

CRACK THE CODE



Activity 1: Nautical Flags

The system of international maritime signal flags is a way of representing individual letters of the alphabet in signals to or from ships. It is a component of the International Code of Signals.

1. Write down the first letter of all 4 team members names. ____
2. Decide how to arrange these letters in order to form a team name. Our team name is: _____
3. Locate the first letter of your name in the International Code of Symbols.

What is the call name for your team? _____

3. Each member creates a flag out of poster board that represents their first initial using the symbols.
4. Punch a hole at the top, middle and bottom and attach flags to the team's flagpole in the correct order to represent their team name.
5. The flagpole must be carried by a team member at all times.

Activity 2: Flag Code

The team will work together to decipher a flag code and perform the task.



1. What were the messages? _____

Activity 3: Semaphore Flags

Flag semaphore is a system for conveying information at a distance by means of visual signals with hand-held flags. Information is encoded by the position of the flags. It is read when the flag is in a fixed position. Semaphores were adopted and widely used in the maritime world in the early 1800s.

The team will work in pairs to crack the semaphore flag codes. One person should look at the alphabet and instruct the other person how to position the two flags. Team A will be at one spot and Team B at another. All team members should review the alphabet together and create strategies for accurate communication once they are apart.

Team A's message was: _____

Team B's message was: _____

Activity 4: Navigational Aids (GB)

Unlike the roads and highways that we drive on, the waterways we go boating on do not have road signs that tell us our location, the route or distance to a destination, or of hazards along the way. Instead, the waterways have AIDS TO NAVIGATION (or ATONs), which are all of those man-made objects used by mariners to determine position or a safe course. The term "aids to navigation" includes buoys, day beacons, lights, light-ships, radio beacons, fog signals, marks and other devices used to provide "street" signs on the water.

Teams will use a compass and sight in the following bearings and use binoculars to identify the ATON.

Bearings	Aid to Navigation
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<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Activity 5: To The Rescue

Teams will decipher the standard meaning for the red & yellow nautical flag and report to the location on the island where they feel this activity would take place. A similar flag will be posted near that site.



How many tries did it take to rescue the person? _____

Activity 6: Morse Code (Keeper’s House)

Morse Code was invented in America in 1835 by Samuel Morse. It became the first form of radio communication as a language that could be transmitted by flashes of light or sound. It was used to send and receive military messages during several wars, used by sailors, and by the Titanic in 1912 to send its SOS.

Teams will split into pairs with each reporting to a designated location. Using a powerful light, one pair will ask the other pair a question using short and long flashes. The receiving pair must decipher the code and answer the question before returning to their teammates. Suggestion: discuss strategies before beginning this activity.

The question was: _____ Answer: _____

Activity 7: Braille (Workshed)

Braille is writing system which enables blind and partially sighted people to read and write through touch. It was invented by Louis Braille (1809-1852), who was blind and became a teacher of the blind. It consists of patterns of raised dots arranged in cells of up to six dots in a 3 x 2 configuration. Each cell represents a letter, numeral or punctuation mark. Review the braille cell before choosing a reader.



What was the message? _____

Finish Line

After all 7 Activities have been successfully completed, each team will plant their team flag in the flower bed in front of the granite benches. The first team to finish will place their flag closest to the solar panels.