

Name _____

How AI Improves

Artificial Intelligence (AI) improves through a chain of **causes and effects**.

Input (Cause): The AI receives data.

Output (Effect): The AI produces a result.

Feedback (Cause): Someone tells the AI if it was right or wrong.

Retraining (Effect): The AI updates itself so it can do better next time.

When all four steps connect, the AI gets smarter. If one step is missing, the loop breaks.

Example Scenario

Let's follow a story about an AI called **PhotoBot**, which is learning to recognize animals.

Read each part of the story. After each step, write whether it is:

- **Step:** Input, Output, Feedback, or Retraining
- **Role:** Cause or Effect

1. A person uploads a photo of their dog into PhotoBot.

Step: _____ Role: _____

2. PhotoBot looks at the image and says: "This is a cat."

Step: _____ Role: _____

3. The person replies: "That's wrong. This is actually a dog."

Step: _____ Role: _____

4. PhotoBot updates its system so next time it will correctly call the photo a dog.

Step: _____ Role: _____



Reflection

1. Why do you think PhotoBot made the mistake in Step 2?
2. If the person had skipped Step 3, what would happen to PhotoBot?
3. Which step is most like when you learn from a teacher's correction?