# Lesson 2: Lights and Drums 

Representations - from Clay to Silicon

Sara Alade

1 Materials from the Teach Computing Curriculum created by the National Centre for Computing Education

## Task 1 - Communication at a distance

Two friends live in huts on opposite sides of a great lake.

They would like to exchange messages
from a distance?

Answer:-

## Task 2 - Encoding in Morse code

Can you work out the following Morse code?



Credit: Morse Code Alphabet: Wikipedia

## Task 3 - Encode

Using the Morse coding scheme, encode the message "Kitty" below.

Hint: use a sequence of "dot" and
"dash" (Morse code table to the right).

| $\mathbf{K}$ | $\mathbf{i}$ | $\mathbf{t}$ | $\mathbf{t}$ | $\mathbf{y}$ |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |



Credit: Morse Code Alphabet: Wikipedia

## Task 4 - Receive

Your decoded message should look
like this:-

| 1101011 | 1101001 | 1110100 | 1110100 | 1111001 |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |


| ASCII |  |  |  |
| :---: | :---: | :---: | :---: |
| a | 1100001 | n | 1101110 |
| b | 1100010 | 0 | 1101110 |
| c | 1100011 | p | 1110000 |
| d | 1100100 | q | 1110001 |
| e | 1100101 | r | 1110010 |
| f | 1100110 | s | 1110011 |
| g | 1100111 | t | 1110100 |
| h | 1101000 | u | 1110101 |
| i | 1101001 | v | 1110110 |
| j | 1101010 | w | 1110111 |
| k | 1101011 | x | 1111000 |
| l | 1101100 | y | 1111001 |
| m | 1101101 | z | 1111010 |

