



# Intro to Machine Learning!

## ***MACHINE LEARNING?***

- × A branch of artificial intelligence (AI) which focuses on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy.

## ***MACHINE LEARNING?***

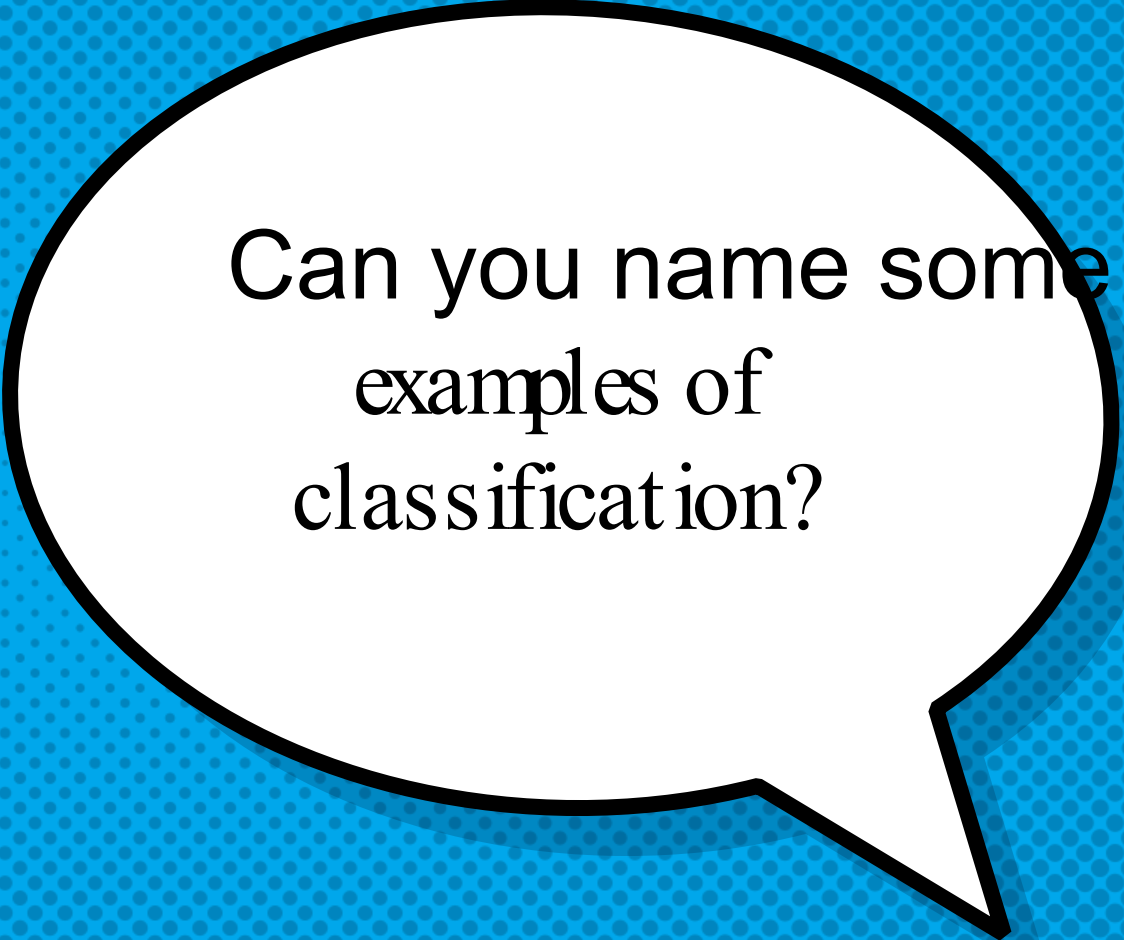
1. Supervised learning
2. Unsupervised learning
3. Self-supervised learning
4. Reinforcement learning
5. Etc.

