

Be Internet Sharp – Think Before You Tap

Overall aims

This lesson plan highlights the age-appropriate activities within the Be Internet Sharp pillar.

You can find the activities within the Be Internet Sharp activity pack.

AI technology has become a significant part of the online experience, including smart devices, recommendation systems and predictive chat. For children, and for many adults, it can be hard to understand what AI is, and what it isn't. Learning to recognise the possibilities of AI while learning not to 'humanise' or become over-reliant on it are important skills for children to learn.

Objectives

Pupils will learn

- ✓ **What** AI is and what it isn't, and how it works.
- ✓ **Ways** AI is used to benefit the wider world and their own lives.
- ✓ **To imagine** new ways AI could be used to benefit wider society.

Outcomes

Pupils can

- ✓ **Understand** AI and why it is not like human intelligence.
- ✓ **Recognise** where AI is and how it is used positively.
- ✓ **Know** how to use AI responsibly and find a healthy balance.

Reminder

Please make sure you read the teacher guide to pupil safety before you start any of the activities in this booklet.

Assessment opportunities

- Assessing pupils' pre-existing knowledge in an introductory activity.
- Think, pair and share with peers.
- Class discussion and teacher circulation during activities.

Timing

This plan is designed for a 50-minute lesson, with approximate timings given to allow you to select activities as you feel appropriate to meet the needs of your pupils.

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Baseline activity



(10 mins)

Begin by auditing the pupils' pre-existing knowledge. Ask the class what they think the acronym AI stands for, then break down the individual definitions of 'artificial' and 'intelligence' using the vocabulary definitions.

Explain to the class the definition of AI: Artificial Intelligence (AI) is a computer program that looks for patterns in information, and uses them to predict what might happen next or uses data to make something new.

The AI recipe

Explain the mechanics behind AI using the recipe analogy. Prompt pupils to brainstorm different types of information (data) an AI tool might use – using pictures, words, sounds or numbers as baseline examples.

Recipe: An algorithm is the step-by-step instructions that an AI tool follows to complete a task.

Ingredients: Data (information like pictures, words, sounds or numbers) is what AI tools use to make decisions.

Machine Learning: The way many AI tools 'learn' – by recognising patterns in data instead of being given exact rules for everything.

Key concept: Emphasise that 'training' involves showing the AI massive amounts of data so it can accurately spot patterns and complete tasks.

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Activity guide



Be Internet Sharp – Activity 7: What is AI? What isn't AI? (10 mins)

Is it AI?

Think, Pair, Share: Distribute the Activity 7 handout or display the items on the board. Instruct pupils to pair up and evaluate the eight technological items listed. Have pupils write 'AI' or 'Not AI' next to each item.

What type of AI is it?

Let's Talk: The four items that are AI are:

- A smart speaker that tells you new jokes (generative AI).
- A game that adapts to someone's playing style (predictive AI).
- A search engine that summarises answers (generative AI).
- A music app that recommends songs you may like (predictive AI).

Now introduce the terms:

Generative AI – AI that uses patterns in data to create new content, for example poems and stories, pictures and sounds.

Predictive AI – AI that uses patterns in data to make guesses about what is likely to happen next. For example, to predict what films someone might like, or the next word they may type.

Discuss: Of the four AI tools the pupils have identified, which are generative AI and which are predictive AI?

Explain your decision

Direct pupils to complete the justification sentences at the bottom of their handouts, picking one item from each category to explain their reasoning.

Discussion guidance: Lead a whole-class review of the answers. Contrast a regular electronic tool (like a light switch that executes a basic mechanical instruction) with adaptive software (like a music recommendation system) to solidify the concept that AI uses data inputs to predict or create.

Guiding questions:

- What is the biggest difference between a regular machine and AI?
- Why is it helpful to know if something uses AI?

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Activity guide



Be Internet Sharp – Activity 8b: AI Inventors (20 mins)

AI as a universal helper

Present these real-world AI applications to spark inspiration for their design challenge:

- Search and rescue: AI-powered drones use heat-sensing cameras to scan collapsed buildings after earthquakes, helping rescuers find survivors.
- Emojis: messaging platforms use AI to look at patterns in the words people type and predict the emoji or sticker someone may want next.
- Travel: map apps use AI to look at patterns in traffic data to predict the fastest route.
- Communication: engineers use AI-powered eye-tracking devices to help people who cannot speak or move to communicate.

Highlight how each one uses specific data (heat, typing patterns, traffic patterns, eye movement) to perform its task.

AI Inventors challenge

Group pupils (3–4 per group) and distribute large sheets of paper and markers. Each group picks one of the following options:

- The Pet Sitter: An AI tool that looks after a family dog or cat when everyone is out at school or work.
- The Team Coach: An AI tool that supports a school sports team (like football or netball) during practice.

Discussion prompts: Before pupils start drawing, instruct them to answer two questions:

- What data does the AI need to collect? (e.g. how much food is in a bowl, counting goals.)
- What smart action does the AI perform? (e.g. refilling a bowl, suggesting a new training drill.)

Create your design

Group activity: Circulate as groups draw and label their inventions. Draw your design and explain:

- Data needed: The specific information it collects to do its job.
- Smart action: What the AI does with the information.

Ensure every design clearly incorporates the Human Takeover Button.

Let's share: Have groups present their inventions to the class.

Why do we need a human in charge?

Key discussion: Use two examples demonstrating that data alone doesn't account for other factors (errors, bias).

Conclusion: AI lacks common sense and empathy – humans must always make the final, fair decision. Emphasise why the "Human Takeover Button" is essential.

Summarise the activity: AI lacks real-world common sense, cannot experience emotions, and cannot replicate genuine human creativity. These are machines that people have created, and people will always be needed to make the smarter, kinder choices.

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Plenary

(10 mins)

Using Activity 9 for examples, lead the class for a reflective discussion on screen habits and over-reliance on AI.

Prompt pupils to consider how their learning, physical health, and friendships would change if they relied too much on AI for creativity, play and friendships.

Lesson materials

Sharp Activity 7: handout.

Sharp Activity 8b: large paper and markers.

Sharp Activity 9: examples.