



AI Adventures:
Exploring the World of Smart Machines
STUDENT GUIDE

LESSON 5

Understanding AI Algorithms



**JA
Canada**

Member of
JA Worldwide

Lesson 5:

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OVERVIEW

Who decides what we see online? In this lesson, you'll pull back the curtain and meet the "invisible puppeteers" of the internet: AI algorithms! You will learn how to be the director of your own online show.



KNOWLEDGE CHECK

Place a check mark (✓) next to the correct answer.

1. Your friend absolutely loves watching videos about building with Lego. Now, his video app mostly shows him new Lego videos. What's going on here?

- ☐ a) The app has run out of all other types of videos to show him.
- ☐ b) An AI algorithm has learned what he likes and is showing him more of it.
- ☐ c) A person who works at the video app company is picking videos just for him.
- ☐ d) It is just a lucky coincidence that he keeps seeing the same type of video.

2. If you only ever see videos and posts that an algorithm picks for you, you might get stuck in an "echo chamber." What is the BEST way to break out of an echo chamber?

- ☐ a) Keep watching the same types of videos so the algorithm knows you are happy.
- ☐ b) Stop using the internet so the algorithm can't find you anymore.
- ☐ c) Think of things you're curious about and purposely search for new and different topics.
- ☐ d) Ask your parents to buy you a new tablet so you can start over.

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REFLECTION ACTIVITY: BE AN ONLINE EXPLORER!

Mission:

Create a plan to discover something totally new online!



1. Choose a New Topic:

Pick something you know almost nothing about but are curious to learn more about (e.g., *deep-sea creatures*, *how to bake a cake*, *the history of hockey*).

My Topic:

2. Plan Your Exploration:

What is the very first thing you would search for to start learning about your new topic?

My First Search:

3. Think Like a Director:

What other things could you look at, watch, or interact with to show the algorithm that you are really interested in this awesome new topic?

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LESSON 5 ANSWER KEY

1. b
2. c



GLOSSARY

Artificial Intelligence (AI): A technology that gives computers and robots a 'brain' to think, learn and solve problems in a way similar to, but different from, the human brain.

Algorithm: A set of step-by-step instructions, like a recipe, that a computer follows to do a task, like picking the next video for you to watch.

Echo Chamber: An online space that happens when an AI algorithm keeps showing you the same kinds of things you already like or look at, instead of showing you new or different ideas.

Data: All the information (like pictures, words, and numbers) that we give to an AI to help it learn.

