based on a timer?

Is it moved manually?

Does it use two sensors to compare light levels?

Now, you…

"Many ideas, not just one"

LIVEWORKSHEETS

Brainstorm solutions:
(Ways to solve a problem)

Working in pairs, you should come up with at least three different ways to solve the problem. Your ideas won't be judged in this section.

1.

2.

3.

Sketch of possible solutions

Choose two ideas and quickly sketch them on a piece of paper.

Conditions:

They don't have to be perfect drawings, but rather:

Overall shape

Movement

Basic parts

"An engineer's drawing, not an artist's!" 😉

LIVEWORKSHEETS

Identify the necessary elements:

Now you're going to connect ideas with reality.
For each idea, you should write:
What would we need?
Example:

Light sensor
Motor (servo)
Solar panel
LED
Arduino

IDEA 1:

IDEA 2:

IDEA 3:

LIVEWORKSHEETS

Blueprint (final plan)

Now, you need to create your final design. Use the back of the sheet from the first drawing.

It must include:

System components.
Motion arrows.
Component names.
What each part does.
It must be visually appealing.

WRAP UP:

Final question:

Why don't we go with the first idea that comes to mind?

LIVEWORKSHEETS