Lights and drums: worksheet

#  Step 1 Encode

Use the coding scheme to encode your message.

|  |  |
| --- | --- |
| **Message**:**babbage****Coding scheme**:Morse code | Write your **encoded message** here: |

 Step 2 Practise

Practise using the equipment for transmitting your message.

|  |  |
| --- | --- |
| **Equipment**:torch | Write **what others will need to know** to receive your message: |

 Step 3 Transmit

First, explain to others what they need to know to receive your message. Start the transmission when everyone is ready.

|  |  |
| --- | --- |
| **What worked:** | **What we hadn’t planned for:** |

 Steps 4 and 5 Receive-Decode

Write down each message that you receive and decode it.

|  |  |
| --- | --- |
| **Coding scheme**:**Decoded message**:  | Write the **message that you received** here: |
| **Coding scheme**:**Decoded message**:  | Write the **message that you received** here: |
| **Coding scheme**:**Decoded message**:  | Write the **message that you received** here: |
| **Coding scheme**:**Decoded message**:  | Write the **message that you received** here: |

 Step 6 Reflect

Discuss these questions within your group and write down a short answer for each one.

|  |  |
| --- | --- |
| **Questions** | **Your answers** |
| The coding scheme that you used associates each letter with a sequence of symbols. What is the **length** (number of letters) of your **original message**?What is the **length** (number of symbols) of your **encoded message**? |  |
| What can you use to represent 0s and 1s in the real world?(Answer in a single sentence) |  |
| Why have people invented so many different coding schemes? (Answer in a single sentence) |  |

This resource is licensed under the Open Government Licence, version 3. For more information on this licence, see [ncce.io/ogl](https://ncce.io/ogl).