

AI for learning

By
MeteSys Corporation

Main Goal

Encourage students to:

- See AI as a future career skill
- Understand practical uses of AI
- Feel confident they can learn it
- And become curious enough to explore further

CONTENT VS PURPOSE

Visual Slides

Live Demonstrations

Stories / Examples

Interactive Questions

Career Insights

Ethical Discussion

Hands-on Activity

Future Pathways

Attention & explanation

Excitement & realism

Emotional connection

Engagement

Motivation

Balanced understanding

Participation

Action after seminar

Time Line

- 0. Something about the presenter – 3 Minutes
 - 1. What is Intelligence – 3 Minutes
 - 2. What is A.I. – 3 Minutes
- 3. Peanut Butter and Jam (B/R) – 10 Minutes
- 4. A.I. in an Abstract – 40 Minutes
- 5. Exercise Quiz – 10 Minutes
- 6. The Summary – 10 Minutes
- 7. Next Teaser – 3 Minutes
- 8. Q&A – 10 Minutes

Time Line

0. Something about the presenter – 3 Minutes

Vision Statement

METESYS OFFERS TECHNOLOGY FOCUSED
INTEGRATED AI PRODUCTS & SERVICES (IAIPS)
TO STREAMLINE NEED FOR DOMAIN SPECIFIC
EXPERTS, FOR SOFTWARE & TOOLS, AND FOR
TECHNOLOGY INFRASTRUCTURE TO OPTIMIZE
COST OF DOING BUSINESS.

Time Line

1. What is Intelligence – 3 Minutes

What is intelligence?

Intelligence is broadly defined as the mental capacity to acquire and apply knowledge, learn from experience, reason through abstract concepts, and adapt to new situations. Rather than a single skill, it is a complex toolbox of cognitive abilities.

Let's try by making a Peanut Butter and Jam Sandwich.

Shall We?

Time Line

2. What is A.I. – 3 Minutes

AI by Definition

AI stands for **Artificial Intelligence**. It refers to computer systems or machines designed to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, understanding language, and making decisions.

Artificial Narrow Intelligence (ANI): Also known as "Weak AI." This is the only type we have today. It is designed to excel at one specific task (e.g., a chatbot like ChatGPT, a chess-playing engine, or a self-driving car).

Artificial General Intelligence (AGI): A theoretical, future stage where a machine would have complete human-level cognitive capabilities, allowing it to learn and reason across any domain just like a person.

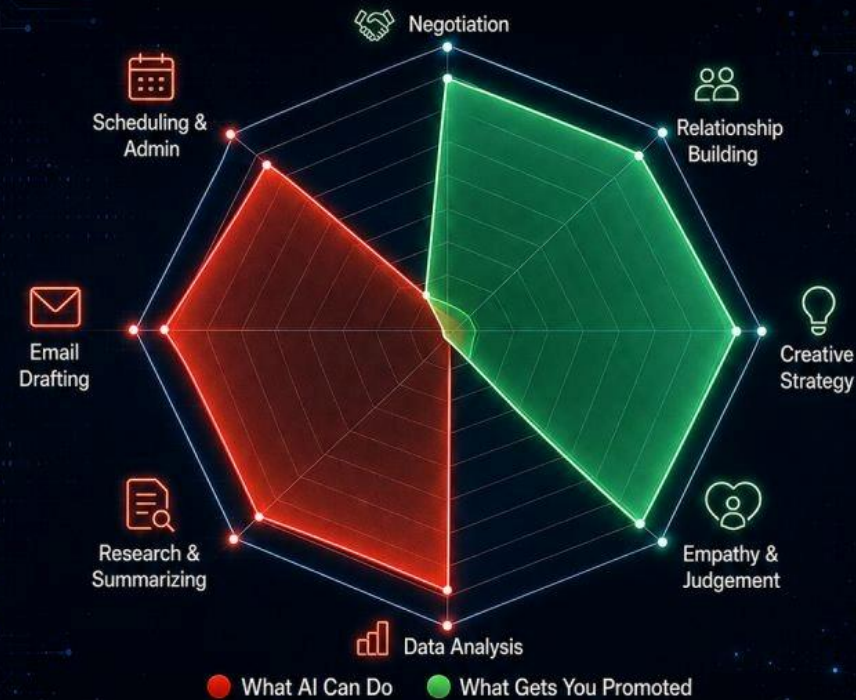


= AI RULE
AVERAGE STUDENTS USE
AI TO GET ANSWERS. TOP
STUDENTS USE AI TO
TRAIN THEIR BRAIN.