# SUPERVISED LEARNING





# Classification & Regression



Can you name some  
examples of  
classification?



label = 5



label = 0



label = 4



label = 1



label = 9



label = 2



label = 1



label = 3



label = 1



label = 4



label = 3



label = 5



label = 3



label = 6



label = 1



label = 7



label = 2



label = 8



label = 6



label = 9

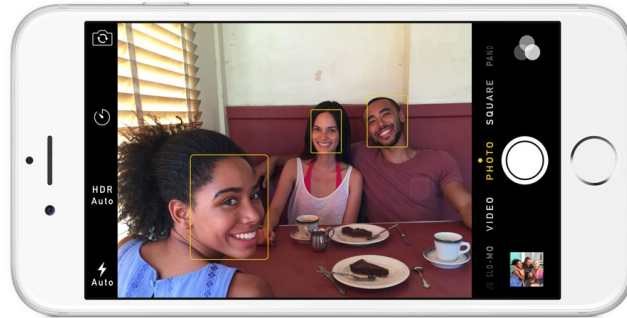


Examples of classification in technology: handwriting detection

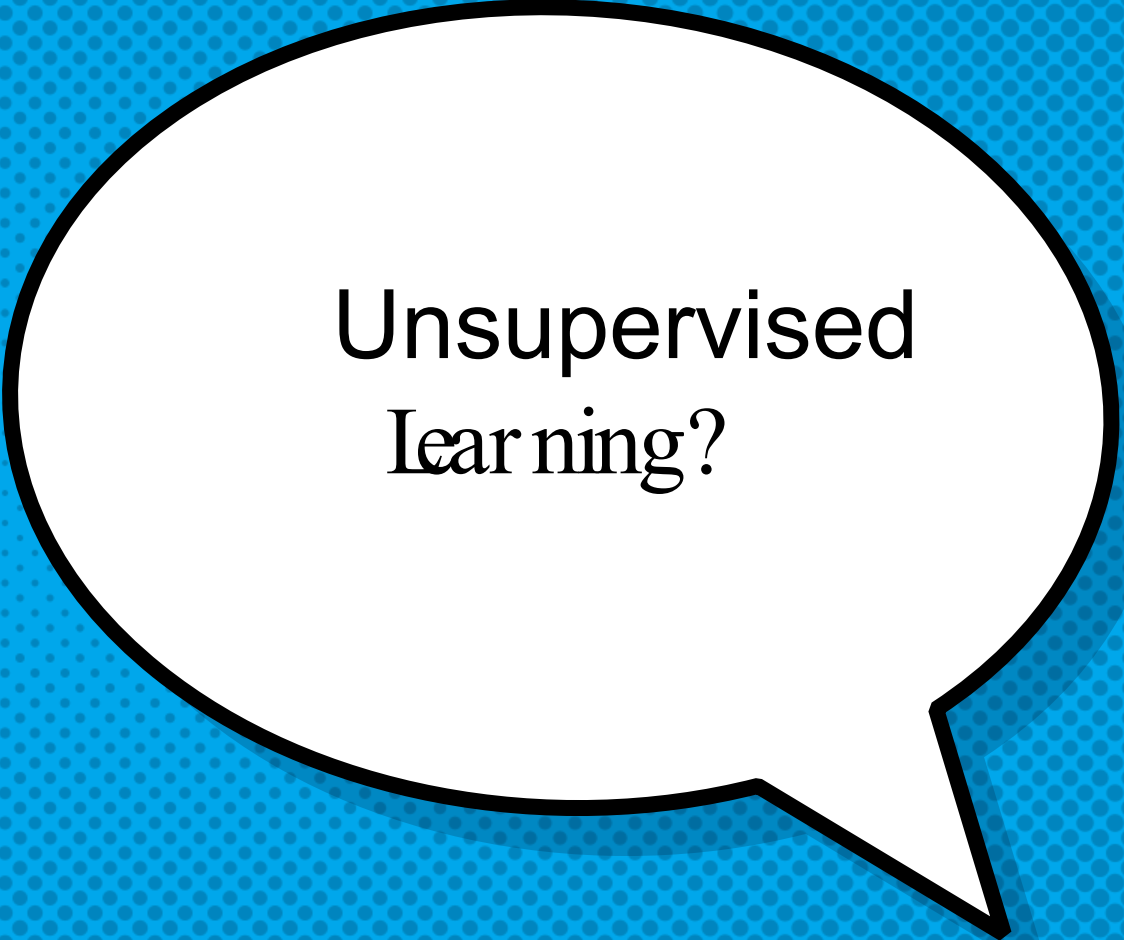


Examples of classification in technology: spam filtering





Examples of classification in technology: face detection

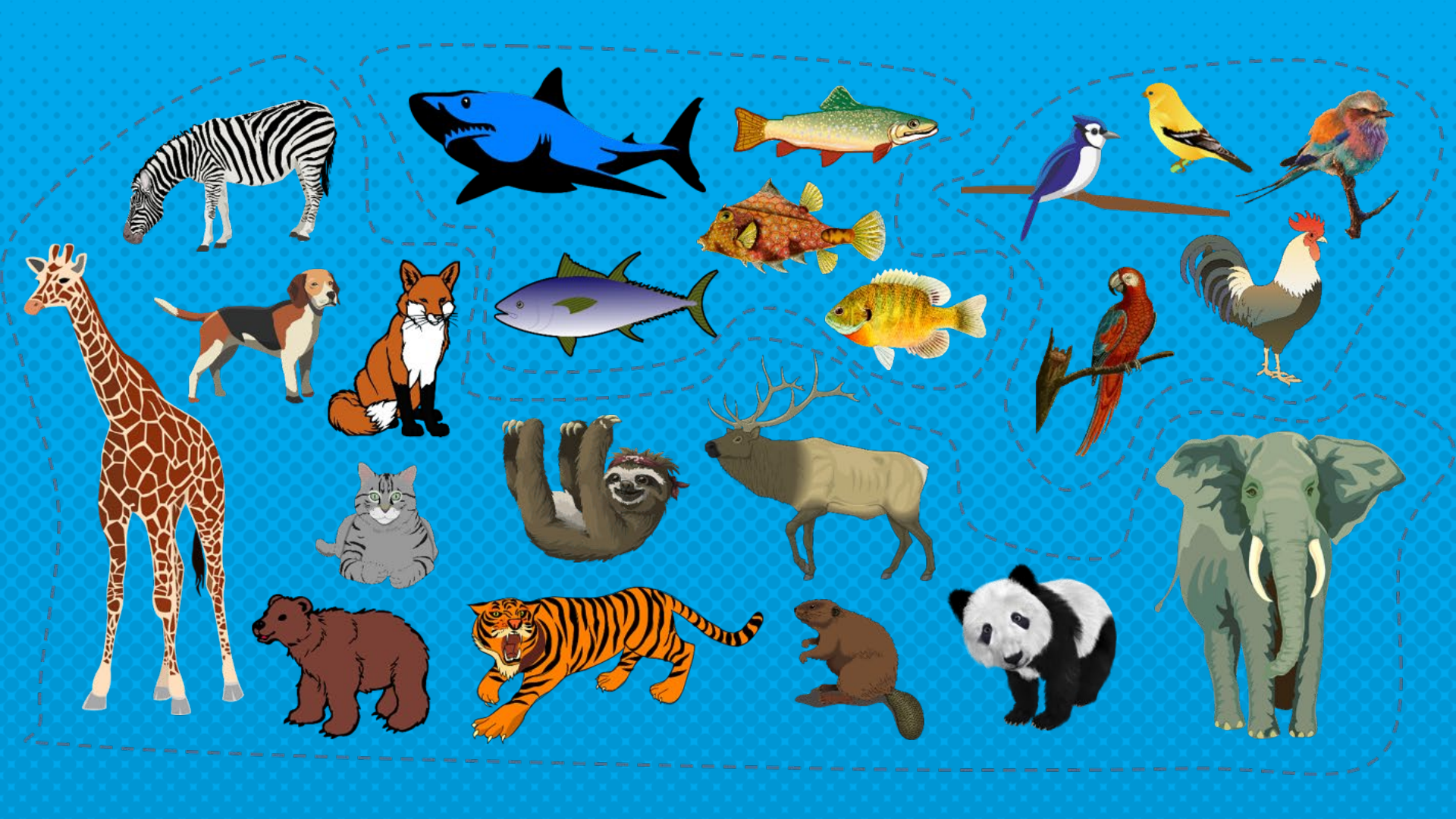


Unsupervised  
Learning?



