



✓ **Congratulations! You passed!**

TO PASS 80% or higher

Keep Learning

GRADE  
100%

## Identifying Machine Learning Techniques

LATEST SUBMISSION GRADE

100%

1. What type of machine learning is the spam filter on your email platform that automatically sends suspicious emails to your spam folder?

1 / 1 point

- ☐ Unsupervised Learning
- ☒ Supervised Learning
- ☐ Reinforcement Learning

✓ Correct

Great job! Spam filters are an example of supervised learning because they are trained on emails labelled as 'spam' or 'not spam' to produce a model that will input a new email and decide whether or not it is spam.

2. What type of machine learning is the Optical Character Recognition system that scans envelopes to determine their destination?

1 / 1 point

- ☒ Supervised Learning
- ☐ Unsupervised Learning
- ☐ Reinforcement Learning

✓ Correct

Great job! OCR systems are an example of supervised learning because these systems are trained on thousands of pictures of hand-written letters that are labelled with their corresponding letters. The goal is that the OCR system can recognize hand-written letters that were not a part of the original training data.

3. What type of machine learning is a system that classifies an image as 'cat' or 'not cat'?

1 / 1 point

- ☐ Unsupervised Learning
- ☒ Supervised Learning
- ☐ Reinforcement Learning

✓ Correct

Great job! Image classifiers are an example of supervised learning because they are trained on thousands of pictures labelled as 'cat' or 'not cat'. The classifier can then look at a new, unlabelled image, and label it as 'cat' or 'not cat'.

4. What type of machine learning is a system that predicts the retail value of a new house on the market?

1 / 1 point

- ☐ Unsupervised Learning
- ☒ Supervised Learning
- ☐ Reinforcement Learning

✓ Correct

Great job! Such a system is an example of supervised learning because it trains on houses labelled with their retail value and then predicts the retail value of a new, unlabelled house.

5. When you're shopping online, a system recommends similar items to what is in your cart. What type of machine learning is this?

1 / 1 point

learning is this:

- ☒ Unsupervised Learning
- ☐ Reinforcement Learning
- ☐ Supervised Learning

✓ Correct

Great job! Online recommender systems are an example of unsupervised learning because the system learns from unlabelled data. The system uses information about your profile or purchases and finds similar purchases to suggest.

6. What type of machine learning is a system that clusters data in order to detect anomalies that could indicate instances of fraud?

1 / 1 point

- ☒ Unsupervised Learning
- ☐ Reinforcement Learning
- ☐ Supervised Learning

✓ Correct

Great job! An anomaly detection system is an example of unsupervised learning because the system decides how similar (or different) unlabelled data is in order to detect examples that are very unlike other examples in the data.

7. What type of machine learning is a system that learns to play Atari games to get a high score?

1 / 1 point

- ☐ Supervised Learning
- ☒ Reinforcement Learning
- ☐ Unsupervised Learning

✓ Correct

Great job! A system that plays an Atari game is an example of reinforcement learning because this system develops a policy for playing the game by playing that game many, many times (while receiving a reward signal based on the score).

8. What type of machine learning is a system that explores a maze until it finds an optimal solution to get to the finish line?

1 / 1 point

- ☐ Supervised Learning
- ☒ Reinforcement Learning
- ☐ Planning
- ☐ Unsupervised Learning
- ☐ Search

✓ Correct

Great job! A system that explores a maze to optimize the route to a finish line is an example of reinforcement learning because the system develops a policy for how to best complete the maze based on its exploration of the maze and the reward signal it receives when it reaches the finish line.