

Social Media Toss-up

A PLIX LLM-Algorithm Arcade Game



PLIX activity guide

Doodle your interests and hobbies, guess what other people might like, and toss it at them!

Ages

11 → 100

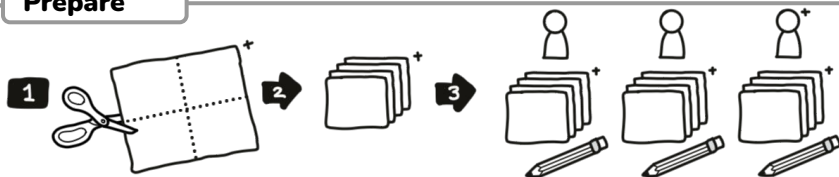
Number of Players

3 → 6 → ∞

Materials



Prepare



Play



1. (3 min) Doodle your interests and hobbies. Each drawing goes on its own scrap of paper



2. Guess who would like the drawing. What do you already know about them?



3. Crumple the paper



4. Throw the paper at the person who would like them!



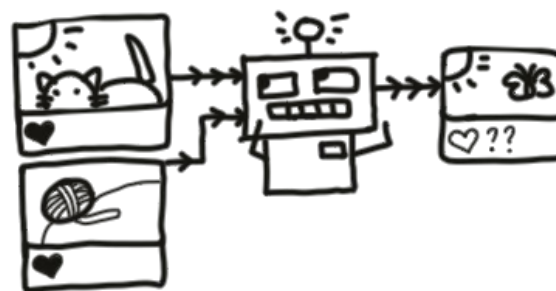
5. Open the paper!

Wonder



- Did people correctly guess what you like?
- Did you correctly guess what other people like?

Learn



Machine Learning: On social media, computer scientists look at pictures and videos (**dataset**) that you and your friends liked. Then the scientists give the machine step-by-step rules (**algorithms**) to learn what you like and make a guess (**prediction**) about what else you might like.

In this game, you make a guess about what people would like. Do you already know what they like?

Change it up!



Collect hearts: Draw a heart on the drawings you like (or an “x” on the ones you don’t like), and toss them at another person! At the end, which drawings got the most hearts?

Cup toss: Try this with people you already know. Put names on cups and try to get the crumpled paper in the correct cup to the right person.

Animal-gorithm

A PLIX LLM-Algorithm Arcade Game



PLIX activity guide



Guess the secret categories of animals in this card game

Ages

12 → 100

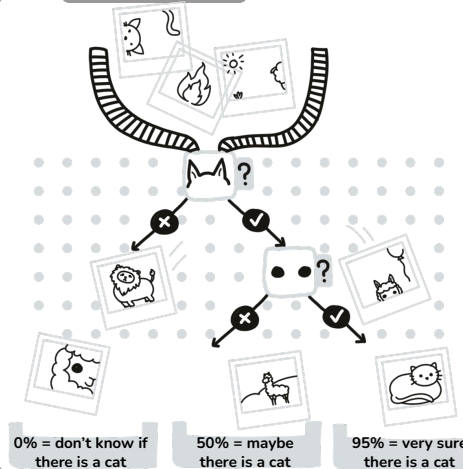
Number of Players

3 → 6

Materials



Learn



Machine Learning: Computer scientists use pictures (**dataset**) and step-by-step rules (**algorithms**) to teach machines what to look for when making a guess (**prediction**) about what is in new pictures.

In this game, you guess what is the same for animals on each side, and what is different. Each new animal added to the table can give you more information about the secret rule.

Play



1. Decider (★) chooses secret categories for left and right sides.



2. Decider (★) places cards on the left and right sides.



3. Players (?) guess which side the next card goes.
Optional: Players say "not sure" or "very certain" about their guess!



4. Players (?) guess the secret categories or add cards.



5. Repeat steps 3 and 4 until a player correctly guesses the secret categories.

Keep going: Play again with a different person as the decider (★)

Wonder



- What categories are easy to guess?
- What categories are harder to guess?

Change it up!



