



Artificial Intelligence for Every Teacher

A Practical, Beginner-Friendly Introduction

All Subject Areas · All Grade Levels · No Tech Experience Needed

Welcome, Educators!

What We'll Cover Today

01

What is AI?

Simple, jargon-free explanation

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History of AI

From 1950 to ChatGPT

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Benefits for Teachers

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Important limits & ethical guardrails



What is

Artificial Intelligence?

AI = Teaching computers to think, learn, and solve problems — much like humans do.



Think of it like this...

AI is like an extraordinarily well-read assistant who never forgets, never sleeps, and can answer almost any question in seconds.



What AI Can Do:

Understand language · Write text · Answer questions · Summarise documents
· Translate · Grade assignments · Generate images

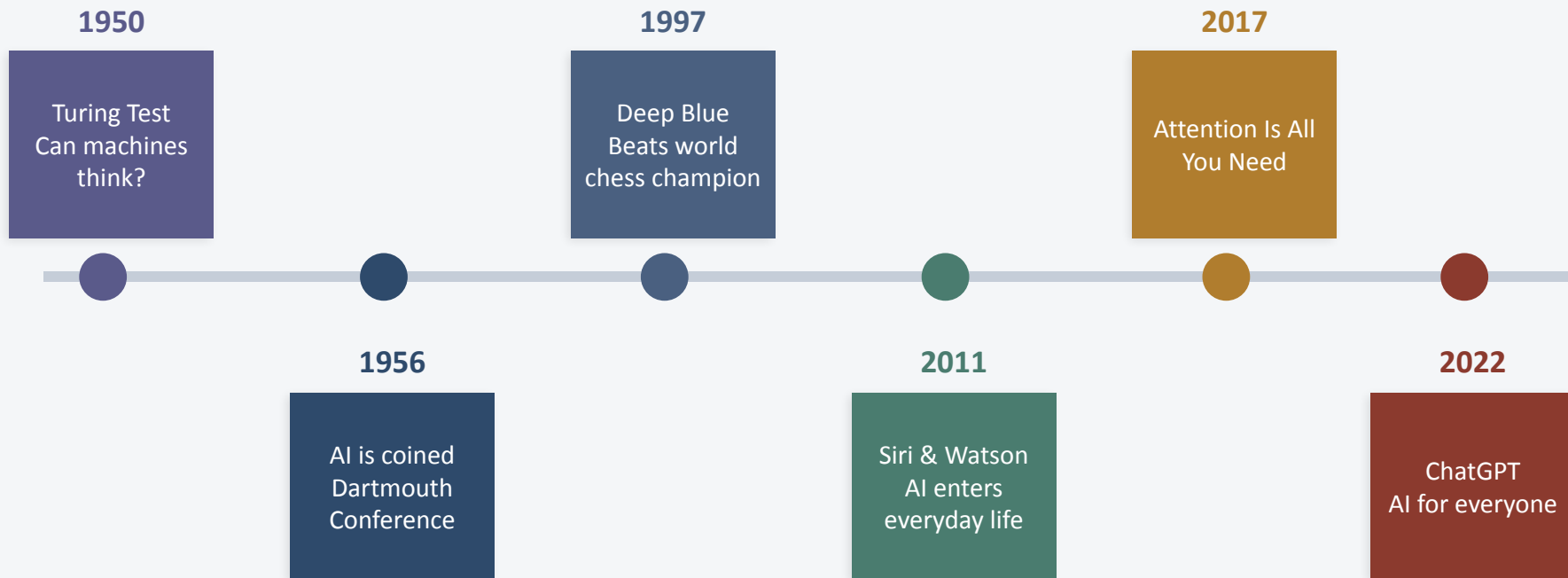


AI is NOT Magic

It is mathematics and massive amounts of training data. Powerful - but not infallible. Always review what it produces.

A Brief History of AI

From science fiction to your staffroom



Today: AI tools are free, easy to use, and available to every teacher — including you.

Why Should You Care About AI?



Save Hours Every Week

Generate lesson plans, quizzes, worksheets & rubrics in minutes, not hours.



Personalise Learning

Create differentiated materials for every ability level simultaneously.



Faster Feedback

Draft written feedback on student work, flag common errors, and suggest improvements.



Break Language Barriers

Translate materials, simplify language, support students from diverse backgrounds.



Make Lessons More Engaging

Generate stories, puzzles, debates, and creative activities that excite learners.



Richer Lesson Planning

Get ideas for activities, experiments, projects, and cross-curricular links instantly.

