



What should I already know?

- Computers are connected together in networks
- Networks can include wireless devices through WiFi
- Devices use inputs, processes and outputs.

Computing

Computer scientists use computational thinking and creativity to understand and change the world

Technical vocabulary

system	A number of things that work together to complete or perform a task.
protocol	An agreed way of doing something
IP address	A special address computers use
packet	A block of data sent across a network.
collaborate	Work jointly on an activity/project

Systems

Computers can be connected together to form systems.
Systems are built using a number of parts. A computer system uses inputs, processes and outputs.
Computer systems communicate with other devices.

Shared working

Working together on the internet can be public or private. We can collaborate by using remixing.

Computer systems and us

We use computer systems in our lives.

- Pedestrian crossings
- Ordering and payment systems in shops and cafes
- Digital bus stop signs

Catalogue systems can help customers and employees find things easily. Some tasks are done by humans and others by computers.

Transferring information

Some systems are not all in the same place – they use the internet.
Digital devices have protocols for how they communicate with each other.
IP addresses are used to say where the information is coming from and where it is going to.
Computers send messages in packets containing sender address, receiver address, the message, the message number and the total number of messages.

Working together

Sharing information online lets people in different places work together.
We can send information over the internet in different ways.

A packet

To:	From:	Message no.	of	Total no. of messages.
192.168.1._	192.168.1._	1		1

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