~~AI Will Replace Your Job~~

What AI can do vs. what actually gets you promoted

AI ForLeaders.com



+78M
Net new jobs by 2030
— World Economic Forum

70%
of skills stay relevant
— McKinsey

+22%
growth in human-AI roles
— Harvard Business Review



The skills AI masters are not the skills that pay you.
Spend more time on **judgement, relationships, and strategy.**



Become better at AI in just 1 minute a day. Sign up free now → aiforleaders.com

Time Line

3. Peanut Butter and Jam (B/R) – 10 Minutes

 = MAKE OR BREAK

AI SANDWICH

LEARNING OUTCOMES

- Explain what AI is.
- Identify common AI applications.
- Understand why AI matters.
- Recognize opportunities and challenges.
- Use AI responsibly for learning.
- Create a personal plan to prepare for college and future careers.

Time Line

4. A.I. in an Abstract – 40 Minutes

The 7 Levels of AI Users

Why most AI training programs are solving the wrong problem



Most AI training programs are teaching tools — not building levels.



88% of organizations now use AI in at least one business function.
Only **1%** have reached AI maturity.

(McKinsey, 2025 / IDC, 2025)



The gap isn't budget, platform, or strategy.

It's that most CXOs don't know which level their people are actually operating at — and they invest in training as if everyone starts from the same place.



82% of enterprise leaders say their organization provides AI training,
yet **59%** still report an AI skills gap.

(DataCamp, 2026)

WHAT IS ARTIFICIAL INTELLIGENCE?

Definition:

Artificial Intelligence (AI) is technology that enables computers to perform tasks that normally require human intelligence.

Examples:

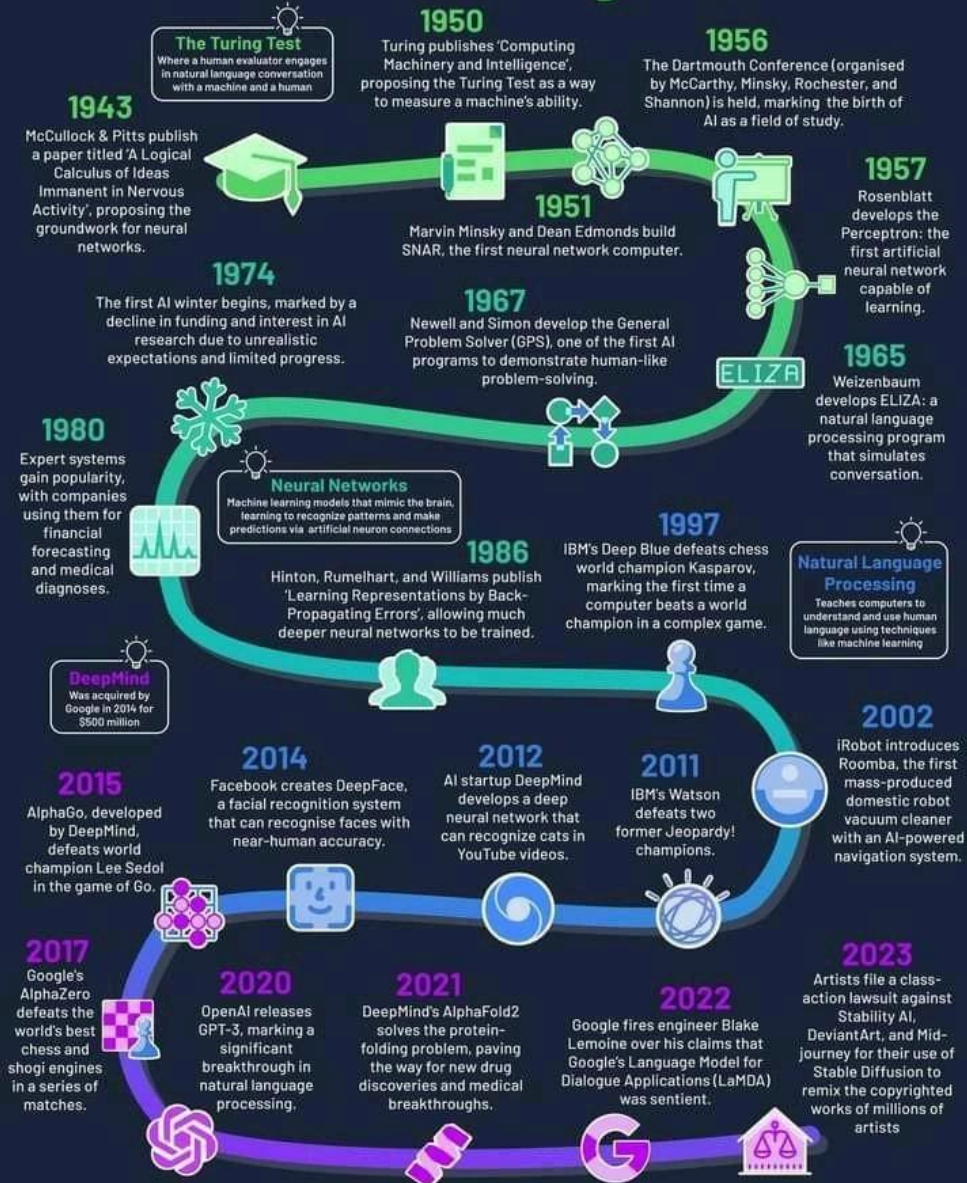
- Understanding language
- Recognizing images
- Solving problems
- Making predictions
- Learning from data

Students already encounter AI through:

- Smartphones
- Social media feeds
- Search engines
- Online shopping
- Streaming platforms

A brief history of... Artificial Intelligence.

