

Technology Education

Morse Code – Decoding 101

Teacher Package

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Introduction

Welcome to the teacher package for Morse Code – Decoding 101. Designed for year 3 and 4 students, this online resource focuses on the digital technologies concepts of knowledge and understanding in relation to data and how it can be represented.

Taking note of the general capabilities strand of information and communication technology, Morse Code – Decoding 101 is a self-directed online learning experience that allows students to move at their own pace while developing their digital technologies skills and understandings. Designed to be used with minimal input from the teacher, Morse Code – Decoding 101 introduces students to Morse code and, more importantly, allows them to explore the concept of data (in this case, letters and words) being represented in different formats.

Upon completing Morse Code – Decoding 101, students should not only have a working understanding of Morse code but also be more aware of the concept of coding – of representing data in various formats.

Standards

The Australian Curriculum supplies teachers with particular learning standards. The standards for year 3 - 4 that are addressed in Morse Code – Decoding 101 are:

Digital Technologies Knowledge and Understanding

Content Description

Recognise different types of data and explore how the same data can be represented in different ways

Elaborations (customised)

Recognising representations of different types of data such as beeps, lights or dots for Morse code

Exploring Morse code as a representation of data, and how it can be represented in various ways (di-dahs, beeps, lights, etc).

Student Learning Outcomes

By the end of Morse Code – Decoding 101, students should be able to:

- Create their own Morse code message (representing data in a different format)
Decipher a Morse code message (interpret data)
- Explain how the same data (letters and words) can be represented in different ways through alphabets and Morse code.
- Describe how social, technical and sustainability factors influence the design first Morse Code, then later technologies to meet present and future needs.

How to use the resource

Morse Code – Decoding 101 has been designed for students to work through at their own pace, however it can of course be used as part of a unit plan, as a standalone activity or even as a rotation activity. Teaching strategies employed within this unit of work include:

- Interactive, engaging online learning activities
- Student-led learning
- Independent learning
- Collaborative learning
- Experiential learning
- Active learning
- Games and simulations
- Learner-centred teaching
- Learning through music

Teacher Preparation and Resources

Each Student will need

- Access to a computer and internet
- [Morse Code – Decoding 101](#) online resource
- Headphones
- A printed copy of each of the three worksheets

Prior Knowledge

To get the most out of this course, students should be comfortable working independently at a computer. Ideally, students will also be confident readers. They may also have previous knowledge of code if they have experience using THRASS in English.

Where to from here?

After completing Morse Code – Decoding 101, students may wish to explore semaphore, play with creating their own code and even continue onto code as it's present in Indigenous cultures. See the Australian Curriculum for further advice.

MORSE CODE

(ALPHABETICAL)

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	• • • • •	0	— — — — —

morse.code.madness

Name: _____

The telegraph was invented in the late 1830s by Samuel Morse. This machine sent electrical signals over a wire laid between stations. Samuel Morse also developed a code that assigned a set of dots and dashes to each letter of the English alphabet, which allowed for sending messages across telegraph lines. This form of communication was used by operators on ships and railroads. People could also send telegraph messages to one another through the Post Office.



A telegraph machine used to send Morse Code messages.

Directions: Use the Morse Code Translator to complete the sentences below.

Morse Code Translator	
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. _____ Morse invented the Morse Code.
• • • — • — • • •

2. _____, instead of sound, is sometimes used by
• • • • • — ships at sea to relay coded messages.

3. Letters most commonly used by the English language were given the
_____ sequence.
• • • • • — • • • —

4. A telegraph sends
_____ signals across wires from one location to another. These signals are decoded into a message.
• • • • • — • • • • •

5. The first Morse Code message was sent from Washington, DC to
_____.
— • • • • — • • — — — • • • • •

6. The most common use of the Morse Code is to send the _____ distress signal.
• • • — • • •

7. The @ symbol was added to the Morse Code in 2003. It was the first change to the code since before

_____.
• — — — • • • • • — • • • • • • • • • •

Name: _____

Message Sent

English:

Morse Code:

Message Received

Morse code:

English: