

**Flashing lights**

For many years, people have communicated by means of light. Even before the invention of bulbs people have sent messages by reflecting sunlight or simply lighting a fire. If you have your own light though, this makes things easier. A light being turned on and off can be used to send coded messages.

One of the most common codes to use with light is **Morse Code**. This represents the whole alphabet using dots (short flashes) and dashes (longer flashes).

You can use Morse code in a number of ways. It works with sound as well as light. You’re going to use it with a torch though, and send a simple message from one side of the room to the other.

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Write out the word you are going to send and convert it into Morse code.

Word:

Morse code:

Then send it and see if they can decode it. Then get them to send a word back.

• What works well with this way of communicating?

• What are the things that you need to get used to?

• What are the more serious problems?

**As you can see, some letters have a short code, such as ‘a’ and ‘e’ whereas others, such as ‘q’, ‘x’ and ‘z’ have longer ones.**

• Can you suggest why ‘e’ has been given a much shorter code than ‘q’?

• This can make life easy, but it also causes a problem. What might happen if you were sending ‘e’ followed by another ‘e’? What might it be confused with?

**Flashing lights – Morse code**