CREATED BY
 genuine
impact



Sources: ChatGPT, Futurism

More charts: genuineimpact.substack.com

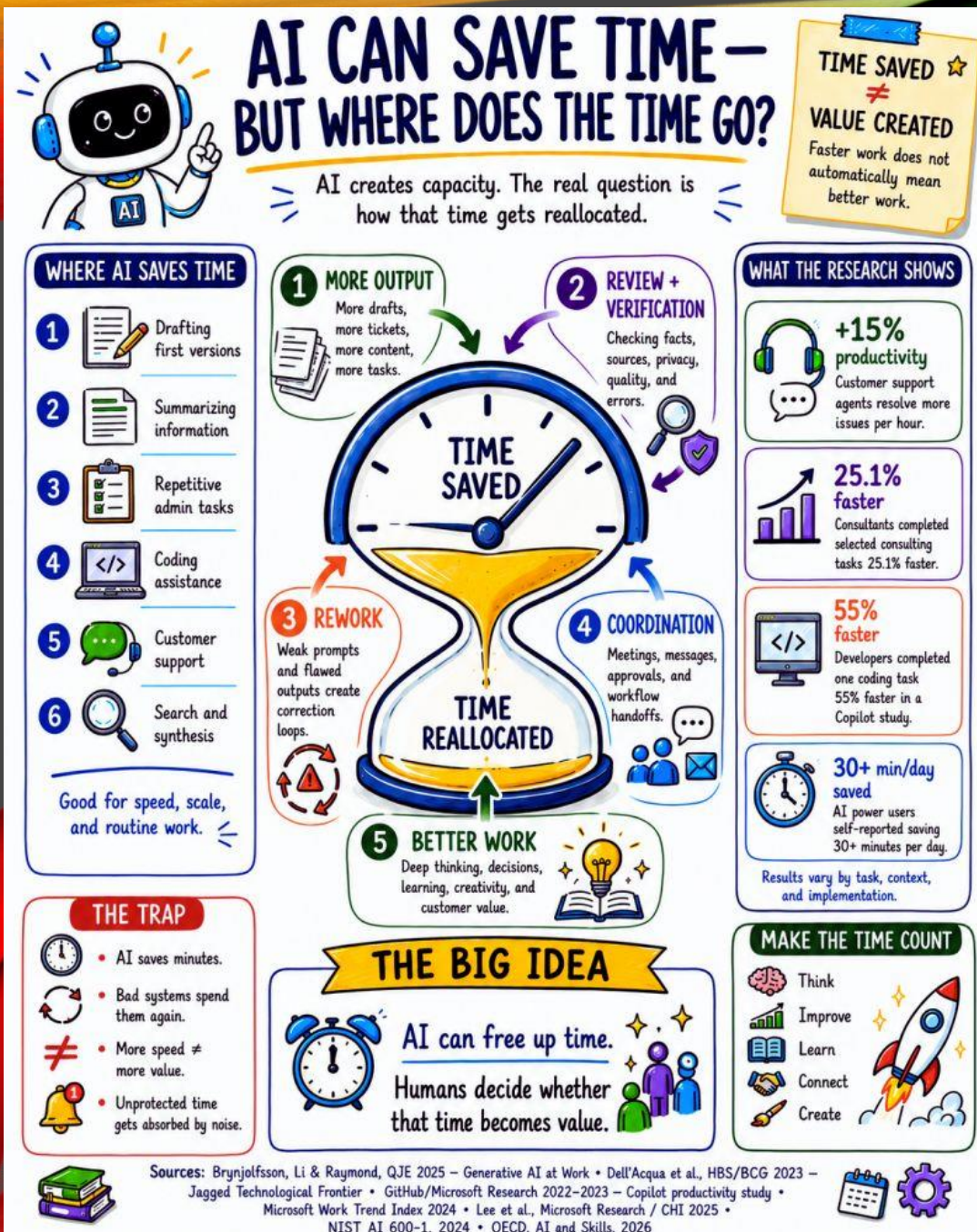
Mete|Sys

AI IS ALREADY AROUND US

Examples students use every day:

- Voice assistants
- Navigation apps
- Video recommendations
- Spam filters
- Translation tools
- Chatbots

"How many AI-powered tools have you used today?"



