



AI Literacy

Understanding AI with a Critical Eye

*Lessons for high school students
aged 14-19*





AI Awareness

*Lessons for high school students
aged 14-19*

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AI Awareness – Teacher/Parent Guide



Learning Objectives

By the end of these lessons, students will be able to:

1. Define what AI is and how it works using data and algorithms.
2. Explain how AI differs from human intelligence and emotion.
3. Describe how AI makes decisions and how bias can affect outcomes.
4. Identify how AI is used in daily life and its influence on choices.
5. Explore how AI is changing the job market and required skills.
6. Practice safe, ethical, and responsible use of AI tools.

Learning Rationale

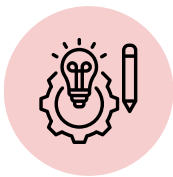
Artificial Intelligence is all around us—from voice assistants to online games to learning tools. As students grow up in a world powered by AI, it's vital that they:



Build awareness of AI in their surroundings.



Develop critical thinking about what AI can and cannot do.



Practice digital safety skills and make responsible choices.



Grow confidence in digital literacy and how to ask for help when unsure about technology.

This digital pack uses Social and Emotional Learning (SEL) strategies—like perspective-taking, responsible decision-making, relationship skills, and advocating for oneself—to help students explore AI in a way that's personal, developmentally appropriate, and empowering.



AI Awareness – Teacher/Parent Guide

Introduction for the Teacher/Parent

These lessons are designed for high school students (ages 14–19) and can be used in classrooms, homeschool settings, or small group discussions. Each lesson includes a concise, student-friendly reading, clear learning objectives, and a variety of flexible activities that encourage reflection and dialogue.

The lessons are:

- **Flexible** – Each can be delivered in a single session or expanded across multiple days using journal prompts, peer discussions, research extensions, or project-based learning.
- **Purposeful** – Focused on helping students understand what AI is, how it works, how it affects their daily lives, and how to engage with it thoughtfully and ethically.
- **Developmentally Appropriate** – Encourages critical thinking, media literacy, and responsible decision-making while empowering students to evaluate the role of AI in their personal, academic, and professional lives.

You don't need to be an AI expert to facilitate these lessons. The goal is to build students' awareness through curiosity, ethical reflection, and real-world connections. As teens prepare for college, careers, and life in a tech-driven world, these lessons offer a meaningful foundation for navigating artificial intelligence with confidence, responsibility, and integrity.

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- **Pre-Assessment** – Checking what students already know about AI.
- **Lesson 1: The Foundations of AI** – Students learn what AI is, how it works using data and patterns.
- **Lesson 2: AI: Smart, but not Human** – Students explore the difference between real people and AI tools, especially in emotional situations.
- **Lesson 3: Patterns & Bias - How AI Decides** – Students discover that AI makes decisions based on training data—and that biased or limited data leads to poor results.
- **Lesson 4: Smart Tools, Real Impact: How AI Supports Us** – Students identify how AI can be helpful in real life, with special attention to AI and future careers.
- **Lesson 5: Using AI Wisely & Responsibly** – Students learn why they should use caution, question AI's advice, and always talk to a trusted adult when unsure.
- **Post-Assessment** – Reflecting on what students have learned.



AI AWARENESS PRE-ASSESSMENT

Teacher/Parent Lesson Plan



Learning Objectives

By the end of the pre-assessment, students will:

- Reflect on and express their current understanding and beliefs about artificial intelligence (AI).
- Identify real-world examples of how AI appears in their daily lives.
- Recognize the differences between human intelligence and machine learning.
- Begin to consider ethical & emotional boundaries related to technology use.
- Build self-awareness around their comfort level, curiosity, or uncertainty about AI topics.

Learning Rationale

The pre-assessment is not a formal test—it is a diagnostic tool designed to gauge students' current understanding and perceptions about artificial intelligence. Its purpose is to surface prior knowledge, common misconceptions, and student assumptions before instruction begins.

Key Instructional Benefits:

- **Activates Prior Knowledge:** Helps students make meaningful connections between their experiences and the learning ahead.
- **Encourages Dialogue:** Sparks curiosity and sets the tone for open discussion about the role of AI in their lives.
- **Informs Instruction:** Allows teachers to identify areas where more support, clarification, or extension may be needed.
- **Establishes a Baseline:** Creates a foundation for reflection and growth, especially when paired with a post-assessment.

