

How does artificial intelligence learn?

Task 1. Watch video. <https://youtu.be/0yCJMt9Mx9c>

Task 2. Choose the correct answer.

1. How does supervised machine learning figure out what rules to follow to do a task?

- The data scientist has to learn the rules and program them for the computer to follow
- The rules are learned by the computer on its own
- The rules are found by mathematical proof

2. Supervised learning is:

- When the data scientist watches the AI as it works on a computer in the same room
- When the data scientist creates a set of rules for the AI to follow and reviews the AI as it works to make sure those rules are followed
- When the data scientist knows the correct answer for classification tasks and uses them to let the AI learn how to classify new data points on its own

3. Unsupervised learning is:

- When the AI run on a server in a different building
- A technique that requires a specific goal or positive outcome
- A set of techniques which allows the AI to find patterns in data without knowing in advance what to look for

4. Reinforcement learning is:

- Often used to create a strategy to play games knowing only the goal
- A set of rules that are set up by researchers to reinforce their goal
- A technique that requires knowledge of the way humans play games

5. Which of the following is NOT true?

- Artificial Neural Networks mimic the connections between the human brain
- Artificial neural networks have multiple layers
- Artificial neural networks can only be used to recognize faces

Task 3. Answer the questions.

- ✓ What is the advantage of using machine learning over rules-based methods for doing tasks like classifying types of fruit?
- ✓ What type of machine learning might be useful for deciding whether a picture is a cat or a dog? What information would you need to do this?