

Think Like a Machine: Understanding AI and Machine Learning

Grade Level: **6-8** | Duration: **Multi-Day** | Subject Area: **Tech Applications**

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This lesson was designed under the WeTeach_AI **Advancing AI Literacy Project**. The project supports the development of standards-aligned AI literacy lessons designed for teachers by teachers. Additional lesson plan material, such as rubrics, answer keys, activity guides, and instructional considerations can be found here on our website.

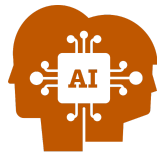
The contents of this digital lesson were developed by the Texas Advanced Computing Center ([TACC](#)) with the support of [Google.org](#). However, the contents do not necessarily represent the policies of Google.

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“I started teaching in 2003 as a Physics teacher and have had the chance to work in different countries and high schools along the way. About five years ago, I shifted into technology and computer science, and I quickly fell in love with coding and the fast pace of the field. Lately, I’ve been especially interested in AI; both learning about it myself and helping students see how they can use it in meaningful ways. This lesson is just a first step in that journey.”

Lesson Description

This lesson introduces students to the foundational concepts of artificial intelligence (AI) and machine learning (ML). Students investigate how AI simulates human thinking, how ML uses data to improve performance, and the historical development of these technologies. They distinguish between AI as the broader goal of making computers act intelligently and ML as a primary method of achieving this by training systems with data rather than explicit rules. Real-world applications such as chatbots, recommendation systems, and image recognition anchor the concepts in everyday experiences. The lesson builds conceptual understanding while fostering critical awareness of how AI systems learn and evolve.



Lesson Objectives

(formatted as “Students will be able to...” statements)

- Goal 1:
- Goal 2:
- Goal 3:

Essential Questions

Outline the basic details and purpose of the lesson here. Also, highlight if this is a face-to-face lesson or a digital lesson.

A brief 2-3 sentence overview of the lesson focus and key takeaways.

TEKS Alignment (Texas Standards Alignment)

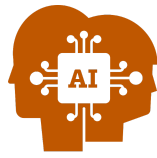
- TEKS Code 1 – Description
- TEKS Code 2 – Description
- TEKS Code 3 – Description

- TEKS Code 1 – Description
- TEKS Code 2 – Description
- TEKS Code 3 – Description

CSTA/ISTE Alignment (National Standards Alignment)

- Standard 1 – Description
- Standard 2 – Description
- Standard 3 – Description

- Standard 1 – Description
- Standard 2 – Description
- Standard 3 – Description



Inclusive Computing Considerations

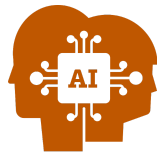
(based on Guiding Principles for Inclusive CS Teaching)

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AI Literacy Competencies

(based on TeachAI Framework)

Key Terms	
Term	Definition
Example Term 1	Brief definition here
Example Term 2	Brief definition here
Example Term 3	Brief definition here
Example Term 4	Brief definition here
Example Term 5	Brief definition here



Launch

Engaging activity or prompt to introduce the lesson.

[Information goes here]

Exploration

Step-by-step student tasks, experiments, or investigations.

[Information goes here]

Whole Class Discussion

Discussion questions, teacher prompts, and expected student responses.

[Information goes here]

Assessment

Formative or summative assessment tasks and criteria.n.

Assessment Opportunities	Facilitation Tips
Activity Title Outline the big picture goals here. How will you measure students' mastery of lesson objectives?	Outline general teacher actions that should occur during this activity.