

Name _____

Label the Loop in Action

An AI team is training a robot named **HelperBot** to recognize fruit. Let's see what happens in one round of the feedback loop:

1. A person shows HelperBot a picture of a red apple.
2. HelperBot looks at the picture and says: "This is a tomato."
3. The person replies: "No, that's incorrect. This is actually an apple."
4. HelperBot stores the correction and updates its knowledge. Next time it sees an apple, it's more likely to answer correctly.

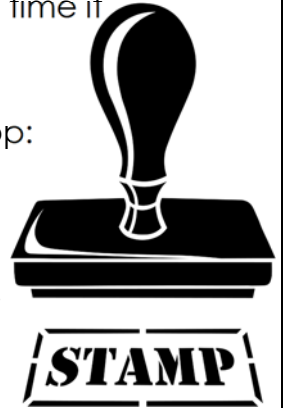
Match the Steps - Below are the four main steps of the AI feedback loop:

Input - The AI receives data or instructions.

Output - The AI gives a result.

Feedback - A person or system responds, saying if it was right or wrong.

Retraining - The AI updates itself to improve next time.



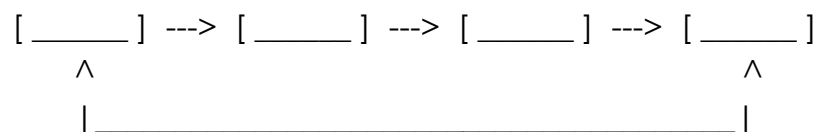
Now, match each part of the HelperBot story (1–4) to the correct step.

Example: "A person shows HelperBot a picture of a red apple." → **Input**

1. HelperBot looks at the picture and says: "This is a tomato." → _____
2. The person replies: "No, that's incorrect. This is actually an apple." → _____
3. HelperBot stores the correction and updates its knowledge. → _____

Label the Diagram

Here's the loop again with missing labels. Write the correct step in each blank using **Input**, **Output**, **Feedback**, **Retraining**.



Reflection

1. Why do you think HelperBot made the mistake in the first place?
2. If the person never gave feedback, what would happen to HelperBot?
3. How is this process similar to how you learn from mistakes in school?