

Year 5/6 Spring 2 ICT Big Data 1

Prior Learning

Children will be aware of QR codes in their every day life. This is the first unit that has been taught that looks at this particular area of ICT.

Key vocabulary for this unit

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- Barcode
- Binary
- Boolean
- Brand
- Chips
- Commuter
- Contactless
- Data
- Encrypted
- Infrared
- MagicBand
- Privacy
- Proximity

- QR code
- QR scanner
- Radio waves
- RFID
- Signal
- Systems/data analyst
- Transmission
- Wireless

Learning Sequence

1. Barcodes	To identify how barcodes and QR codes work.
2. Transmitting data	To know how infrared waves transmit data.
3. RFID	To recognize how RFID is used.
4. Using RDID	To input and analyse real-world data.
5. Transport data.	To analyse and evaluate data.
Assessment milestones	

ICT knowledge:

- To know that data contained within barcodes and QR codes can be used by computers.
- To know that infrared waves are a way of transmitting data.
- To know that Radio Frequency Identification (RFID) is a more private way of transmitting data.
- To know that data is often encrypted so that even if it is stolen it is not useful to the thief.

ICT skills:

- Understanding and identifying barcodes, QR codes and RFID.
- Identifying devices and applications that can scan or read barcodes, QR codes and RFID.
- Understanding how barcodes, QR codes and RFID work.
- Gathering and analysing data in real time.
- Creating formulas and sorting data within spreadsheets.
- Learning how 'big data' can be used to solve a problem or improve efficiency.