TYPES OF AI (NARROW AI)

Designed for specific tasks.

Examples:

- Recommendation systems
- Language translation
- Face recognition

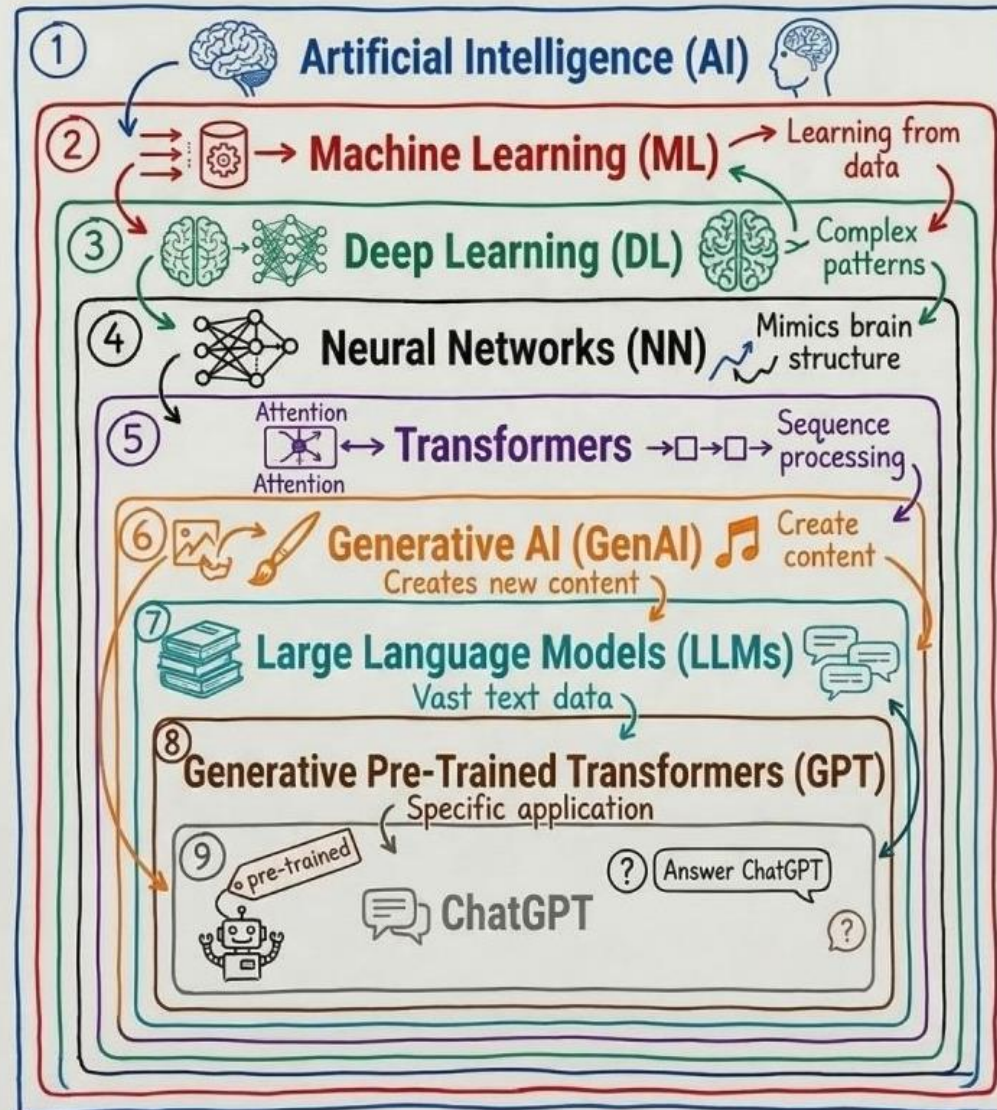
General AI

A hypothetical AI that could perform almost any intellectual task a human can.

Currently, only Narrow AI exists in practical use.

HOW TO EXPLAIN AI TERMS

A PROFESSOR'S VISUAL GUIDE



USEFUL AI TOOLS FOR STUDENTS

Learning

- ChatGPT
- Khan Academy

Writing

- Grammarly

Research

- Search engines
- Academic databases

Programming

- AI coding assistants

AI USE CASES FOR STUDENTS

AI can help with:

- Summarizing chapters
- Creating quizzes
- Practicing interviews
- Learning languages
- Coding practice
- Study planning

WHY IS AI IMPORTANT? TALKING AI

AI is transforming:

- Education
- Healthcare
- Finance
- Agriculture
- Manufacturing
- Transportation

Many future careers will involve AI in some way.

