Design an AI voice assistant

Learning Objective/s	• AI systems are made by humans • Humans must act responsibly and make sure new technology works for everyone • The 'personality' of an AI voice assistant has an influence on how we interact with it
Keywords	• **Artificial intelligence** (AI) is when computers can perform tasks that require humans. • **Machine learning** is AI that learns from training data and doesn't need to be programmed with exactly what to do • An **AI voice assistant** uses AI for understanding human speech and for deciding what information to provide or what actions to take.
Preparation	• One large sheet of poster paper per group of 5-6 • Printed worksheets • Pens, Scissors, Glue • Additional background reading *for teachers*: https://www.soundhound.com/voice-ai-blog/the-role-of-ethics-in-voice-assistant-design/ See also, articles quoted in slides 10 & 11.
Curriculum links	• Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact • Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • Decomposition (Computational thinking)

Activity	Description	Tips
1 (Slides 1-7 - 5-10mins)	• Introduce the definition of an AI voice assistant and cover staying safe with these apps and devices. Extend: • Ask about the specific features of AI voice assistants that pupils have used • Discuss how AI (machine learning) is used to understand speech and to decide what action to take.	• Cover the topic in more depth for year 5 & 6 • Be aware that the age rating for ChatGPT is 18 so children should not be using it. However they may have heard about it in the news or used it with an adult.
2 (slides 8-13 - 10-15 mins)	• Understand that AI voice assistants are created by teams of people. • Create a code of conduct for AI Voice Assistant designers. Extend: • Consider privacy, laws and more aspects of inclusion	• For year 3 & 4, consider creating the code of conduct as a class. • Relate to any recent news about AI • Make culturally relevant associations for your learners. For example, relate to regional accents or dialects.
3 (slides 14-16 - 10-15 mins)	• Introduce the activity (slide) • Either: Put pupils into groups of 5-6 or have them work individually • Give each group a large sheet of poster paper Extend: • Add more detailed feature descriptions	• If working in groups, encourage learners to split the work between them. Possible design prompts if needed: • AI voice reader that can lip read and sign for deaf users. • Outdoor AI assistant for children's games.

	• Add quotes from 'users'	• Voice assistant that helps you to communicate with a pet.
4 (slides 17-18 - 5-10mins)	• Showcase posters • Recap guidelines for staying safe when using AI voice assistants. Extend: • Give pupils time to evaluate other AI voice assistants and offer feedback.	• Ask each child/group to describe their idea and highlight one feature (more if you have time.) • Help pupils to make links from their features to their Code of Conduct.
Take it further: Ask questions about how the AI voice assistants would react in different scenarios. How would they avoid the problems in the example problems scenarios on slides 10-11?		