What is AI?

Before we get started, let's jot down a few of your current impressions about AI.

- What do you think artificial intelligence (AI) is? Discuss with your group and write down five words that you think of when you hear "artificial intelligence".

- Can you think of any examples of AI technologies? These may be technologies you have used or real or fictional technologies you have seen elsewhere (e.g. on TV, in movies, in the news). Write down some examples below.

- How do you feel about AI? Discuss with your group and circle any words below that you think describe your feelings. Feel free to write down other words/phrases as well.

Amazed

Frightened　　　Hesitant　　Confused

Concerned

Uncomfortable

Empowered　　Interested　　　Resistant

Curious

Dangerous　　Friendly

Hopeful

Trusting　　Enthusiastic　Reverent　　Disappointed

Have you ever interacted with artificial intelligence (AI) before?

- **Look** through the **AI EXAMPLE** card deck and **glue** cards with technologies that you have interacted with before below. Feel free to write-in or draw any technology that is not in the card deck.
- Now look at the cards you glued below. Were you surprised that any of these technologies used AI? **Circle** any technologies that surprised you.

1 Let's do a step-by-step activity now to learn a little bit more about how AI works. On this page, you're going to design your own imaginary AI that takes an **input**, processes it using an **algorithm**, and expresses an **output**. Your imaginary AI can be bizarre or non-sensical—it does not have to be useful or practical.

Step 1: Data Input

Most AI learn from **data**. This data can come from **sensors**, such as cameras, noise sensors, or light sensors. It can also be provided in the form of a **data set**, or a "collection of curated data"[1] such as images, songs, numbers of views, or texts.

- **Look** through the **SENSOR** and **DATASET** card decks and choose a dataset and/or sensor to act as the input for the imaginary AI technology you are designing.
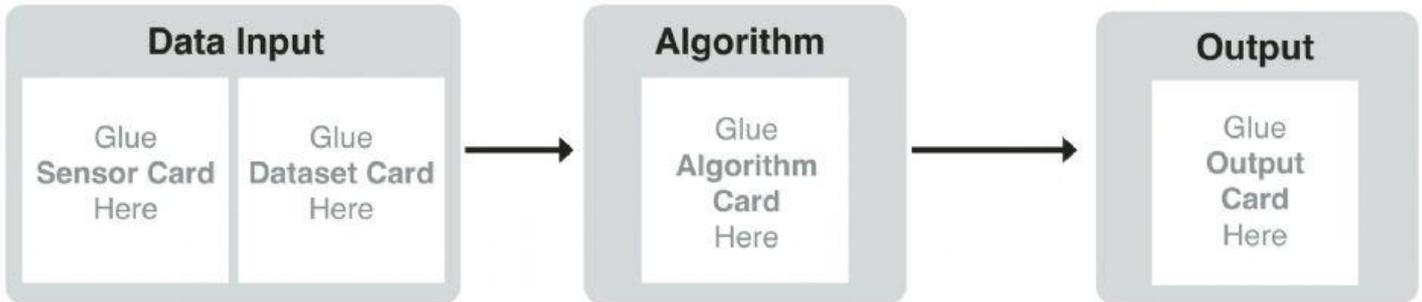- **Glue** the card(s) you select below.

2 **Step 2: Algorithm**
Once AI have data to work with, they make sense of this data using an algorithm. An **algorithm** is "a set of instructions that turns something (an input) into another thing (an output). A sandwich-making algorithm, for example, would turn a bunch of ingredients (bread, peanut butter, and jelly) into a delicious lunch (a PB&J sandwich)"[1].

- **Look** through the **ALGORITHMS** card deck and choose an algorithm that will process the input data for your imaginary AI technology.
- **Glue** the card you select below.

3 **Step 3: Output**
The **output** of an AI algorithm can come in many forms. Some AI devices use physical devices like motors, lights, or speakers to act on the world. Other AI technologies have outputs that look more like decisions or predictions about what song you will like or whether you will enjoy an advertisement.

- **Look** through the **OUTPUT** card deck and choose a device or method that your AI can use to share its results with the world
- **Glue** the card you select below.

Data Input	Algorithm	Output
Glue **Sensor Card** Here — Glue **Dataset Card** Here	Glue **Algorithm Card** Here	Glue **Output Card** Here

1. https://www.technologyreview.com/s/614938/ai-mit-bingo-game-to-teach-about-kids-ai/

Fill in the blanks based on your diagram from the previous page and draw a picture of your imaginary AI below!

What would an AI that takes _____ **as input, uses** _____ **to process that input,**
Data Input   Algorithm

and uses _____ **to express its output look like?**
Output