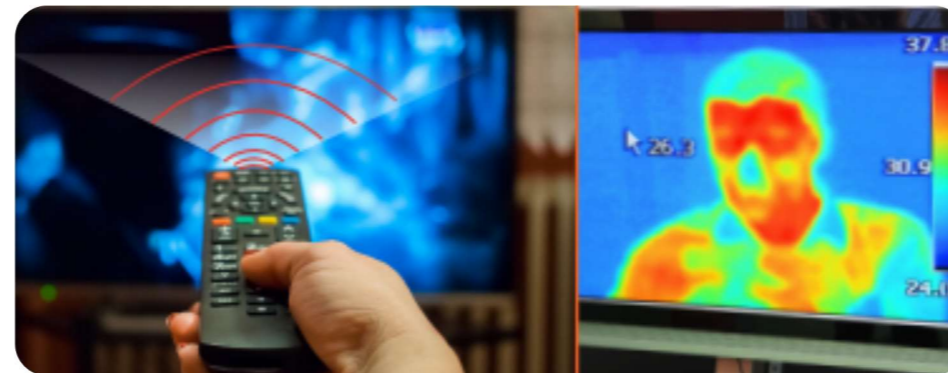


Key Vocabulary

barcode	A machine-readable code of lines and numbers. Can be scanned for information.
chips	This is where the data is encrypted.
encrypt	Securing information by turning it into a code of letters, numbers and symbols.
infrared	Red section of the electromagnetic spectrum that transmits small amounts of data.
QR scanner	Quick Response code. Similar to a bar code. Information/links are given when scanned.
RFID	Radio Frequency Identification. Device using radio signals to check where something is.
transmission	When something is passed or sent to another place.

Infrared



Infrared light can be used to:

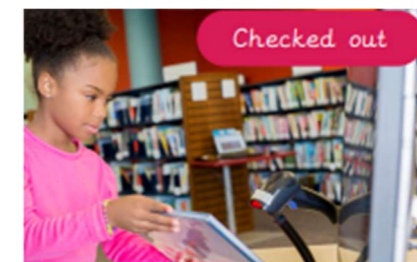
- Send small amounts of data (e.g. remote control changing a TV channel.)
- Provide warmth from electrical heaters
- Heat up and cook food
- Detect heat through thermal imaging cameras

Barcodes

How do barcodes help libraries track book borrowing?



1. Choose a book to borrow from the library and find the bar code.



2. Take it to the self-scan to check the book out of the library.



3. The system will warn the librarian that your book is almost due back.



4. Return and scan the book to check it back in to the library.

QR Codes

Quick Response Codes



A more advanced version of a barcode.

They can contain more detail and information.



RFID

Radio Frequency Identification



Data only passes between the card and the RFID reader.

Data transmission is invisible and instant.



Banks encrypt data sent between a shop and a bank. This means it is converted into coded form.