Beech Hill Primary School Knowledge Organiser

Topic: Computing – Digital literacy	Year group	Term
AI Unit 1	Year 2	Summer 2 6 sessions

Background knowledge
A gentle introduction helping young children understand that computers can follow instructions, recognise patterns, and sometimes "guess" what we want based on data. The focus is on identifying AI in everyday life, staying safe, and using Copilot responsibly.

What should I already know?
That Artificial Intelligence can be defined as a machine working to achieve complex goals. That AI brings both advantages and disadvantages. As educators we need to make children aware of AI and its uses while also making children aware of the drawbacks of using this technology and concerns over its use.

National Curriculum Objectives / Key Skills	The Journey
NC Pupils should be taught to: * recognise common uses of information technology beyond school; * use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the Internet or other online technologies. * use technology purposefully to create, organise, store, manipulate and retrieve digital content	Throughout the unit, children will: Lesson 1. What Is a Computer? What Is AI? (Activity 1: Discussion. What is AI? "AI means a computer that can spot patterns and make smart guesses. https://www.youtube.com/watch?v=kQPC4_DsJ8I (Activity 2: Partner talk, then share: "Where have you seen a computer doing something smart?" (Activity 3: Children sort pictures into AI and non AI. eg. Calculator (No), Voice Assistant (Yes), Toaster (No), Autocorrect (Yes)

	Lesson 2:— Spotting AI in Everyday Life (Activity 1: Show short video clips or images: robot vacuum, YouTube recommendations, spelling suggestions, translation, voice activated toys. https://www.youtube.com/watch?v=oJC8VIDSx_Q (Activity 2: In mixed ability groups, children match the picture of the AI to the description of its use). Lesson 3: How Does AI Learn? (Pattern Spotting) (Activity 1: Explain that AI learns by spotting patterns. Watch the video. https://www.youtube.com/watch?v=jEBLCZ6LtPM (Activity 2: Repeating patterns worksheet.) (Activity 3: Make a pattern for a friend to complete. Can your friends use skills like AI does to spot the pattern) Lesson 4 and 5 — Using Copilot for Questions The teacher will demonstrate how to use Copilot on our PCs to answer simple questions. Activity: Children ask Copilot simple questions such as: "Tell me three facts about turtles." "Give me three facts about sharks." Safety reminders: • Only use in school. • Never enter personal information. • If something looks strange/untrue → ask a teacher. Follow up: • Children tell us verbally one fact Copilot gave them. ALLOW TWO WEEKS for this activity due to the typing and reading speed of the children.

	Lesson 6 - Why We Need to Be Careful With AI Activity 1: • Show Copilot a "trick question": "How many legs does a dragon have?" • Let children see the answer might not be perfect or real. • If AI doesn't *know*, it *guesses*. • We need people (teachers, adults) to help check. https://www.youtube.com/shorts/wVVeYbXvEYo Activity 2: Spot my mistakes worksheets. Differentiated in three levels. Children spot the errors in the minibeasts patterns. Just like we, humans, have to spot errors in AI.

Outcomes
Lesson 1: Children understand that computers follow instructions, and some computers can learn from examples (AI). Lesson 2: Children will be able to identify AI in toys, home devices, and apps. They will be able to say what the AI's job is. Lesson 3: Children will understand that AI learns from lots of examples. Lesson 4: Children will learn to use Copilot safely to ask factual questions. Lesson 6: To know that AI can make mistakes and doesn't always tell the truth.

Key Vocabulary

Computer, program, robot, artificial intelligence, instructions, pattern, guess, safe, information.

Question of the week.

1. Give me an example of a piece of AI and non-AI technology.
2. Tell me an example of a piece of technology that uses AI and what job it does.
3. I am going to draw a pattern on the board. What comes next in the pattern?
4. In school we have a piece of AI tech called Copilot. How did we use it last week?
5. True or False: AI is always right.