AI Use Cases for Teachers

Practical ideas across all subjects and grade levels

Lesson Prep

Write full lesson plans in any format

Create warm-up & cool-down activities

Generate differentiated worksheets

Build unit plans and scope & sequence

Suggest cross-subject connections

Assessment

Generate MCQ, true/false & short-answer quizzes

Create rubric templates for any task

Write descriptive student feedback

Design project-based assessment criteria

Produce oral exam question banks

Differentiation

Simplify texts for struggling readers

Enrich tasks for advanced learners

Translate content to home language

Create visual learning guides

Suggest alternative explanations

Creative Tasks

Write stories, poems & creative prompts

Design role-play & debate scenarios

Generate crossword & word-search puzzles

Build escape-room style challenges

Create engaging class discussion starters

Admin & Comms

Draft parent newsletters & notices

Write student report card comments

Summarise meeting notes

Create structured lesson observation notes

Draft emails to parents or colleagues

AI Use Cases by Subject

Copy-ready ideas you can try this week

Languages & Literacy

- Generate phonics stories at any reading level
- Create grammar drills targeting real student errors
- Produce comprehension passages on any topic
- Write essay outlines and topic sentences
- Build vocabulary lists with example sentences

Science

- Summarise complex concepts with clear analogies
- Generate lab procedure instructions
- Create hypothesis-testing activity guides
- Build concept comparison tables
- Produce science fair project idea lists

Mathematics

- Create word problems at any difficulty level
- Generate worked examples with step-by-step solutions
- Explain 'why' behind formulas in plain language
- Design revision tests chapter by chapter
- Write math story problems using local contexts

Social Studies / History

- Create timeline summaries of key events
- Generate cause-and-effect analysis prompts
- Write comparative country or culture notes
- Build geography fact summaries
- Produce structured debate topics on civic issues



What is a

Prompt?

A prompt is simply the instruction or question you type into an AI tool.



AI does exactly what you ask

The quality of AI output depends almost entirely on how clearly you frame your request. Better prompts = better results.



Think of it like ordering food

Vague: 'Give me food.' Specific: 'Give me a vegetarian meal for two, medium spicy, ready in 20 minutes.' The second always wins.



Anatomy of a great prompt

ROLE · TASK · CONTEXT · FORMAT · CONSTRAINTS

All five don't always apply — but the more you include, the better.

Good Prompts vs Bad Prompts

The difference between a useful answer and a frustrating one

Weak Prompts

"Make a quiz."

↳ No subject, grade, format, or difficulty specified.

"Write a lesson plan."

↳ AI has no idea what topic, length, or style you need.

"Tell me about science."

↳ Too broad — could return anything from atoms to astronomy.

"Give me ideas."

↳ Ideas about what? For whom? In what context?

Strong Prompts

"Create a 10-question multiple-choice quiz on the water cycle for Grade 5, with an answer key."

↳ Subject, format, grade, and deliverable are all clear.

"Write a 45-minute lesson plan on fractions for Grade 4 using hands-on activities."

↳ Duration, topic, level, and style specified.

"Explain photosynthesis in simple language suitable for 11-year-olds, using a food analogy."

↳ Age, complexity, and preferred approach all stated.

"Give me 5 creative writing prompts for Grade 7 students on the theme of friendship."

↳ Number, grade, subject, and theme are explicit.

Anatomy of a Strong Prompt

Five ingredients that make AI work harder for you

ROLE	Tell AI who it should be	<i>"Act as an experienced primary school teacher..."</i>
TASK	State exactly what you want	<i>"...create a 10-question quiz..."</i>
CONTEXT	Give the relevant background	<i>"...for Grade 5 students who have just completed Chapter 3 on fractions."</i>
FORMAT	Specify the output structure	<i>"Present it as a numbered list with an answer key at the end."</i>
CONSTRAINTS	Add limits or special requirements	<i>"Keep language simple, avoid jargon, and use local examples where possible."</i>

Copy-Ready Prompt Examples

Just paste these into ChatGPT, Gemini, or any AI tool

Lesson Plan

"Act as an experienced teacher. Create a 45-minute lesson plan on the water cycle for Grade 5. Include a warm-up, main activity, group task, and exit question. Use simple language."

Differentiation

"Take this paragraph [paste text here] and rewrite it at three levels: simple (for struggling readers), standard, and extended (for advanced learners)."

Parent Email

"Write a polite, professional email to a parent explaining that their child is excelling in reading but needs support in mathematics. Keep the tone warm and solution-focused."

Quiz Generator

"Create a 10-question multiple-choice quiz on the French Revolution for Grade 8. Include 4 options per question, indicate the correct answer, and add a brief explanation for each."

Creative Writing

"Give me 6 creative writing story starters suitable for Grade 6 students, themed around adventure and problem-solving. Each starter should be 2–3 sentences long."

Report Comments

"Write 3 versions of a positive end-of-term report comment for a Grade 4 student who is enthusiastic, participates well, but struggles to complete written work independently."

