



VE Day light communications

For this investigation you are going to try out your skills of silent messaging that was used to send information during the wars.

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 (investigation 2) 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.

Resources: torch

- Think up a simple message to send to someone else and write it down.
- Use the Morse code sheet on next page to find the correct pattern for each letter.
- Practice your message sending skills.
- Send to another member of your family across the room.
- Can they understand your message?

Want a further challenge?

- Can you create a way to get a message around a corner?
- What about sending a message to someone across the street?
- Can you get a message to someone upstairs when you are downstairs using just a torch?

Remember to send me your pictures or experiences of how it went.





VE Day Light communications

Flashing lights – Morse code

| | | | |
|---|-----------|----|-----------|
| a | . _ | n | _ . |
| b | _ . . . | o | _ _ _ |
| c | _ . _ . | p | . _ _ . |
| d | _ . . | q | _ _ . _ |
| e | . . | r | . _ . |
| f | . . _ . | s | . . . |
| g | _ _ . | t | _ |
| h | | u | . . _ |
| i | . . | v | . . . _ |
| j | . _ _ _ | w | . _ _ _ |
| k | _ . _ | x | _ . . _ |
| l | . _ . . | y | _ . _ _ |
| m | _ _ | z | _ _ . . |
| 1 | . _ _ _ _ | 6 | _ |
| 2 | . . _ _ _ | 7 | _ _ . . . |
| 3 | . . . _ _ | 8 | _ _ _ . . |
| 4 | _ | 9 | _ _ _ _ . |
| 5 | | 10 | _ _ _ _ _ |





VE Day Light Communications.

The science behind it:

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.

Talking points:

- 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?

