

## **Lesson Plan: Communication and Morse Code**

**Provided by the Sable Points Lighthouse Keepers Association (SPLKA)**

### **Content Area:**

Language Arts

### **Lesson Title:**

Communication and Morse Code on Lake Michigan

### **Objective(s):**

After completing this lesson, students will be able to:

- Describe the purpose, history and development of Morse Code.
- Demonstrate how language can span many different forms.
- Explain the importance of Morse Code as an efficient communication tool.
- Defend the role of Morse Code as a lifesaving form of communication even in the 21<sup>st</sup> century (after listening to and/or reading an inspiring interview about how Morse Code assisted with a rescue on Lake Michigan).
- Translate words and phrases from Morse Code into English.  
Memorize the international signal of distress – SOS – and be able to clap (or use a flashlight) to send it to each other.
- Practice sending and receiving their names through Morse Code by clapping or a flashlight.
- Translate words and phrases from English into Morse Code (optional)

### **MI Content Standards:**

Reading Standards for Literature – for Grade 4 students (see 2, 3, 4 6, 7 and 10)

Writing Standards – for Grade 4 students (see 2, 4, 6 and 9)

Speaking and Listening Standards – for Grade 4 students (see 4 and 6)

Language Standards – for Grade 4 students (see 3 and 6)

Standard 10: Range, Quality, and Complexity of Student Reading K-5

Range of Text Types for K-5: Informational Texts

### **Materials:**

Pieces of paper or a notebook or journal.

Pencil.

Sheet of English words and phrases to translate into Morse Code.

Flashlight(s) – optional

## Resources:

Gillingham, Sara. *Alpha, Bravo, Charlie: The Complete Book of Nautical Codes*. New York, NY: Phaidon Press, 2016.

House, Katherine L. *Lighthouses for Kids: History, Science, and Lore with 21 Activities*. Chicago, IL: Chicago Review Press, 2008. See page 92.

*Learning Morse Code*, American Radio Relay League (ARRL), <http://www.arrl.org/learning-morse-code>, accessed 7/12/21.

*Morse Code Messaging (Activity)*, Education.com, <https://www.education.com/activity/article/Morse-Code>, accessed 7/12/21.

Sable Points Lighthouse Keepers Association, <http://splka.org>, accessed 7/11/21.

Spencer, Mark. *Code Kids*, American Radio Relay League (ARRL), <http://www.arrl.org/code-kids>, accessed 7/12/21.

*What is Morse Code?*, STEMout, <http://web.northeastern.edu/stemout/morse-code>, accessed 3/24/21.

Wood, Joe. *Morse Code and Radios: A Guide for Kids and Amateurs*, TechWholesale.com, <https://www.techwholesale.com/morse-code-radios-kids.html>, accessed 7/12/21.

## Activities:

1. Learn about the purpose, history and development of Morse Code by reading and listening (teacher prepares from Resources).
2. Learn how language can span many different forms (teacher prepares from Resources).
3. Learn the importance of Morse Code as an efficient communication tool (teacher prepares from Resources).
4. Listen to and/or read an inspiring interview about how Morse Code assisted with a rescue on Lake Michigan.
5. Translate words and phrases from Morse Code into English.
6. Memorize the international signal for help – SOS – and clap (or use a flashlight) to send it to each other.
7. Practice sending and receiving their names in Morse Code through clapping or a flashlight.
8. Translate words and phrases from English into Morse Code (optional)

## Assessment:

- Short written self-reflection on Morse Code and its importance as a communication tool.

- Short written comparison of Morse Code with other systems of language.
- Translation of Morse Code into English.
- Sending the universal signal of distress – SOS – via clapping and/or using a flashlight.
- Writing messages in Morse Code (on the white board) and translating them into English.
- Sending and receiving their names in Morse Code through clapping or a flashlight.

**Notes:**

When sending Morse Code, you spell every word – one letter at a time – using dots and dashes (also called dit and dah – or short and long). Leave extra space between each word (set of dots and dashes) when sending – a / between words when writing it.

“As ‘code talkers’ grew more and more comfortable with Morse Code, they eventually stopped needing to reference an alphabet chart, and could translate letters just by hearing the long and the short beeps. This led to the development of Morse Code as a spoken language.”(*What is Morse Code?*) An added side benefit of teaching Morse Code is that “the instruction in how codes are used to transmit information is part of the ‘educational standards’ or benchmarks that are required to be taught in our nation’s classrooms.”(Spencer)

Teachers can think of their own words and phrases to have students use to translate Morse Code into English and these words and phrases can complement the language arts curriculum. Here are a few suggestions to get started – be sure that the students use adequate spacing between the words:

hello  
 happy birthday  
 peace  
 lighthouse  
 lake  
 sunshine  
 walk the beach  
 help a friend  
 wait for me  
 the student’s name

# International Morse Code

1. The length of a dot is one unit.
2. A dash is three units.
3. The space between parts of the same letter is one unit.
4. The space between letters is three units.
5. The space between words is seven units.

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 — — — — —