AI AND FUTURE JOBS

AI may automate some tasks but also creates new opportunities.

Examples:

- Data Analyst
- AI Engineer
- Prompt Engineer
- Cybersecurity Specialist
- Digital Marketer
- Robotics Technician

Key message:

Students who learn to work with AI will have an advantage.

Healthcare

- Disease detection
- Medical imaging

Agriculture

- Crop monitoring
- Smart irrigation

Banking

- Fraud detection

Education

- Personalized learning

Transportation

- Navigation systems

WHY STUDENTS SHOULD LEARN AI?

Benefits:

- Faster learning
- Better productivity
- Stronger problem-solving skills
- Career readiness

You only need:

- Curiosity
- Consistency
- Willingness to learn

AI literacy may become as important as computer literacy.

LEARNING PATH BEFORE COLLEGE

Month 1:

- Understand AI basics

Month 2:

- Learn prompt writing

Month 3:

- Learn basic programming

Month 4+:

- Build simple projects

A Simple Formula

When using AI, try:

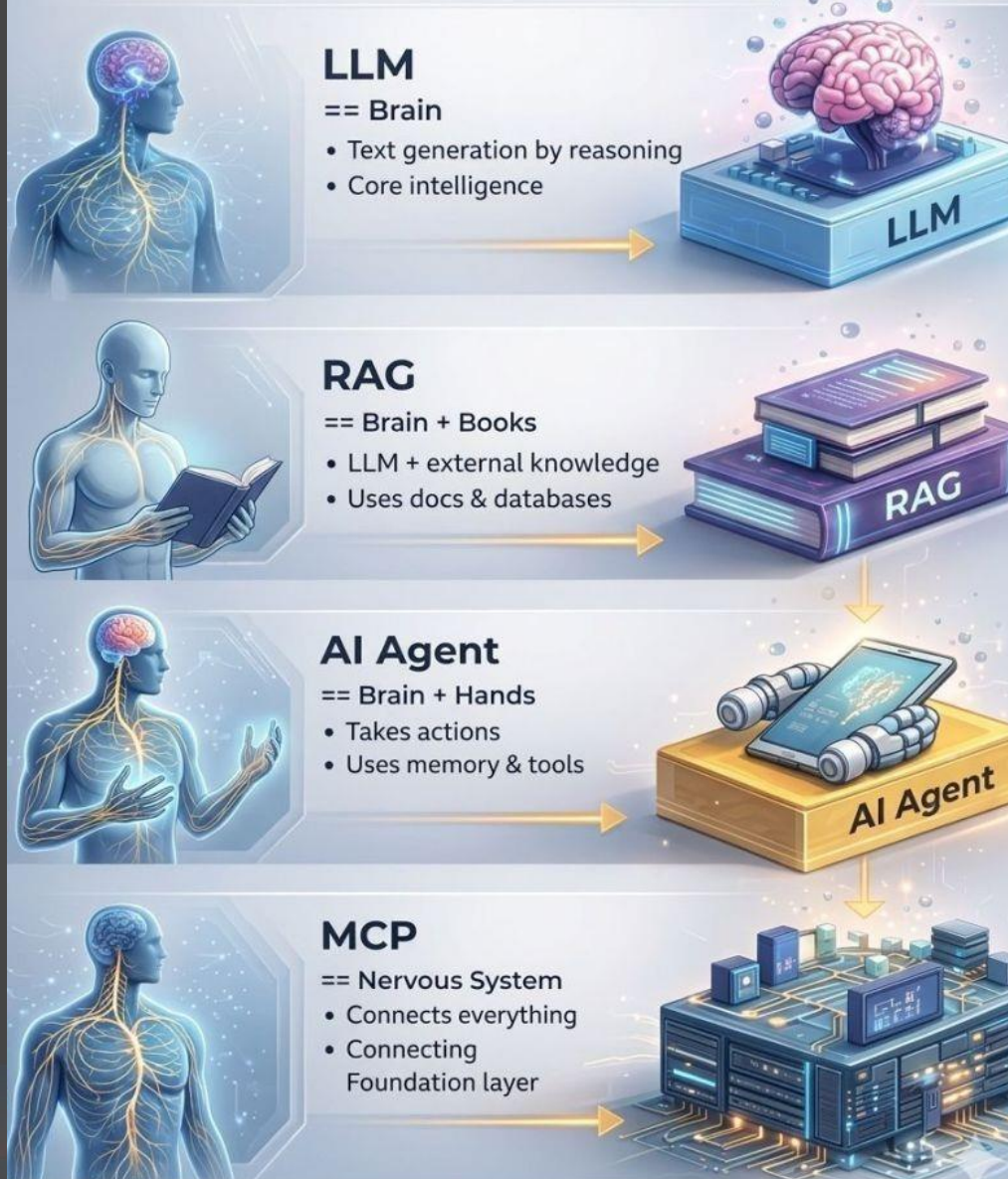
1. Ask a question.
2. Ask for examples.
3. Ask follow-up questions.
4. Ask it to test your understanding.

