MIDDLE SCHOOL
LESSON GUIDE

Into the Outdoors

# CREATING YOUR CUSTOM SAFE-N-SMART FISHING PLAN

Educational Partners

Physical Science

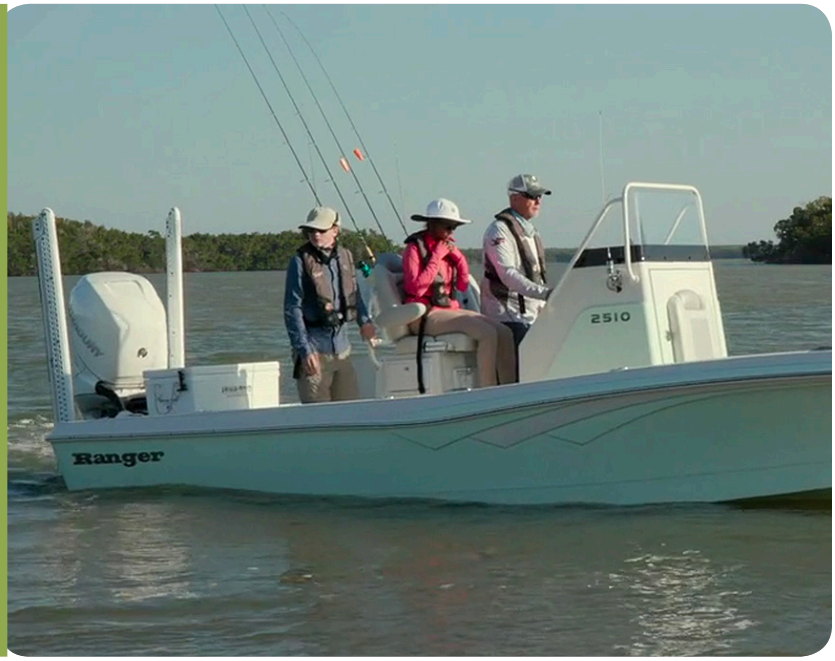
GRADE LEVELS
**Middle School - Grades 6-8**

CONTENT AREA
**Physical Science**

UNIT THEME
**Outdoor Recreation Safety**

TOPIC
**Boating and Angling Safety**

TIME REQUIRED
**Three 45-minute sessions**




## OVERVIEW

Fishing is a growing recreational activity that combines aspects of a sustainable outdoor lifestyle with outdoor adventure. It offers fun, bonding with family and friends, the chance to catch hi-protein food while connecting with nature on the open water. It's also an activity that combines placing inexperienced youth in water environments with little knowledge of boating or angling safety. And it's a proven fact that safe boating knowledge is the key to preventing serious or fatal accidents while fishing.

Most states require registered boaters to complete a certified boating safety course. The U.S. Coast Guard and other agencies and orgs offer a variety of comprehensive online resources to educate new anglers about boating safety. The challenge however is that most new anglers are much more interested in getting out fishing rather than being concerned about safety.

In this lesson, students will develop an understanding of the importance and concepts of boating safety, using critical thinking in a peer-driven activity where students ask critical questions, perform research, debate, and create their own "fishing safety plan".

# CONCEPT Outdoor Safety

## ENDURING UNDERSTANDING:

Students will understand the different considerations in developing an outdoor adventure safety plan. They will also understand that outdoor safety plans can be adapted to various outdoor activities.

## CONTENT OBJECTIVES:

Students will be able to define the reasons for developing a plan and identify the key concepts in an outdoor adventure safety plan that can affect their safety and that of friends or family.

## LEARNER OBJECTIVES:

Students will use video, online research and classroom discussion in developing and supporting their understanding of a safe fishing plan.

## PROCESS OBJECTIVES:

Students will work in small and large groups to process new information and use evidence to come to conclusions.

## MATERIALS NEEDED (each group, each student):

1. Internet access to webpage and video http://intotheoutdoors.org/topics/safe-smart-fishing/
2. Student Worksheets (free downloadable PDFs)
3. Poster Paper and Markers for each group


## PROCEDURES

**Session 1 - Before watching the Safe & Smart Fishing video** or reading the website background information, ask students what they know about the key concepts of fishing safely from a boat. Also ask students how many have actually fished from a boat and what safety practices they followed.

Have students download, or print and distribute the Pre-Lesson Student Worksheet (free PDF via **http://intotheoutdoors.org/topics/safe-smart-fishing/**). Instruct students to fill in the worksheet while watching the video. Go over the questions with the students before viewing so they know what to look and listen for. After viewing the video, review and discuss the answers to the questions as a class.

Next, divide the class into small groups (fishing teams) of three. Have students download and print, or hand out to each student the Safe-N-Smart Fishing Plan Worksheet (free PDF via the web link). Ask them to review the details and assignments of the worksheet in preparation for Session 2.

**Session 2 - Team Research & Plan Development**

Within the worksheet, each 3-person team has assigned roles, goals and objectives in developing their safety plan. Within each team, one member will be the "Fishing Guide", one the "Fishing Client" and the other the "Retired Boating Safety Officer". Have students perform online research from the links provided, and other sources, then have the teams discuss and develop their key goals. The worksheet provides instructions and research options for students to gather information. Inform each team that one member will also prepare to give a presentation to present their Safe-N-Smart Fishing plan to the class during Session 3. Their presentation should be supported by research and some form of media (either video, poster, graphs, charts, images).

