



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.



Flashing lights



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

a	. —
b	— . . .
c	— . — .
d	— . .
e	. —
f	. . — .
g	— — .
h	
i	. . —
j	. — — —
k	— . —
l	. — . .
m	— —

n	— .
o	— — —
p	. — — .
q	— — . —
r	. — .
s	. . .
t	— .
u	. . —
v	. . . —
w	. — —
x	— . . —
y	— . — —
z	— — . .

1	. — — — —
2	. . — — —
3	. . . — —
4	 —
5	

6	—
7	— — . . .
8	— — — . .
9	— — — — .
10	— — — — —