

This zine and activity was created by Ada Ren-Mitchell of MIT Public Library Innovation Exchange (PLIX), based on MIT STEP Lab's Kate Moore's work on Developing AI Literacy (DAILY) curriculum for the Everyday AI PD project. Learn more at everyday-ai.org

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LLM-Algorithm
Arcade
activity guide

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LLM-Algorithm Arcade

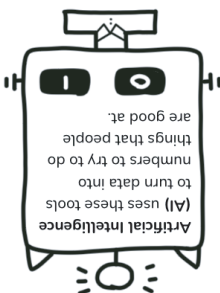


What is the next word?

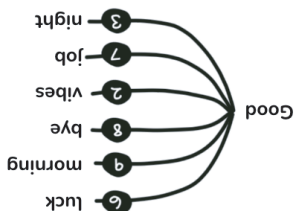
Once upon a _____
Rock, paper, _____
Far, far, far _____

STEM Concept: Large language model (LLM)
Large language models take datasets of words like books and messages and counts how many times two words show up together. It can make a guess about what word would come next!

LLMs are a type of machine learning.

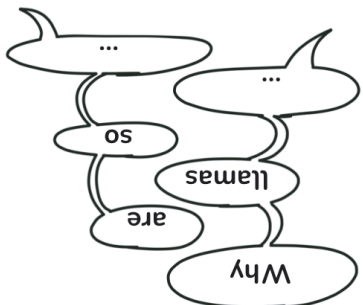


Good



STEM Concept: Word Vectorization
LLMs turn pairs of words into numbers. This is called word vectorization. Bigger numbers means the words go together more often. Artificial intelligence uses these numbers to build sentences one word at a time.

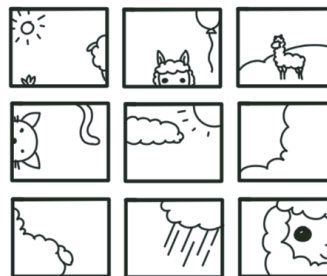
Play: With a friend, continue the sentence for as long as you can!



Build a sentence together!

What is a llama?

Which pictures in this dataset have a llama?
How do you know?



STEM Concept: Dataset

A dataset is a collection of data.

Data can be anything, like:

- photos you take with a camera,
- messages you send to other people,
- pictures created by artists,
- books written by authors,
- songs by musicians,
- videos or movies that people create,
- and anything that can be counted or measured!

Learning step-by-step

Computer scientists create rules for machines to try to do things that people are good at. When they add many rules together and use them step-by-step, they create an **algorithm**.



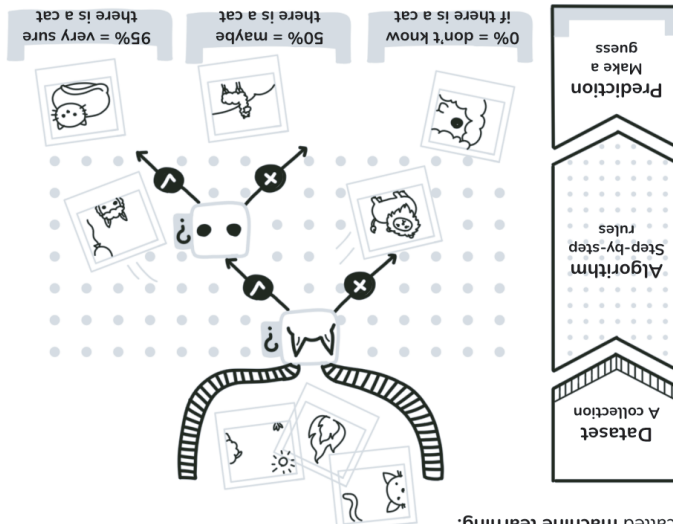
When you draw a cat step-by-step, what parts do you draw first? What parts would you not draw?



STEM Concept: Confidence Score
Machine learning uses confidence scores from 0% to **almost** 100% to say how sure it is that the guess is correct.

- if there are cats in pictures,
- or if you have messages from strangers,
- or if you might like a video on social media.

Machine learning can make good guesses about



Computer scientists use **datasets** of pictures, words, sounds, and videos with rules (**algorithms**) to teach machines to make a guess (**prediction**) about new data. This is called **machine learning**.