This tool also supports social-emotional learning (SEL) goals by prompting students to consider their relationship with technology and how it affects their understanding, decision-making, and sense of responsibility.



AI AWARENESS PRE-ASSESSMENT

Teacher/Parent Lesson Plan

Lesson Plan

- 1** Ask students to read each statement and decide how much they understand each idea. Remind them that this is not a test and they should be honest; there are no correct answers
- 2** Optional discussion:
 - After each statement, you may ask for brief examples but avoid correcting them yet—just listen and note answers.
 - Keep it light and exploratory. The goal is to learn what they think, not to teach in this step.
- 3** Record insights: Consider jotting down brief notes of their responses so you can look back during the post-assessment to see changes in understanding.
- 4** Set the tone: Let students know that by the end of the lessons, they'll have learned new things about AI, and it's perfectly fine if their answers change later.



AI AWARENESS PRE-ASSESSMENT

For each statement below, rate how well you understand the idea by choosing one of the following:

- I strongly agree with this statement.
- I agree with this statement.
- I disagree with this statement.
- I strongly disagree with this statement.

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
I can explain what artificial intelligence (AI) is.				
I know how AI learns to do things using data.				
I believe AI can think for itself.				
I understand how apps like Spotify or TikTok use AI.				
I can explain why people sometimes treat AI like a person.				
I know the limits of what AI can do emotionally.				
I think some people are unfairly affected by AI.				
I understand that AI makes decisions based on the data it is trained on.				
I know how AI influences what I see on social media.				



AI AWARENESS PRE-ASSESSMENT

Statement	Strongly Agree	Agree	Disagree	Strongly Disagree
I understand that AI can be biased.				
I know how to protect myself when using AI tools online.				
I know how to check if something AI says is accurate.				
I've thought about whether it's OK to use AI for school assignments.				
I know how to use AI tools responsibly.				

Which topic do you feel the most confident about? Why do you think that is?

Which statement(s) did you feel unsure or confused about? What do you think made them hard to understand?

What is one question you have about AI that you'd like to explore?



THE FOUNDATIONS OF AI

Teacher/Parent Lesson Plan



Learning Objectives

By the end of this lesson, students will be able to:

- Explain what AI (Artificial Intelligence) means in their own words.
- Understand that AI is created by humans and learns from data and patterns.
- Recognize that AI is not alive—it is a tool designed and trained by people.
- Identify common examples of AI in daily life (e.g., search engines, smart assistants).
- Describe how AI “learns” by being trained with large sets of examples.
- Simulate how AI follows rules or patterns using simple logic.

Learning Rationale

High school students are coming of age in a world powered by Artificial Intelligence (AI)—from the social media algorithms that shape their feeds to the smart tools they use for school, work, and entertainment. Yet despite this constant exposure, many students have little understanding of what AI really is or how it works.

This lesson builds essential AI literacy by helping students explore:

- What AI is—and what it is not
- How AI learns from patterns and data, rather than thinking like a person
- How AI differs from traditional programming and automated systems

Why This Matters for High School Students

At this stage, learners are developing advanced reasoning and growing awareness of complex systems. They are ready to:

- Think critically about the unseen forces shaping their digital experiences
- Reflect on how emerging technologies may affect their futures
- Move beyond passive tech use to become informed, ethical participants in a world shaped by AI

This foundational understanding sets the stage for more advanced lessons on bias, decision-making, ethics, and career pathways in AI—empowering students to navigate the digital world with clarity and confidence.



THE FOUNDATIONS OF AI

Teacher/Parent Lesson Plan

Preparation

- Review the student lesson text on “What is AI & How Does It Work?.”
- (Optional) Bring in or show examples of tools or services that use AI and those that don’t (e.g., smart speaker vs. basic calculator).

Lesson Plan

- 1** Read the Introduction
 - Students can read the introduction silently, in pairs, or listen as you read it aloud
 - Key points to emphasize:
 - AI is a computer system that can do things like learning, recognizing patterns, or making predictions.
 - It learns by training on large amounts of data (images, words, sounds, etc.).
 - AI is not alive—it does not think or feel, but it can appear smart.
- 2** Activity 1: Build an AI Recipe
 - Students choose a simple task.
 - They then write or draw a step-by-step “recipe” for how an AI would learn to do that task.
 - Encourage them to:
 - Break the task into clear, logical instructions.
 - Think about what data or examples the AI would need to learn.
- 3** Activity 2: You Be the AI
 - Go through the introduction about the if-then statements.
 - Walk around and help students if they are stuck.
 - Afterwards, you can conduct an optional discussion, answering;
 - Which version felt more helpful or authentic?
 - Could the AI version offer support in a meaningful way?
- 4** Activity 3: Guess the Rule
 - Go through the activity with your students so they understand what to do. The data sets go from easiest to hardest. The answer key is upside down so they can check their answers when they are finished.
 - Ask students to reflect on the questions either in writing or in pairs.