What Not to Do

- Don't share passwords or private information.
- Don't copy AI answers directly and claim they're your own work.
- Don't rely on AI as your only source for facts.

AI Systems: A Human Analogy

Still confused? Think of AI like a human body!



For more information connect with Satish Billasanti

HOW DOES AI WORK?

Simplified AI Process

1. Collect data
2. Find patterns
3. Learn from examples
4. Make predictions

Example:

An AI sees thousands of cat photos and learns what cats look like.

Imagine:

A student studies 1,000 solved questions.

Eventually, they recognize patterns and answer new questions.

AI learns similarly—through large amounts of data.

WHAT IS A PROMPT?

A prompt is an instruction given to an AI system.

Example:

Basic prompt:

Explain photosynthesis.

Better prompt:

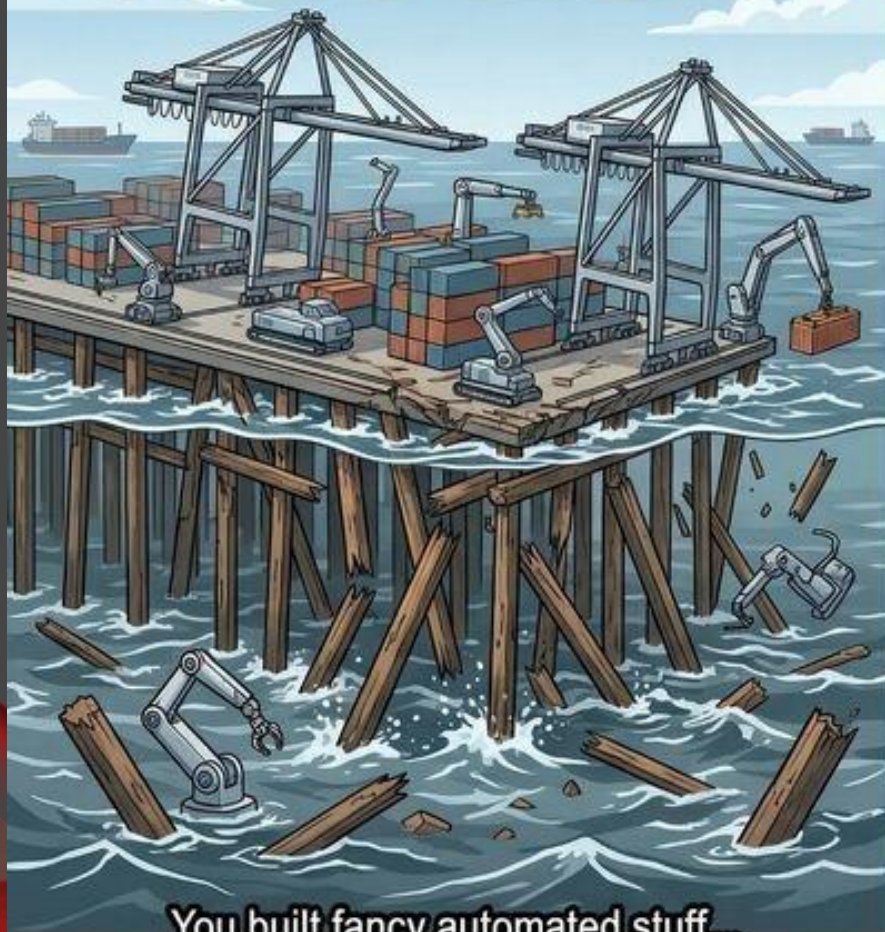
Explain photosynthesis to a Grade 12 student using simple language and examples.

Write a prompt to:

- Learn a math concept
- Summarize a chapter
- Generate a quiz

Discuss why some prompts work better than others.

AI FIRST



You built fancy automated stuff...
But you'll collapse.

DATA FIRST



You care about value...
and stable systems.

AI VS HUMANS

AI can:

- Make mistakes
- Provide outdated information
- Reflect biases in data

Students should:

- Verify important information
- Use critical thinking
- Avoid blind copying

Good use:

Learning concepts
Getting explanations
Practicing questions

Poor use:

Submitting AI-generated work as your own
Cheating on exams

1. AI is a tool, not a truth machine

AI can sound very confident even when it is wrong.

So always remember:

"Sounds right" $\neq$ "is right"

✓ Good habit:

- Ask "How do I know this is correct?"
- Double-check important facts in textbooks or trusted websites

2. Use AI to learn, not just to finish homework

There are two types of users:

✗ Passive user

- "Write my essay"
- "Give me answers"

✓ Active learner

- "Explain this step-by-step"
- "Quiz me on this topic"
- "Check my answer and tell me mistakes"

3. Break big problems into small prompts

AI works best when you guide it step-by-step.

