What Is Artificial Intelligence?

A simple idea behind a big name

Imagine that a student asks, ‘Why does the moon look different on different nights?’ A teacher can listen, understand the question and explain it. Now imagine a computer tool that can read a question and try to give an explanation too. The tool is not a teacher or a human being. It is using technology called AI.

AI is short for Artificial Intelligence. ‘Artificial’ means made by people. ‘Intelligence’ here means doing tasks that need skills such as recognising things, using language or finding patterns. In simple words, AI is technology that helps computers do some tasks that usually need human thinking. It can identify objects in a picture, turn spoken words into writing or suggest an answer to a question.

Take a basket with mangoes, bananas and apples. If a computer has learned from many fruit pictures, an AI system may look at a new picture and suggest which fruit it shows. But if the picture is dark or unclear, the answer may be wrong. AI does not understand the world exactly as a person does, and it cannot promise that every answer is correct.

A calculator that adds 25 and 15 is a useful machine, but ordinary calculation alone does not make it AI. A switch that turns on a fan is not AI either. We call something AI because of the kind of task it performs, not because it has a screen or uses electricity.

The best way to think about AI is this: it can offer help, but people still need to think. We can listen to an AI answer, ask questions about it and check it before using it. That is how AI becomes a useful tool rather than something we follow blindly.

A person asks	AI offers a reply	A person checks

Who Started AI, and How Did It Grow?

From an idea in 1956 to tools used today

AI may seem new because we hear about it so often now. In fact, people have been studying the idea for many years. In the 1950s, computers were large, slow by today's standards and available mainly in research centres. Some scientists began asking an interesting question: could machines be made to do a few things that need human intelligence?

One of these scientists was **John McCarthy. He is often called the 'father of AI'** because he helped give this field its name and bring researchers together. In 1955, McCarthy and other scientists proposed a meeting about 'artificial intelligence'. The meeting took place at Dartmouth College in 1956. That year is widely remembered as the beginning of AI as an area of study. It does not mean that every AI tool was invented in that year.

Progress came step by step. Early systems followed instructions and played simple games. Later, stronger computers and better methods helped AI work with pictures, speech and language. People began using helpful features in maps, translation, voice typing and photographs, often without calling them AI.

Then, on 30 November 2022, ChatGPT was introduced for public use. It gave many people a new way to try AI: they could type an ordinary question and receive a reply in a conversation. ChatGPT did not start the whole history of AI. It made one form of AI easier for many people to see and try.

AI has grown because many scientists, teachers, engineers and other people kept testing and improving ideas. Its story is not about one person building a clever machine overnight. It is about a long journey of learning, mistakes and better tools.

1956	1990s	2010s	2022
AI becomes a field	Computers play harder games	Speech and photo tools grow	ChatGPT opens to the public

Meet Today's AI Assistants

Different names, a similar way to ask for help

Think of asking someone, 'Can you explain this lesson in simpler words?' A modern AI assistant lets you type, and in some services speak, a request like that. It replies in conversation. Such a tool is often called a chatbot. 'Chat' means a conversation. A chatbot is a computer service, not a real person sitting inside the screen.

There are several well-known AI assistants. ChatGPT is made by OpenAI. Gemini is made by Google. Claude is made by Anthropic. Grok is made by xAI. Copilot is a name used by Microsoft for its AI assistance tools. They have different features, but students can think of them as tools that may help explain ideas, suggest examples, translate words or help prepare a first draft.

For example, you could ask, 'Explain why plants need sunlight as if I am learning it for the first time.' You could also ask for five practice questions from a topic you have already studied. If the first explanation is confusing, you can ask the tool to try another example. A conversation can continue with follow-up questions.

Most online chat assistants need a device and an internet connection. Some have rules about age, accounts and permissions. You do not need to open an account or use any app to learn the ideas in this booklet. Knowing what these tools are is enough for now.

One important point: these are examples, not a list of tools that everyone must use. A familiar brand name does not make a reply automatically correct. Whether we ask ChatGPT, Gemini, Claude or any other tool, we must use our own judgment.

ChatGPT	Gemini	Claude	Grok	Copilot
OpenAI	Google	Anthropic	xAI	Microsoft

What Can Different Kinds of AI Do?

Recognise, create, or help with several steps

You may hear people use three names: AI, Generative AI and Agentic AI. They sound difficult, but the differences become easier with a few examples.

AI is the broad name for the technology. Generative AI and agentic AI describe some ways AI can be used.

