Information

A digital system refers to digital hardware and software working together to transform data into digital solutions. The hardware interacts with the software to help perform a task. This task could be using a word processing program (software) to create a written document. Once the hardware and software are connected, the digital system forms a network. All parts of a computer are vital for the digital system to perform its task.

Defining problems and finding solutions involves understanding how digital systems can play a part in help to solve a problem that would otherwise be unsolvable by humans alone, too hard for humans to complete or may take too long for a human to complete the task. Digital technologies are constantly even to help solve problems faced in society.

Curriculum Expectation

Students will investigate a problem that can be solved within their wider community. Defining the problem will allow students to generate aligned solutions. They can use established digital systems to help solve a problem.

Video Resource

Click the image to open the video
This video looks at the processes that are needed to design and app. It looks the role that data plays in this process.

Video Source: Computer Science Education Research (CSER)

DEFINING & SOLVING

Current digital systems can help
solve new problems

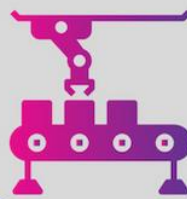Using sound to create
voice activated texts for faster typing

Define a problem based on requirements
that are needed. Look at how other systems
solve a similar problem.

Define a problem to be solved	Investigate what the system needs	Look at current systems that solve similar problems	Solve and create