Instead of:

"Teach me everything about algebra"

Try:

"Teach me what a variable is with 3 examples"

Then:

"Now give me 5 practice questions"

4. Never share personal or sensitive info

Never type:

- Passwords
- Phone number
- Address
- School login info
- Private photos

Even if it feels harmless — don't do it.

5. Don't blindly trust AI for serious topics

Be extra careful with:

- Health advice
- Money/financial advice
- Legal questions
- Emergency situations

AI can help explain, but not decide for you.

6. Always "test yourself" after using AI

A powerful habit:

After learning something, ask:

"Can I explain this in my own words without looking?"

If yes → you learned it

If no → you just read it

7. Use AI like a tutor, not a shortcut

Best uses for Grade 8:

- Explaining science concepts
- Making quizzes
- Helping with essay structure
- Practicing math problems
- Brainstorming ideas

8. Ask better questions → get better results

Weak prompt:

“Tell me about gravity”

Strong prompt:

“Explain gravity to a Grade 8 student using examples and then give me a short quiz”

Cross-check important answers, biggest secret:
don't become dependent

Good places to verify:

- Textbooks
- Teacher notes
- Trusted educational websites

AI = helper

Teacher/textbook = authority

AI should:

- save time
- improve understanding
- help you practice

But NOT:

- replace thinking
- replace writing
- replace learning

90-DAY AI BOOT CAMP

Month 1

- Learn AI basics
- Explore AI tools

Month 2

- Improve communication
- Practice prompt writing

Month 3

- Learn Python basics
- Build a simple project

Important Rules to Follow:

- **Don't let it do your homework.** Using AI to write your assignments for you violates academic rules and prevents you from actually learning the material.
- **Fact-check everything.** AI can confidently give you wrong information (called a "hallucination"). Always double-check facts with your textbook or a trusted website.
- **Ask your teacher.** Always check with your teachers to see if they have specific rules about using AI for their assignments.
- **Which specific subject or assignment** you are working on right now
- **What topic you are studying** in class (e.g., Biology, History, Math)

I can help you come up with the **perfect prompt** to use AI to master that topic!

The 25-Minute Daily AI Routine [1] [After School]



Step 1: The 5-Minute "AI Explain" (Clarify)



Step 2: The 10-Minute "Active Recall" (Test)



Step 3: The 5-Minute "Grade My Work" (Fix)



Step 4: The 5-Minute "Preview Tomorrow" (Prep)

How To Start Learning AI Agents



Level 3: Advanced Agent Skills

21. Real-World Integration: Connect agents to tools like Slack, Notion, or Gmail.
22. Autonomous Loops: Create agents that run and update tasks on their own.
23. Custom Toolkits: Equip agents with APIs or Python tools.
24. Optimize Performance: Improve speed, cost, and error handling.
25. Deploy to Production: Host your AI agent for real users to access.

Level 2:

20. Safety & Guardrails: Add filters to keep agents safe and factual.
19. Action Planning: Make agents plan, adapt, and retry intelligently.
12. Build Your First Agent: Create a simple AI agent that performs real tasks.
13. Agent Workflows: Design how agents think, act, and complete tasks.
14. Agent Memory: Add memory so agents can recall past actions.
15. Agent Evaluation: Track agent accuracy, performance, and reliability.
16. Multi-Step Reasoning: Teach agents to think in logical sequences.
17. Multi-Agent Systems: Enable agents to work together on complex tasks.
11. Agentic Frameworks: Create a simple AI agent that performs real tasks.
11. Agentic Frameworks: Explore LangChain, CrewAI, AutoGen, and more.
10. What Are AI Agents? Learn how agents plan, reason, and act autonomously.

AI Agent Essentials

Level 1:

GenAI & RAG Basics

1. GenAI Introduction: Get familiar with what Generative AI is and where it's used.
2. Basics of LLMs.: Understand how large language models are trained & used.
3. Prompt Engineering: Learn to write effective prompts for better LLM results.
4. LLM Preprocessing: Clean, chunk, and format data for AI tasks.
6. RAG Fundamentals.: Combine LLMs with search to retrieve accurate info.
7. Vector Databases : Store & search embeddings using Pinecone, Chroma, etc.
8. API Wrappers.: Interact with LLMs using LangChain, LlamaIndex, or direct APIs.
9. Tool Integration: Let LLMs call tools like search, code, or APIs.

Time Line

5. Exercise Quiz – 10 Minutes

THE GENERAL QUIZ

Mathematics

Question:

What is the value of $(12 \times 8 \div 4)$?