First, think of a fruit photograph. An AI system might look at it and say ‘banana’. It is recognising something already in the picture. A language tool that turns spoken any language into written words is another possible use of AI. These tools are not the same as a basic calculator, which simply follows fixed arithmetic steps.

Next comes Generative AI. ‘Generate’ means ‘make’. A generative AI tool can create a new explanation, poem, picture or set of practice questions when we ask. If you say, ‘Write three simple sentences about rain’, it produces three sentences. They are generated by the tool, but they still need to be read and checked by a person.

Agentic AI describes systems that can plan and carry out several connected steps using tools, within the permissions given to them.

Imagine a system asked to compare travel options, organise details and prepare a plan. That is different from a chatbot that only gives one reply. Such systems need careful limits and human supervision, especially if they can make changes or take actions.

How does AI learn?

One common way is by studying many examples and finding patterns.

A tool may learn from many labelled pictures of fruits. It is not learning in the same way as a child. And if the examples are poor, the result can be poor too.

AI	Generative AI	Agentic AI
Recognise a fruit	Create an explanation	Help with several steps

How to Ask AI for Useful Help

A clear question usually gives a more useful reply

Suppose you are learning fractions and one step is not clear. You could ask an AI assistant, ‘Tell me about maths.’ But that is a very big question.

The tool may not know what you need. Instead, try: ‘I am learning fractions. Explain one-half and one-fourth using a roti or an apple. Use easy words.’ The second question gives the topic, the difficulty and the kind of example you want.

The instruction we give an AI tool is called a prompt. You do not have to remember a difficult definition. A prompt is simply what you ask the tool to do. It can be one sentence, and you can change it if the reply is not helpful. ‘Explain it in Telugu’, ‘Use a smaller example’, and ‘Show one step at a time’ are all useful follow-up instructions.

Here is a good way to study. First, read the lesson or listen to your teacher. Find exactly what is troubling you. Then ask AI for an explanation, not just a finished answer. Try the next problem by yourself. At the end, compare the explanation with your textbook or ask a teacher if something does not match.

AI can also help with reading practice. You might ask for five easy sentences using a new word, or a short dialogue to practise speaking English.

If you have written your own paragraph, you can ask which sentence is unclear. You can then make the correction yourself.

A clear question does not guarantee a correct reply. It only helps the tool understand what you want. Whenever the answer matters, check it.

Good use of AI begins with a good question and ends with your own thinking.

Too broad	**Tell me about science.**
More useful	Explain evaporation in four easy lines, with an example from drying clothes.

AI and Homework: Learn, Don’t Just Copy

Use the help, but keep the learning yours

A teacher gives a class an assignment: ‘Write a short note about saving water.’ Two students decide to use AI. The first student asks, ‘Give me three ideas about saving water and explain why each one matters.’ She reads the ideas, remembers what she has seen at home and writes the note in her own words. She has used AI as a learning helper.

The second student types, ‘Write my entire assignment so I can submit it.’ He copies the reply without reading it. His notebook may look full, but he may not be able to explain even one line when the teacher asks. The purpose of homework is to practise thinking.

Copying a finished AI answer hides that learning instead of building it.

AI can be useful before writing, while writing and after writing. Before writing, ask for ideas or an outline. While writing, ask for the meaning of a difficult word or an example you do not understand. After writing, ask whether your own paragraph is clear. Keep your own experiences, words and conclusions in the final work. Follow your teacher’s instructions about when AI help is allowed, and be open about using it if asked.

The same rule applies to maths. Asking ‘Why did this step change?’ can help.

Taking an AI answer and writing it without understanding the method will not help during the next test. If AI makes a mistake, copying it passes that mistake into your work.

Respect other people’s work too. Do not use AI to make fun of classmates, invent a false story about someone or pretend that another person’s writing is yours. A useful tool should help you become more capable, not more dependent.

Helpful	**Ask for ideas, examples and feedback**
Not helpful	Copy a complete answer as your own

AI in Places We Already Know

School, travel, languages, farming and health

AI is not used only in chatbots. It is already part of services around us. When someone speaks into a phone and the spoken words appear as text, AI may be helping with voice typing. When a translation tool changes a sentence from one language to another, AI may help with the wording. The translation still needs checking, especially when the message is important.

Think about travelling to a new place. Some map services study road information and traffic patterns to suggest a route or an arrival time.

AI can be one part of such a service. But the person travelling must still look at road signs and follow safety rules. A map suggestion cannot see every situation on the road.

In farming, some tools study crop photographs to suggest what might be causing spots on leaves.

A weather service may use AI along with other methods to study information about rain. These are starting points, not final instructions.

A farmer should check important advice with reliable local information or an agricultural expert before spending money or treating a crop.

