

AI Literacy for Ages 8-11

A short guide to understanding, questioning and protecting independent thought

ESRA OBUT

Language • Culture • Artificial Intelligence & Human Collaboration



What do we want children to learn at this age?

Between the ages of eight and eleven, children may begin to use artificial intelligence more independently for homework, research, games and content creation. This guide helps adults teach children not only how to use a tool, but also how to evaluate its output and protect their own thinking.

HOW TO USE THIS GUIDE

You do not need to read the pages in order. Open the relevant section when an app is being used, during homework or when research is needed, and discuss the questions together. You can reuse the two write-on activities with different topics.

These outcomes show the thinking skills we want children to use when they encounter artificial intelligence:

- Recognise that artificial intelligence is more than a chatbot.
- Understand the relationship between data, patterns and predictions.
- Know that a fluent, confident answer can still be wrong.
- Check and revise what artificial intelligence produces.
- Protect their own thinking and final decision while receiving help.

THE ADULT'S ROLE

The aim is not to provide every answer, but to support the child in asking: “How do we know?”, “What is missing?” and “Could it be different?”

THE SAME THREE STEPS IN EVERY SECTION

1 CHILD FIRST

The child says what they know, predict or initially think.

2 THEN THE TOOL

Artificial intelligence offers options, explanations or feedback.

3 FINAL DECISION

The child checks, revises and decides.

Where does artificial intelligence come in?

Children often associate artificial intelligence only with chatbots. Recognising recommendation, ranking and personalisation systems is the first step towards understanding how artificial intelligence may influence their everyday choices. Begin with the apps the child uses rather than with technical definitions.

EXPLORE TOGETHER

Open an app the child uses often. Ask: “What is being selected or ranked here?” “What is the system predicting for me?” “Why might this recommendation have appeared?”

How does artificial intelligence learn?

Showing that artificial intelligence works from examples helps children avoid treating an output as an unchangeable fact. Group household objects by colour, shape or purpose, then add an object that does not fit any group perfectly. Discuss how the classification changes when the feature we focus on changes.

EXAMPLES

PATTERN

PREDICTION

People collect, select, label and group examples. This means that outputs reflect not only the system, but also choices made by people.

QUESTIONS YOU CAN ASK

Who and which examples are included? Who is missing? Would the result change if different examples were used?

Speaking like a person does not mean understanding like one

Fluent, friendly language can lead children to perceive a system as human and place too much trust in its answer. The adult's role is not to make artificial intelligence seem frightening, but to make the difference between conversational style and genuine understanding visible.

EXPLORE TOGETHER

"Artificial intelligence can talk like us, but does it have memories and a life it has lived?" "Does forming sentences like a person prove that it thinks and feels like one?"

WHAT IT MAY SEE

- Correct and incorrect answers
- Time spent working
- Scores and clicks

WHAT IT MAY MISS

- Why the child is struggling
- How they think and what interests them
- Context and different paths to a solution

CHECK THE ANSWER TOGETHER

Artificial intelligence may invent a book title, give an incorrect date or present incomplete information as certain.

1. Choose three claims to check. 2. Consult a book, reliable source or expert. 3. Ask, "Where could we look to make sure?"

Sounding confident is not the same as being correct.

Make room for the child to think first

When artificial intelligence provides the answer at the beginning, a child may reach the result faster but lose the opportunity to test what they know and build their own thinking. Ask the child to predict, try or create a first draft before bringing artificial intelligence into the process.

1

CHILD

Predicts, tries or creates a first draft.

2

AI TOOL

Offers an alternative, question, explanation or feedback.

3

TOGETHER

The two approaches are compared; gaps and differences are discussed.

4

CHILD

Revises, explains their reasoning and makes the final decision.

WHAT CAN ARTIFICIAL INTELLIGENCE DO?

It can speed up the work, ask questions, explain a difficult concept through another example, help the child expand what they know or notice gaps, offer feedback on a draft and suggest paths for research.

SUGGESTION

Ask the child to explain a familiar topic in their own words first. Then ask artificial intelligence for feedback on points that are missing, unclear or need to be checked again.

Let Me Explain First

In this activity, the child first explains a familiar topic they enjoy in their own words. Artificial intelligence is then used not to complete the answer, but to help identify missing or unclear points.

HOW TO USE IT

Ask the child to choose an animal, sport, book, game or another topic that interests them. They should complete the sections below before asking artificial intelligence for help.

MY CHOSEN TOPIC

WHAT I KNOW ABOUT THIS TOPIC

WHAT I AM UNSURE ABOUT OR CURIOUS ABOUT

FEEDBACK FROM ARTIFICIAL INTELLIGENCE: WHAT IS MISSING, UNCLEAR OR NEEDS CHECKING

WHAT I ADDED OR CHANGED AFTER CHECKING

Final decision: I do not have to use every suggestion from artificial intelligence. I check them and use the suitable ones in my own words.

Output Check Laboratory

This activity teaches children to evaluate the information in an answer separately instead of trusting the whole response at once. Ask artificial intelligence for a short explanation of a topic the child knows well, select three claims and check each one together.

1

CLAIM MADE BY ARTIFICIAL INTELLIGENCE

WHERE DID WE CHECK?

RESULT

☐ Correct ☐ Incomplete ☐ Incorrect

DID WE CHANGE OUR MINDS? WHY?

2

CLAIM MADE BY ARTIFICIAL INTELLIGENCE

WHERE DID WE CHECK?

RESULT

☐ Correct ☐ Incomplete ☐ Incorrect

DID WE CHANGE OUR MINDS? WHY?

3

CLAIM MADE BY ARTIFICIAL INTELLIGENCE

WHERE DID WE CHECK?

RESULT

☐ Correct ☐ Incomplete ☐ Incorrect

DID WE CHANGE OUR MINDS? WHY?

If we cannot find a source for a claim, we do not have to accept it as true.

The child makes the final decision; the adult holds responsibility

We cannot expect a child aged eight to eleven to build a safe and thoughtful relationship with artificial intelligence alone. An adult should check the tool's age suitability, terms of service, data use and content safety, and accompany the child in important uses.

FOUR CLEAR FAMILY RULES

- Do not share names, school, address, photos or private conversations.
- Do not leave homework or important decisions to a single artificial intelligence answer.
- Show surprising, frightening or inappropriate content to an adult.
- Check content from artificial intelligence before using it; the child creates the final version.

FOUR QUESTIONS THE CHILD CAN KEEP

"Can I trust this?"

"Where else can I check?"

"Is this tool really necessary here?"

"Does the final decision still belong to me?"

Our aim is to raise children who do not turn to artificial intelligence for every question, but know when to use it, how much to trust it and when to return to their own thinking.

Where can you begin?

Suggested programmes and resources

Use the resources below as tools to explore and discuss together, not as apps to leave the child with alone. Choose an age-appropriate activity, ask what the child notices throughout the process and evaluate the results together.

TEACHABLE MACHINE

teachablemachine.withgoogle.com

Helps users train a simple model with image, sound and pose examples without coding, and see how examples change the result.

DAY OF AI

dayofai.org

Offers free lessons for ages 8-10, along with short videos, discussion cards and home activities for families.

AI4K12

ai4k12.org

Provides a framework that organises the core ideas of artificial intelligence by age level, along with posters and selected educational resources.

MACHINE LEARNING FOR KIDS

machinelearningforkids.co.uk

Helps children train simple models with their own examples and use the results in Scratch projects.

A SHORT NOTE

Most of these resources are in English. Depending on the child's age and experience, support from an adult or educator may be needed.

Let artificial intelligence be the second step that develops a child's thinking, not the place where thinking begins.