AIM Framework

A	Actor	<i>"You are a Grade 6 English teacher skilled in inclusive education and differentiated instruction."</i>
I	Input	<i>"Topic: Identifying the main idea and supporting details in a paragraph"</i>
M	Mission	<i>"Generate three versions of a reading worksheet (easy, medium, hard) on the same topic."</i>

Example

"You are a Grade 6 English teacher skilled in inclusive education. My class has mixed reading levels. Generate three versions (easy, medium, hard) of a worksheet on identifying main idea and supporting details - same topic, different complexity, each with 4-5 questions."

Copy-Ready Prompt Examples

Just paste these into ChatGPT, Gemini, or any AI tool

"You are an experienced Grade 3 math teacher who designs fun, engaging lesson plans. I need a lesson on introduction to multiplication for 8–9 year olds with a 45-minute class. Create a step-by-step plan with a warm-up, main explanation, a group game, and an exit-ticket question."

"You are a warm, professional Grade 1 teacher. A bright student frequently disrupts group activities due to lack of focus. Write a kind, constructive parent email that highlights his strengths, explains the concern, and suggests collaborative strategies for home and school."

"You are a creative Grade 9-10 Science teacher who designs inquiry-based projects. My students (ages 14-16) are studying climate change. Design a 2-week PBL activity where teams investigate local climate data, propose a community solution, and present via poster or short video using basic tools."

Common Prompt Mistakes — and How to Fix Them

✗ *"Help me with my class."*

Too vague — no subject, age, or task



✓ *"Create a 30-minute warm-up activity for a Grade 3 English class on letter sounds."*

✗ *"Write something about plants."*

No format, level, or length specified



✓ *"Write a one-page fact sheet on photosynthesis for Grade 6, using bullet points."*

✗ *"Make it better."*

'Better' is undefined — AI needs criteria



✓ *"Rewrite this paragraph to be shorter, clearer, and suitable for 10-year-olds."*

✗ *"Give me everything about World War II."*

Scope is too wide — narrow it down



✓ *"Summarise the main causes of World War II in 5 bullet points for Grade 9 students."*

Tip: If you don't like the first answer, simply say "Try again, but this time..." and add more detail.

AI Tools You Can Start Using Today

All have free tiers - no credit card required to begin

Other tools: Grammarly, Notion, Google Lens

Claude AI



Widely used AI. Ask it anything: write lessons, create quizzes, explain any topic.

claude.ai

Google Gemini



Deeply integrated with Google Docs, Drive and Gmail — ideal if your school uses Google Workspace.

gemini.google.com

Math-GPT



Built specifically for questions related to Mathematics.

math-gpt.org

NotebookLM



AI research tool and thinking partner that can analyze your sources, turn complexity into clarity and transform your content.

notebooklm.google.com

Diffit



Instantly adapts any reading text to any grade or reading level. Excellent for differentiation.

diffit.me

Khan Academy (Khanmigo)



An AI tutor and teaching assistant built for classroom use with student safety in mind.

khanmigo.ai



When NOT to Use AI — Important Limits

Do Not Replace Human Connection

Students need empathy, mentorship, and real relationships. AI cannot provide pastoral care. You are irreplaceable.

Always Verify AI Outputs

AI produces plausible-sounding errors. Never publish AI content without checking it yourself first.

Protect Student Privacy

Never enter student names, grades, or personal data into public AI tools. Follow your school's data policy.

Don't Bypass Critical Thinking

AI should scaffold learning, not replace it. Set clear boundaries on student use during assessments.

Prevent Academic Dishonesty

AI-written student work is dishonesty. Teach students when use is appropriate and when it is not.

Sensitive Topics Need Human Care

Counselling, mental health, grief — never refer a student to AI. These require trained, compassionate adults.

The Golden Rules of Responsible AI Use

1

AI is a Tool, Not a Teacher

Use AI to enhance your expertise — not to replace it. You remain the professional in the room.

2

Always Review and Edit

Treat every AI output as a first draft. Read, verify, and adapt before using it with students.

3

Be Transparent with Students

Tell students when AI helped create materials. Model honest and ethical use of technology.

4

Teach AI Literacy

Help students understand how AI works, what it can do, and where it falls short — an essential life skill.

5

Watch for Bias

AI can reflect cultural biases from its training data. Be critical: if something feels wrong, it probably is.

Great teachers + AI = Extraordinary education for every student.

Your 5-Step Getting-Started Plan

Small steps — sustainable progress

1

Step 1

This Week

Visit ChatGPT or Gemini. Type one question about your next lesson. See what comes back.

2

Step 2

Next Week

Use AI to create one quiz or one set of practice questions for your class.

3

Step 3

This Month

Explore MagicSchool.ai or Canva AI. Create your first AI-assisted worksheet or lesson plan.

4

Step 4

Next Month

Share one success with a colleague. Help them take their first step too.

5

Step 5

Ongoing

Build a prompt library - save your best prompts in a document and reuse them all year.

You are the most important AI in your classroom —

*Artificial Intelligence simply helps you do more
of what you already do brilliantly.*

Start small. Stay curious. Keep learning.

Thank you — Questions are welcome!