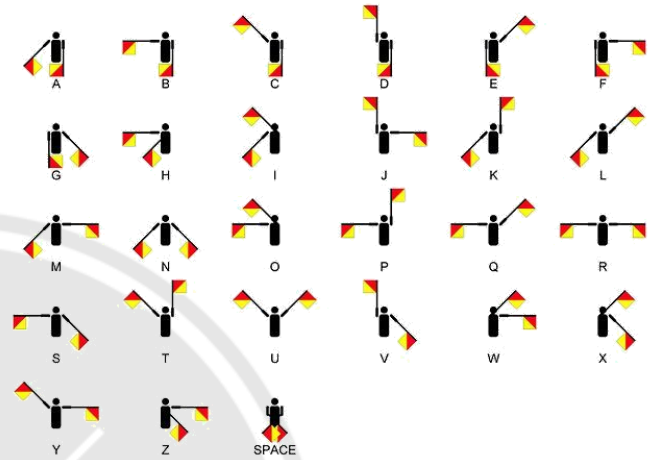


# REAL SCIENCE: SEMAPHORE CODING CHALLENGE

## INTRODUCTION

Semaphore is a system of sending messages by holding the arms or two flags or poles in certain positions to an alphanumeric code. It is a way for naval ships to communicate with each other without using the radio. One officer on one ship spells out each letter in a message using semaphore to a second officer on a second ship. The second officer then translates each semaphore symbol and <voila!> the message is received.



## PURPOSE

In this activity, your team will generate your own code - your own custom semaphore - and challenge other teams to see who can send and receive a message the fastest.

## MATERIALS

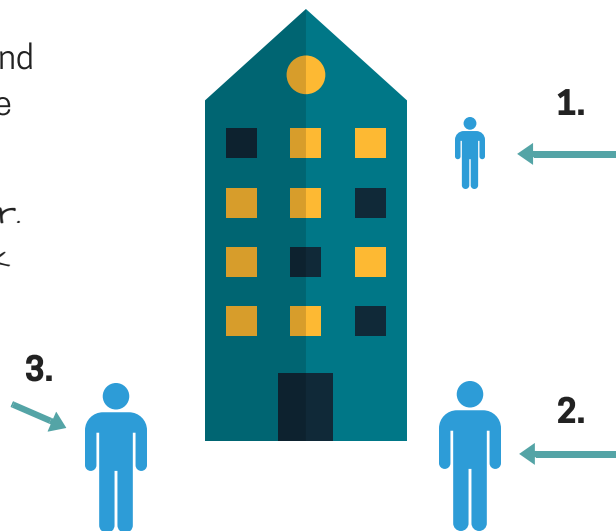
- one 8x8 grid with 16 X's randomly placed
- one blank 8x8 grid
- pencil or pen
- stopwatch

## PROCEDURE

NOTE: the sender and receiver cannot see each other.

This is the receiver. They hold the blank 8x8 grid.

They watch the middleman and translate their actions to X's on the blank grid.



- This is the sender. They hold the 8x8 grid with the 16 X's.
- They create the actions that send the message

2. This is the middleman. They copy the actions of the sender.

**BLANK GRID**