THE FOUNDATIONS OF AI



Learning Goals for this lesson:

- Explain what artificial intelligence (AI) is in my own words.
- Describe how AI uses data and patterns to make predictions or suggestions.
- Recognize examples of AI in tools and apps I use every day.
- Understand that AI doesn't think or feel like a human being.



Let's Learn about AI.

Have you ever talked to Siri or Alexa? Or maybe you've seen YouTube recommend videos just for you? That's AI in action!

AI refers to computer programs that are designed to do things that usually require human thinking. These include recognizing faces in photos, predicting what video you'll want to watch next, or answering questions like a chatbot.

AI doesn't think the way people do. It doesn't have feelings or opinions. Instead, AI systems analyze huge amounts of data (like text, images, or numbers) and learn to recognize patterns. Once they learn those patterns, they can make predictions or suggestions based on new information.

For example:

- If you listen to a lot of hip-hop on Spotify, the app may suggest more songs in that style—that's AI recognizing a pattern in your choices.
- When you type a message and your phone suggests the next word, it's using AI to guess what you might say based on past data.
- AI tools used in medicine might analyze test results and compare them to thousands of past cases to help doctors make decisions.

Some AI systems are very simple. Others are extremely advanced. But in every case, AI learns from data, not from experience or emotion like a human would.



THE FOUNDATIONS OF AI

How Humans Teach AI and How AI Learns

Imagine your AI has never seen a dog before. It doesn't know what "dog" means—so you'll have to teach it using very specific, pattern-based steps.

Step 1: Collect lots of pictures of animals.

Step 2: Label each picture as "dog" or "not dog."

Step 3: Upload the pictures into the AI training system.

Step 4: Help the AI notice patterns in "dog" pictures by looking for four legs, fur, two ears, etc.

Step 5: Show new, unlabeled pictures and ask the AI to guess if it's a dog.

Step 6: If the AI gets it wrong, correct it and update the labels.

Step 7: Repeat this process many times so the AI learns from its mistakes.

Step 8: Test the AI with new animal pictures it hasn't seen before.

AI can't "assume"—you have to spell out every pattern it should learn or every rule it should follow.

Key Ideas (What You Should Know)

- AI stands for Artificial Intelligence—technology that can perform tasks that typically require human thinking.
- AI works by learning from large amounts of data, such as text, images, videos, or numbers.
- AI uses algorithms—sets of rules or instructions—to recognize patterns and make predictions.
- AI is all around us: in social media feeds, voice assistants, GPS apps, recommendation systems, and more.
- AI doesn't "know" or "feel" things. It works based on data and probability, not emotions or judgment.



Reflection Question:

Where do you think AI shows up in your daily life, and do you think you've ever used it without even realizing it?



THE FOUNDATIONS OF AI



Activity 1: Build an AI Recipe

AI needs to learn how to do things. But AI doesn't learn by thinking or guessing. It needs clear steps, like a recipe. Write a step-by-step "recipe" to teach an AI how to do something. Be specific and break it into small, simple steps.

Need help? Look back at introduction page for this lesson for an example about teaching AI to recognize dogs.

Step 1: Pick a Task for Your AI

Choose one or come up with your own!

- Teach AI how to recognize a teenager
- Teach AI how to know if a sentence is a question
- Teach AI how to play a guessing game
- Teach AI how to sort laundry

My own idea: _____

Step 2: Write Your AI Recipe (Step-by-Step Instructions)

- _____

- _____

- _____

- _____

- _____

- _____



THE FOUNDATIONS OF AI

Step 2: Write Your AI Recipe (Continued)

- _____

- _____

- _____

- _____

- _____

Step 3: Test a Friend's AI Recipe

Try to follow your partner's AI recipe. Did it work? Was anything confusing? What would you change?

What worked well: _____

What could be clearer: _____
