



## TITLE: AI Bingo!

### LEARNING SCENARIO

<b>School:</b>	<b>Duration (minutes):</b>	90
<b>Teacher:</b>	<b>Students age:</b>	10

**Essential Question:**

What does “Artificial Intelligence” make you think of?

**Topics:**

- Artificial Intelligence, AI bingo

**Aims:**

- understanding AI in a more practical way
- the concept of an algorithm and methods of its notation
- algorithms in our everyday life: dealing with problem tasks which require creativity
- get to know and understand the concept of artificial intelligence and social and economic implications of AI

**Outcomes:**

- recognize examples of artificial intelligence use in everyday life
- basic steps of algorithmic problem solving: defining the problem and the goal to be achieved, analysis of the problem situation, developing a solution, checking the problem solution for sample data, saving the solution in the form of a diagram or program

**Work forms:**

- work in pairs, group work

**Methods:**

- presentation, talk/discussion, graphic work, interactive exercise

### ARTICULATION

The course of action (duration, minutes)

### INTRODUCTION





The teacher starts the lesson with a discussion.

### Scenario for discussion

What do robots have in common?  
What do they do? How do robots help us?

Examples:

Cozmo - visual recognition  
Alexa/Google home - speech recognition  
Are robots the only form of AI?  
What about social networks: Instagram, YouTube, Facebook, Google,... ?  
How many of you use these?  
What do they have in common?

### **Announcement of the goal of the lesson:**

Today we will learn what the main task of artificial intelligence is: prediction. How can computers learn?

## MAIN PART

Short definition:

AI trying to predict something in the future or something that the data says.  
Example of what you predict (weather, what happens in a movie).

What is the dataset?

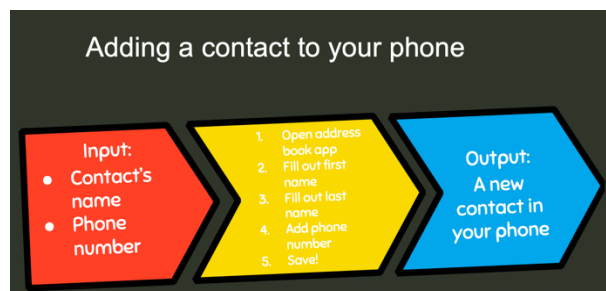
A dataset is a collection of curated data

Images  
Measurements (time, views, inches, etc)  
Text  
Video recordings!

The dataset contains a lot of separate pieces of data and can be used to train an algorithm with the goal of finding predictable patterns inside the whole dataset.

Isn't just numbers, weather data vs. online video data (gives you information).  
Have you ever collected a dataset?

Artificial intelligence is a kind of algorithm... there are other kinds as well.

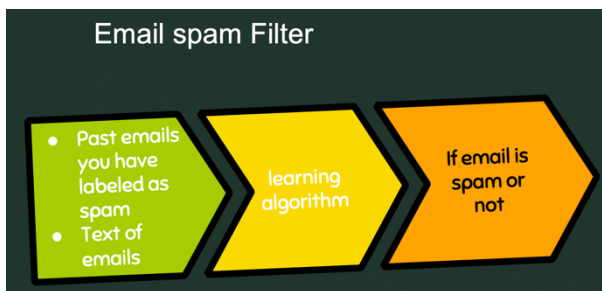
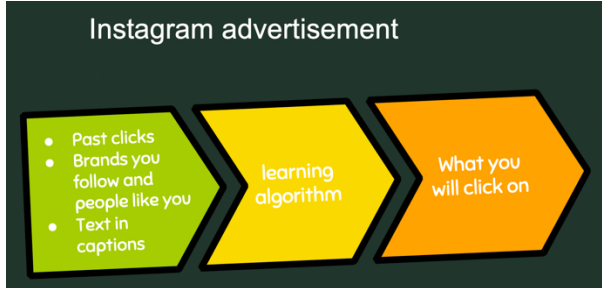


What is Instagram's algorithm trying to pick?



ARTIE: Artificial Intelligence in Education - challenges and opportunities of the new era:  
development of a new curriculum, guide for educators and online course for students  
Project co-funded by European Union under Erasmus+ Programme, 2020-1-HR01-KA201-077800

What kinds of ads do you get?  
What do you think they are trying to do?



**Interactive exercise:** It is time for AI Bingo!

AI Bingo: Learning by playing ftw. Payne, a researcher at MIT, AI bingo builds on pedagogical research that shows how exposing kids to the way technology works helps develop their interest in STEM and improve their job prospects later on in life.