Teachers may use AI to prepare extra practice questions. Doctors may use certain AI-supported tools to study medical information. Shopkeepers may use tools that help organise stock.

In every case, the user must check whether the suggestion fits the real situation.

Not every map, camera, weather report or electronic device uses AI. Technology changes from one service to another. The important idea is that AI may recognise patterns, work with words or make suggestions.

People use the results in real life, where common sense and experience still matter.

A classroom	A journey	A farm
Extra explanations	Route suggestions	Crop-image clues

When AI Makes a Mistake

A smooth answer is not always a true answer

An AI answer can sound friendly and confident. That is useful when the answer is correct, but it can also mislead us. A tool may give the wrong date, misunderstand a question or even mention a book or website that does not exist. A long, neat paragraph is not proof that every sentence is true.

Imagine asking AI for the date of a school event. It may give a date that sounds reasonable but belongs to last year. The right place to check is the latest notice from the school. If you ask about a medicine, a crop treatment or a government benefit, a wrong answer may cause real harm. Such information should be checked with qualified people and official sources.

AI also learns from examples made by people. Those examples can be incomplete or unfair. A tool may work better for one language or type of question than another. If a reply seems to judge a person unfairly or leave out an important point, do not accept it without thinking. Ask for evidence, compare with other reliable information and speak to someone you trust.

Pictures and voices need care too. Some AI tools can create a picture of something that never happened or imitate a voice. Seeing a picture in a message does not mean the event is real. Look for where it came from before believing or forwarding it.

Use a simple habit: read the answer, check what matters, then decide. If you cannot verify something important, say, 'I am not sure yet.' That is a stronger choice than repeating a confident but untested AI answer.

Read carefully	Check important facts	Decide yourself

Stay Safe When Using Digital Tools

Protect information and check before sharing

A phone or computer can make life easier, but we must be careful with our information. A password protects an account. An OTP, or One-Time Password, is a short code often sent to confirm a login or payment. Never give passwords or OTPs to an AI chatbot, an unknown person, or an unfamiliar app. Even a message that sounds urgent may be a trick.

Avoid putting private details into unknown tools. Your home address, bank details, identity numbers, medical records and other people's personal information should not be typed or uploaded casually. A class photograph or a friend's phone number also belongs to someone else. Ask a parent, teacher or trusted adult before sharing something you are unsure about.

You may see messages saying 'You won a prize' or 'Click here immediately'. A message may use a real-looking logo or an AI-made picture. Do not open strange links just because they look exciting. Check who sent the message. If it claims to be from a school, bank or government office, use an official contact that you already know rather than replying to the message.

Treat people respectfully online, just as you would face to face. Do not make a false image of a classmate, spread rumours or send hurtful messages. Ask before sharing someone's photograph. Once something is sent online, it may be difficult to bring it back.

You do not need to be afraid of technology. You need a few careful habits: protect private details, question strange messages, and ask a trusted adult when something feels wrong. These habits matter with or without AI.

Keep private	**Password • OTP • personal details**
Check first	Links • images • important claims

AI, Future Jobs and Your Next Step

New tools matter, but people matter more

Think about how people work. A teacher explains lessons, a farmer studies the land, a nurse looks after patients and a bus driver keeps passengers safe.

AI may help with part of their work: preparing extra questions, studying a crop picture, organising information or suggesting a route. But understanding people, taking responsibility and making careful choices remain human tasks.

As technology changes, there may be new kinds of work. Some people will build AI tools, others will test whether they are safe, explain them in local languages or use them to solve practical problems.

Many jobs may change rather than disappear completely. Nobody can say exactly what every job will look like in the future.

You do not need to become a computer expert today. Start with useful habits that work in every subject. Read carefully. Ask why. Practise explaining an idea in your own words. Try different ways to solve a problem. Work with other people.

Learn to say 'I do not know' and then find a trustworthy answer.

If you remember five things from this booklet, remember these: AI means Artificial Intelligence; John McCarthy helped start the field; today's tools include ChatGPT, Gemini and Claude; AI can help you learn but should not do your learning for you; and important answers and private details must be handled carefully.

The purpose of learning about AI is not to know more app names than someone else. It is to understand a new tool and decide when it can be helpful. Keep your curiosity. The best questions you ask tomorrow may be more valuable than any answer a computer gives today.

Stay curious	**Think for yourself**	**Use tools wisely**

Congratulations and thank you for reading!

Team Vadaanya wishes you all the best for your upcoming exam.
Keep your curiosity alive, think for yourself, and use your tools wisely!