

Name:

Student Number:

Date:

Lesson 5 The Secret Code

Activity Sheet

Context

What if you were lost during the time travel? What would you do to call for help? Today, let us learn a “secret” but powerful means of calls for help – Morse Code. The Morse Code uses specific sound or light signals to represent the letters so that the message can be transmitted in a non-verbal way.

Should you be aware that your code should be arranged in a logical sequence in reference to the rules of the International Morse Code. A different sequence of the signals may lead to different meanings.

Task 5-1 Morse Code Communication

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 ■ ■ ■ ■ ●
 0 ■ ■ ■ ■ ■

Notes: Use  to represent the dot ●;

Use  to represent the dash ■.

However, you can change the color of the LED bulbs.

Task 5-2 Secret Talk

Work in pairs and use mBot's light signals to code an English word. Ask your partner to guess what the word is and take turns.

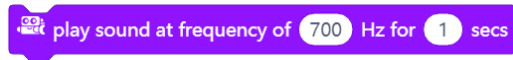
You can write down your word(s) in the table below:

Words	Morse Code Representation
Example: SOS	● ● ● ■ ■ ■ ● ● ●

Challenge: Try to code a phrase or even a sentence.

Or you can try to code by using the buzzer in mBot to produce sound signals.





Key Concepts from this Learning Activity

Terms	What it means
Morse Code*	Uses short and long sound or light signals to represent a specific English letter according to a set of rules.
Sequencing*	A set of ordered steps for accomplishing a task.
LED	Stands for Light Emitting Diode and is a type of light.

* New term