Instructions:

Students must find a partner who has used an AI system listed on the card and together students must identify the prediction the system is trying to make and the dataset it might use to make that prediction. The first student to get five squares filled out in a row, diagonal, or column wins (or, for longer play, the first student to get two rows/diagonals/columns).

Worksheet:



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## A.I. BINGO

<p>Gotten a weather forecast from a website or used a weather app</p> <p>Dataset: Prediction:</p>	<p>Sent a voice-to-text message</p> <p>Dataset: Prediction:</p>	<p>Used an online search engine like Google or Bing</p> <p>Dataset: Prediction:</p>	<p>Seen a Google autofill search result</p> <p>Dataset: Prediction:</p>	<p>Had a writing assignment graded by a computer</p> <p>Dataset: Prediction:</p>
<p>Used "safe search" on Google</p> <p>Dataset: Prediction:</p>	<p>Seen a suggested response on Gmail to an email</p> <p>Dataset: Prediction:</p>	<p>Used a Snapchat filter (what's your favorite?)</p> <p>Dataset: Prediction:</p>	<p>Played a motion-sensitive video game e.g. Mario Party, Nintendo, Wii U, etc.</p> <p>Dataset: Prediction:</p>	<p>Had an Emoji suggested instead of a word e.g. "lol" is replaced for an Emoji smiley face</p> <p>Dataset: Prediction:</p>
<p>Seen a sponsored product on Google or Amazon e.g. "since you bought __, we thought you might like..."</p> <p>Dataset: Prediction:</p>	<p>Had an email go to your spam folder (was it actually spam?)</p> <p>Dataset: Prediction:</p>	<p><b>FREE</b></p>		<p>Clicked on an Instagram ad (what kinds of ads do you normally see on the app compared to your partner?)</p> <p>Dataset: Prediction:</p>
<p>Had an email labeled as "important"</p> <p>Dataset: Prediction:</p>	<p>Seen a suggested ad on Snapchat (if so, what for? How does this compare to what ads your partner sees?)</p> <p>Dataset: Prediction:</p>	<p>Had a text auto-completed or used autocorrect</p> <p>Dataset: Prediction:</p>	<p>Listened to a recommended song on Spotify (what kind of music do you usually get recommended compared to your partner?)</p> <p>Dataset: Prediction:</p>	<p>Seen a recommended product on Facebook (if so, what for?)</p> <p>Dataset: Prediction:</p>
<p>Seen a "nudge" reminder on Gmail to respond to an email</p> <p>Dataset: Prediction:</p>	<p>Used a fingerprint to unlock a device or opened a device with your face</p> <p>Dataset: Prediction:</p>	<p>Used a map app to find a path to a destination</p> <p>Dataset: Prediction:</p>	<p>Used an app to recognize a song playing</p> <p>Dataset: Prediction:</p>	<p>Communicated with a customer service bot</p> <p>Dataset: Prediction:</p>

### CONCLUSION

AI trying to predict something in the future or something that the data says.  
The dataset contains a lot of separate pieces of data and can be used to train an algorithm with the goal of finding predictable patterns inside the whole dataset.

Methods	Work forms
<p><i>presentation</i></p> <p><i>talk</i></p> <p><i>work on the text</i></p> <p><i>graphic work</i></p> <p><i>interactive exercise /simulation on the computer</i></p>	<p><i>interview</i></p> <p><i>demonstration</i></p> <p><i>role playing</i></p> <p><i>individual work</i></p> <p><i>work in pairs</i></p> <p><i>group work</i></p> <p><i>frontal work</i></p>

### Material

- <https://www.technologyreview.com/2019/12/27/131071/ai-mit-bingo-game-to-teach-about-kids-ai/>
- <https://www.sparklebox.co.uk/previews/8551-8575/sb8554-words-with-ai-bingo.html>





**Literature**

- <https://www.forbes.com/sites/bernardmarr/2019/12/16/the-10-best-examples-of-how-ai-is-already-used-in-our-everyday-life/?sh=213f08da1171>
- <https://www.ibm.com/cloud/learn/what-is-artificial-intelligence>
- <https://kids.kiddle.co/>
- <https://www.iotforall.com/8-helpful-everyday-examples-of-artificial-intelligence>

PERSONAL OBSERVATIONS, COMMENTS AND NOTES

Empty box for personal observations, comments and notes.