Draw a dataset: Create your own set of cards of a type of thing you like: books, movies, songs, food from different cultures, vehicles, or even dinosaurs

Remix a deck: Use card decks like Pokémon, Magic the Gathering, regular playing cards, or baseball cards to play this game

Build-a-sentence-bear

A PLIX LLM-Algorithm Arcade Game



PLIX activity guide

Build a sentence together using magnet words, and vote on the next word each time

Ages

8 → 100

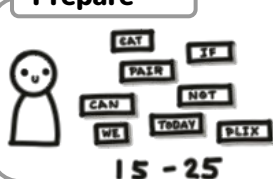
Number of Players

3 → 6 → ∞

Materials



Prepare



Each player gets 15-25 words



Optional: Players can decorate their individual game piece!

Play



1. Start with a random word



2. Each person chooses a word to be the next word. Try not to spend too much time deciding.



3. Each person use their game piece to vote for a word they like most. This can be different from their own word.



4. Keep the word with the most votes. Each person chooses a word to be the next word.



5. Continue voting and choosing words until everyone decides that the sentence is complete!

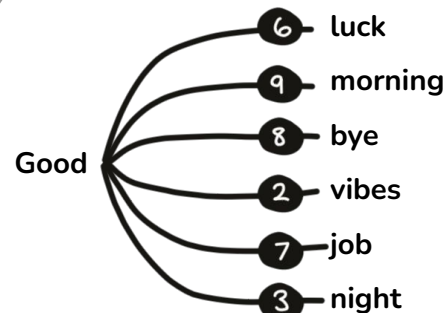


Wonder



- Did you have too many words to choose from, or not enough words to choose from?
- Did people vote more for words that are funny, serious, complex, or philosophical?

Learn



Large Language Models (LLMs): LLMs uses books and other written text (**database**) and turns pairs of words that go together into numbers. This is called **word vectorization**.

Bigger numbers means the words go together more often. LLMs uses these numbers to build sentences one word at a time.

In this game, just like a large language model, you create a sentence one word at a time. When you vote for a word, you might choose a word that makes the most sense to continue the sentence. Or you might choose a word that can make a funny, serious, complex, or philosophical sentence.

Change it up!



Answer questions: Try to answer a question by building a sentence together!

Build a poem or song: Having a hard time making sentences? Create a poem or song together. Try to sing it at the end!

Poetic GPT

A PLIX LLM-Algorithm Arcade Game



PLIX activity guide



Answer questions using only the words from a single poem

Ages

13 → 100

Number of Players

3 → ∞

Materials



A selection of printed short poems



A list of questions



Prepare



Each player brings a poem or chooses a poem from the prepared list

Play

- What is this rash on my arm?
- How can I become an astronaut?
- What could be a delicious flavor of ice cream?
- <Add your own question>

2



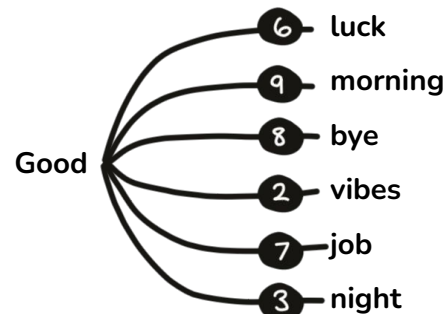
Hope is the thing
with feathers
That perches
in the soul

...

1. Start with a question

2. Look at the words in your poem.

Learn



Large Language Models (LLMs):

LLMs uses books and other written text (**database**) and turns pairs of words that go together into numbers. This is called **word vectorization**.

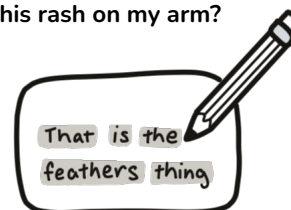
Bigger numbers means the words go together more often. LLMs uses these numbers to build sentences one word at a time.

In this game, you use one **database** of words, a poem, to try to answer questions. Some poems may have the right words to answer a question seriously.

The words you use to ask a question is really important! If you ask a LLM a question using scientific terms, you would get scientific answers.

What is this rash on my arm?

3



4



3. Each person uses only the words in their poem to create a response

4. Share your answers out loud!

Wonder



- Did you use words that were next to each other?
- Who or where would you go for real answers to these questions?
- What if you have to use words from 100 poems to answer the questions?

Change it up!

Vote on it: Write your answers on cards and the person with the question choose their favorite answer

Other sources: Use the words on a single page from old books, newspapers, magazines, songs lyrics, or textbooks to answer the same questions.

Book genres: Instead of poems, pretend you are a [children's book, romance, comedy, textbook, self-help, murder-mystery] author to answer the questions.