How can we group animals into categories based on their characteristics?

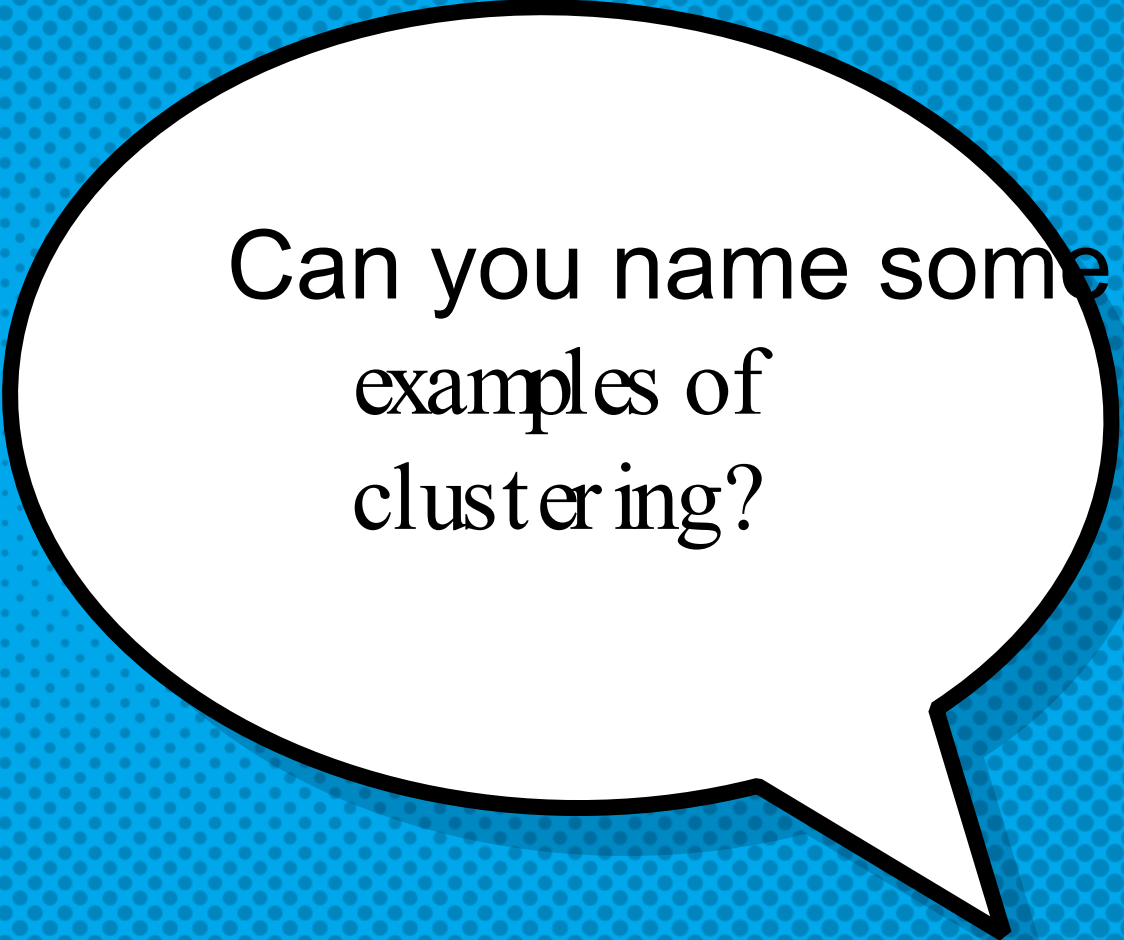




## ***CLUSTERING***

- × Group objects (e.g., animals, customers) based on their characteristics
  - × **within each group** are **similar** to each other
  - × **in different groups** are **different** from each other





Can you name some  
examples of  
clustering?

# ***MARKETING AND SALES***



# ***SPORTS SCIENCE***



# ***HEALTH INSURANCE***





## ***YOUR TURN...***

- × Go to  
<https://teachablemachine.withgoogle.com/>
- × In partners follow the tutorial
- × Answer the questions on your activity sheet