English

Question:

Choose the correct sentence:

- A) He don't like apples
- B) He doesn't like apples
- C) He not like apples

General Knowledge

Question:

What is the capital city of Pakistan?

Geography

Question:

Which is the longest river in the world?

Religion

Question:

How many daily prayers are obligatory in Islam?

AI CHALLENGE QUIZ

- 1.What is the AI Rule?
- 2.Why an AI Sandwich?
- 3.Which is the key to AI?
- 4.How can one learn AI?
- 5.What is AI NOT?

Which AI Model to Use

Pick by use case, not by hype

AIForLeaders.com



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Time Line

6. The Summary – 10 Minutes

For Research, For Learning Skills, For Creativity

- Brainstorm story ideas.
- Create characters for comics or games.
- Write poems, songs, or scripts.
- Generate art ideas and image prompts.
- Learn coding:
 - "Teach me Python from the beginning."
- Learn languages:
 - "Teach me 5 Spanish words a day."
- Learn public speaking, math tricks, or science concepts.

Use AI to:

- Get an overview of a topic.
- Generate questions to investigate.
- Summarize information.

But always double-check important facts with textbooks, teachers, or reliable sources because AI can sometimes make **BLUNDERS!**

What Not to Do

- Don't share passwords or private information.
- Don't copy AI answers directly and claim they're your own work.
- Don't rely on AI as your only source for facts.

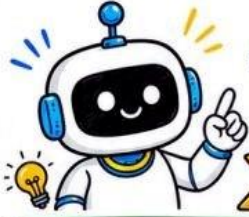
A Simple Formula

When using AI, try:

1. Ask a question.
2. Ask for examples.
3. Ask follow-up questions.
4. Ask it to test your understanding.

Time Line

7. Next Teaser – 3 Minutes



ARE YOU USING AI... OR IS AI USING YOU?

AI can make you faster. But without judgment, it can also make your work more generic, noisy, and shallow.

AI OUTPUT
≠ **YOUR JUDGMENT**

AI can assist thinking — not replace judgment.

WHAT AI HELPS YOU DO

- Draft faster
- Summarize faster
- Brainstorm faster
- Analyze faster
- Edit faster

Speed is valuable.
But speed is not the same as quality.

HOW THE TRAP STARTS

- You ask AI
- AI gives a fast answer
- It sounds confident
- You accept or copy it
- You stop thinking deeply

**The danger is not using AI.
The danger is outsourcing judgment.**

WHAT AI CAN QUIETLY INFLUENCE

- What you notice
- What you ignore
- How your ideas sound
- Which assumptions you accept
- How much thinking you outsource

WHAT YOU MAY LOSE

- Focus
- Judgment
- Original thinking
- Mental sharpness
- Ownership of the final decision

5 SIGNS AI IS USING YOU

1 You accept the first answer

2 Your work sounds generic

3 You stop checking sources

4 You ask AI what to think

5 You cannot explain the final result alone

USE AI AS A TOOL, NOT A BRAIN REPLACEMENT

BEFORE USING AI	WHILE USING AI	AFTER USING AI
- Define the goal - Define the audience - Define the quality bar - Decide what must stay human	- Ask for options - Ask for assumptions - Ask for counterarguments - Ask what is missing - Ask which claims need evidence	- Verify the facts - Rewrite in your voice - Remove generic language - Add human context - Own the final decision

BETTER PROMPTS = BETTER THINKING

"Give me 3 strong angles."

"What assumptions am I making?"

"What could be wrong here?"

"Which claims need sources?"

"How can I make this more specific?"

"Challenge this draft like an expert editor."

BEFORE YOU RELY ON AI

- Did I think first?
- Did I verify the answer?
- Can I explain it myself?
- Did I add my own judgment?
- Would I trust this without checking?

THE BIG IDEA

Let AI speed up your work — not weaken your mind.

The best AI users know when to delegate, when to verify, when to edit, and when to think alone.

Sources: NIST AI 600-1: Generative AI Profile; OECD AI Principles; Microsoft Work Trend Index 2024; Noy & Zhang, Science 2023; Microsoft Research, The Impact of Generative AI on Critical Thinking; Stanford SCALE repository on cognitive engagement.

A SUGGESTED LEARNING PATH

- Learn basic computer skills and internet safety.
- Start with Scratch and simple programming concepts.
- Explore AI through Teachable Machine and Quick, Draw!
- Use ChatGPT or another AI assistant to ask questions and build small projects.
- Learn Python through beginner tutorials.
- Build increasingly challenging AI projects and explore topics like machine learning, computer vision, and robotics.

This progression helps a 6th grader develop both computational thinking and practical AI skills without requiring advanced mathematics at the start.

Time Line

8. Q&A – 10 Minutes

Q&A

THANK
YOU

