Architecture Labeling Exercise

AI agents don't just act randomly-they are built with parts that help them sense, think, and act. These parts are called **agent architecture**. The four main parts are:

1. **Environment** - The world the agent is in.
2. **Sensors** - How the agent collects information.
3. **Decision-Making (Brain)** - How the agent decides what to do.
4. **Actuators** - How the agent takes action.

Directions - Each sentence below is missing one part of the agent's architecture. Fill in the blank with the correct part (**Environment, Sensors, Decision-Making, or Actuators**) and give a short example or definition.

1. A smart thermostat adjusts the temperature in your home. Its _____ measure the current room temperature.

2. A vacuum robot notices when it bumps into a wall. The wall is part of the robot's _____.

3. A delivery drone decides which direction to fly based on GPS data. This choice is made by its _____.

4. A video game character runs forward when you press a button on the controller. The movement is carried out by its _____.

5. In a self-driving car, traffic lights and road signs are part of the _____.

6. A health-tracking smartwatch collects your heartbeat and step count using its _____.

7. A chatbot listens to what a user types and then chooses a reply. The reply is generated in the _____.

8. A factory robot arm picks up and places boxes. The moving arm is one of its _____.

9. In a farming drone, fields, weather, and crops are all part of the _____.

10. A robot dog decides to wag its tail after a person pets it. This "wagging tail" action is done through its _____.