



Title: Don't Rock The Boat Baby!

Grade(s): 6-8

Introduction: Records show that many ships sink in less than 15 minutes. This means that sailors must be ready for emergencies and need to be educated for safety survival. Many survival tips and safety equipment are important at all times while out at sea. The **Coast Guard** sets minimum safety standards for vessels and associated equipment. For example, **personal flotation devices** (PFDs) must be Coast Guard approved, in good and serviceable condition. They should not be stowed in plastic bags, in locked or closed compartments. Disposable devices must be immediately available for use. Though not required, a PFD should be worn at all times when the vessel is underway. All recreational boats must carry one Type I, Type II, III, or V PFD for each person aboard. PFDs will keep someone from sinking, but necessarily from drowning.

The ten basic rules of boating safety include carrying adequate safety equipment, carrying approved and suitable PFDs, telling someone where you are going, knowing the rules and regulations, watching the weather, carrying sufficient fuel and water, guarding against fire, ensuring that the engine is reliable, preventing overload, and not mixing alcohol or drugs with boating. Safe boating must be encouraged at all times. Boating/sailing vessels should never be overloaded with passengers.

Learner Objective(s):

- The student will be able to formulate a plan of action in case of sinking water vessel.
- The student will demonstrate an understanding of human behavior in case of emergencies.
- The student will be able to discuss safety tips for survival at sea.

Florida Sunshine Standards: Science: SC.A.1.3.1; Math: MA.B.3.3.1

Competency Based Curriculum: Science: M/J - III-1-A; Math: M/J - III - 2- A

Materials:

Life Jacket
Rope
Flat Board
Sea Survival Kit (i.e., whistle, signal devices, flashlights, etc.)
Life Raft
Immersion Suit
Personal Flotation Device (PFD)
Simulated Knife
Hand-held Radio
Radar Reflector
Water Buckets (2)
Extra Clothing
Signaling Mirrors (2)

Activity Procedure(s):

1. Allow students to research and read the Survival at Sea article at:
<http://www.otenet.gr/sailor/abandon.htm>

2. Present the following scenario to the students:

*You are on a ship that will sink in less than 15 minutes. This affords little time to formulate a plan of action, therefore careful planning is essential to be ready for emergency. When abandoning ship there are important pointers that need to be considered. **Role play** one of the following plans of action:*

3. Assign one of the following emergency tasks to each group of 3 students:

Group 1- Action In The Water

Group 2- Boarding The Raft From The Water

Group 3- Getting An Injured Man Into The Raft

Group 4- Righting A Capsized Raft

Group 5- Righting A Capsized Raft With Water Trapped In The Canopy

Group 6- Surviving Aboard The Life Raft

Group 7- Treating Injuries

Group 8- Preservation Of Body Heat

Group 9- Leadership And Morale

Group 10- Establishing The Routine

4. The role play activity should be no less than 10 minutes.
5. Encourage students to make suggestions and critique the respective role plays.

Student Assessment:

Allow student to answer critical thinking skills questions assigned by the teacher.

- a. If you were lost at sea by yourself, how would you prioritize your emergency plan of action?
- b. In case there were 3 of you attempting to survive out at sea, who determines the leader of the group?

Observe student participation during role play activities.

Activity Extension(s):

Depending on the length of the sailing vessel, research the maximum number of individuals that should be on the respective vessel (**Math**). If there is no Coast Guard capacity label, the following formula can be used:

$$\text{People} = (\text{Length of Boat} \times \text{Width})$$

Give students examples to calculate.

Allow students to research articles via the internet associated with real-life survival at sea situations (**Language Arts/Social Studies**).

Home Learning Activity:

Allow students to explain the following question:

Can salt be separated from actual seawater while at sea?

Vocabulary: Coast Guard, Personal Flotation Devices

References/Related Links:

<http://www.airseasafety.com/surv.htm>

<http://www.mbht.tas.gov.au/mbh006.html>

<http://www.coastguard.com>

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Reading Passage

Our body is about 70 percent water. Maintaining the body's water balance is a prime requirement for survival. Water is a higher priority than food. We can probably live for weeks without food, but our survival will be measured in days if we have no water. Because the digestion of food drains needed water from our body, we should not eat if we have no water. Every bit of water that we conserve, even perspiration, increases our survival time.

While conserving water is vital, so is maintaining enough physical strength to cope with the ordeal of survival. Survival experts recommend that we begin drinking rationed quantities of water soon after boarding the life raft, the amount depending upon how much we have been able to bring aboard. They suggest drinking one half of the daily ration at a time, rather than sipping very small quantities. Thirst may also be reduced by chewing a gum, or practically anything else. However, this relief does not reduce the body's need for water.

Drinking seawater will exaggerate thirst, promote water loss through the kidneys and intestines, and shorten our survival time. Under conditions of lack of water, urine is too toxic to drink and will also cut down our survival time. Alcohol will promote heat loss through the skin and water loss through the kidneys. Drinking alcohol under the conditions of lack of water is suicidal.

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FCAT Questions

Directions: Read the passage, then answer all the questions below. Answer multiple-choice questions by circling the letter of the answer that you select. Write your answer to the “Read, Think, and Explain” question on the lines provided.

1. Approximately ____ of our body is water.

- A. 1/2
- B. 1/3
- C. 4/5
- D. 3/4

Answer: D

2. Survival experts recommend which one of the following tips?

- A. Drink 1/2 of the daily water ration.
- B. Sip very small quantities of water on a daily basis.
- C. Drink small amount of water when thirst occurs.
- D. Do not drink water for one day and drink small amounts of water the next day.

Answer: A

3. Which one of the following promotes heat loss through the skin?

- A. Perspiration
- B. Alcohol
- C. Seawater
- D. Over-hydration

Answer: B

4. Why is water a higher priority for survival than food itself??


