Name _____

Inside the Mind of an AI Answer Key

Match the Component to Its Role

1. **Training Data → E.** The large collection of examples that provides patterns for the AI to learn from.

2. **Algorithm → C.** The step-by-step method the AI uses to analyze and learn from examples.

3. **Model → A.** The "brain" of the AI that uses what it has learned to make predictions.

4. **Feedback Loop → B.** Corrections or ratings that guide the system to get better over time.

5. **Output → D.** The results or actions the system produces, such as a prediction or recommendation.

Reflection - Sample Responses*(Answers will vary. Here are some models to guide student expectations.)*

Movie Recommendation System

Training Data: Thousands of viewing histories and ratings from past users.

Algorithm: A set of rules for finding patterns like "users who liked *Movie A* also liked *Movie B.*"

Model: The trained system that can predict what a new user might enjoy.

Feedback Loop: Thumbs up/down ratings or skipped movies that refine suggestions.

Output: A list of recommended movies on the user's home screen.

Weather Prediction App

Training Data: Past temperature, wind, pressure, and satellite readings.

Algorithm: Mathematical steps to connect weather patterns with outcomes.

Model: The system trained to predict future weather based on new data.

Feedback Loop: Comparing predictions with what actually happened, then refining.

Output: A forecast like "Rain tomorrow at 3 p.m."