STEM Challenge: Morse Code

Before telephones, Morse code was how people sent messages quickly over long distances. They used a telegraph key (or a Morse key) like this! Morse Code was created by Samuel F.B. Morse in the early 1800s

Morse code is still in use today in the US Navy and through the International Morse Code Preservation Society. It can be transmitted through sounds, lights or written on paper.

Using the code key and directions on the next page, decode the messages below. Share the key with a neighbor and send messages using your flashlight at night! Turn the light on and off quickly for a dot, leave it on three times as long for a dash. Don't forget to leave it dark for your spaces!

1— .__ .   __ .. ..   _.__ ___ .._!

2— _._ . . . ._ .__.   ._. . . ._ _.. .. _. __.!

3— __. ___   ._. ._. ___ ._.   ._   ._. ._ ._.. _._!

Want more Morse code? Code a message and send it to us at eplyouthservices@gmail.com! We'll see if we can decode it and send one back. Remember your spacing!

How to use International Morse Code:

1. A "unit" is the length of one dot.
2. A dash is three units.
3. The space between dots and dashes in the same letter is one unit.
4. The space between letters in a word is three units.
5. The space between words is seven units.
6. To add a period use . ___ . ___ . ___
7. To add a comma use ___ ___ . . ___ ___
8. To add a question mark use . . ___ ___ . .
9. If you didn't understand the message sent to you, send back an error message . . . . (ten dots)

If you're using sound or lights to send your message:

To signal the beginning of a message (for light or sound messages) use ___ . ___ . ___

To signal the end of a message use . ___ . ___ .

_____

Letter	Code		Letter	Code
A	● ▬		U	● ● ▬
B	▬ ● ● ●		V	● ● ● ▬
C	▬ ● ▬ ●		W	● ▬ ▬
D	▬ ● ●		X	▬ ● ● ▬
E	●		Y	▬ ● ▬ ▬
F	● ● ▬ ●		Z	▬ ▬ ● ●
G	▬ ▬ ●			
H	● ● ● ●			
I	● ●			
J	● ▬ ▬ ▬			
K	▬ ● ▬		1	● ▬ ▬ ▬ ▬
L	● ▬ ● ●		2	● ● ▬ ▬ ▬
M	▬ ▬		3	● ● ● ▬ ▬
N	▬ ●		4	● ● ● ● ▬
O	▬ ▬ ▬		5	● ● ● ● ●
P	● ▬ ▬ ●		6	▬ ● ● ● ●
Q	▬ ▬ ● ▬		7	▬ ▬ ● ● ●
R	● ▬ ●		8	▬ ▬ ▬ ● ●
S	● ● ●		9	▬ ▬ ▬ ▬ ●
T	▬		0	▬ ▬ ▬ ▬ ▬