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## PROCEDURES *(continued)*

**Session 3 – Fishing Team Presentations & Class Debate**

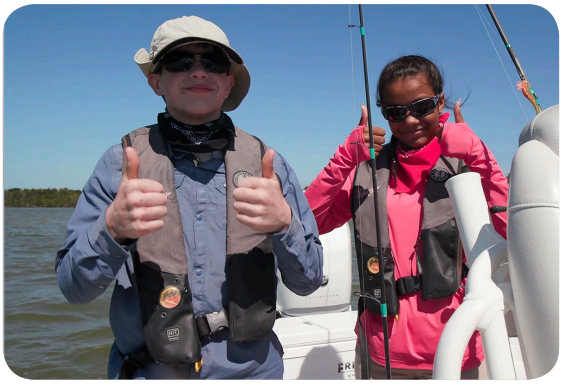
Have each fishing team present their Safe-N-Smart Fishing Plan and supporting reasons along with their media. During presentations, ask all the students to write down key boating-fishing safety considerations that other teams may have missed. After all the teams have presented their safety plans, lead a group discussion while listing and prioritizing on the board the key elements of the "Ideal Safe-N-Smart Fishing Plan". This final plan should reflect a stakeholder balance of logical safety goals between the fishing guides, client anglers and boating safety officers.

**Conclude the discussion** with a sampling of students who remained concerned that the overall plan may have missed one or more of their safety concerns.

## ASSESSMENT

Students will be informally assessed based on their participation within the fishing teams and during class presentations and discussions. Teachers could collect the discussion notes students took during the video to check for completion.

Students can be formally assessed on meeting the formal learning objectives on how thoroughly students completed their Safe-N-Smart Fishing Plan worksheets.

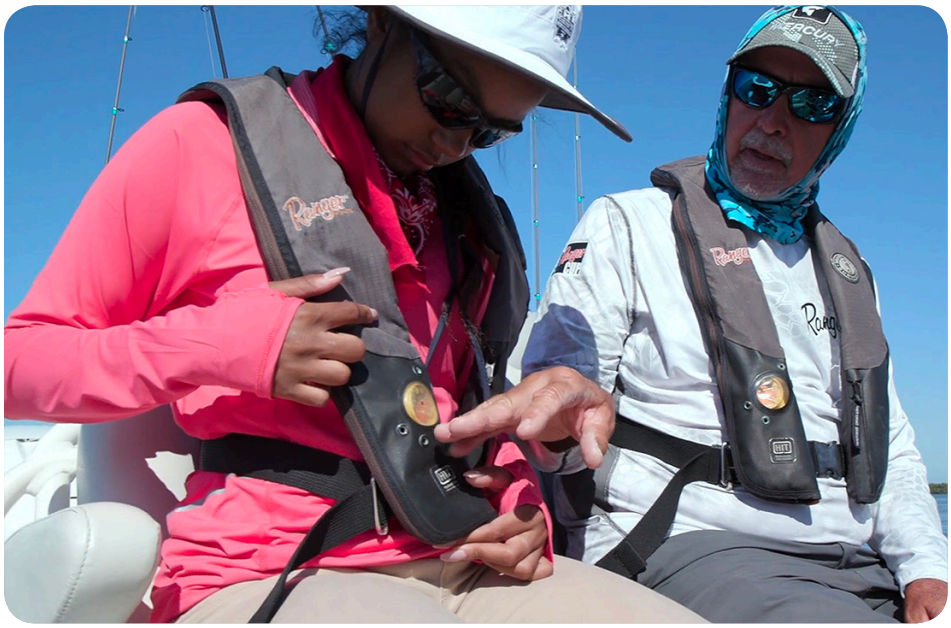


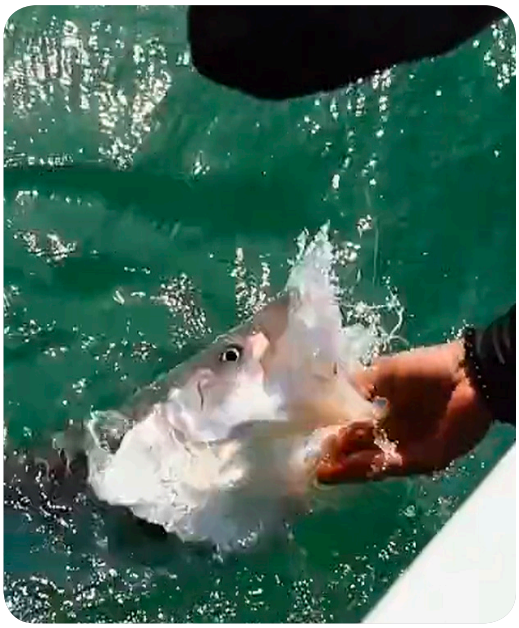
## EXTENSION ACTIVITY

Students may select other outdoor recreational activities that they have participated in to develop customized "outdoor safe-n-smart" plans. Direct students to use the same general worksheet and procedure of research in developing their custom activity plans. Students can later present their custom outdoors safety plans in class and compare the plans of different students.

### SPECIAL CONSIDERATIONS:

This activity is richest when completed in groups with answers shared to a whole class. The student worksheet is not a typical worksheet as it encourages students to construct knowledge as they answer questions. The questions build off of each other.





## RESOURCES

- https://www.uscgboating.org/recreational-boaters/floating-plan.php
- https://www.takemefishing.org/boating/boating-and-water-safety/
- https://www.boat-ed.com/
- https://www.boatus.org/boating-safety/
- https://learn-to-fish.igfa.org/courses/intro-to-fishing

## The following **National Common Core Standards** can be met teaching SAFE-N-SMART FISHING PLAN:

**CCSS.ELA-LITERACY.RI.6.4** Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.

**CCSS.ELA-LITERACY.RI.6.7** Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

**CCSS.ELA-LITERACY.RST.6-8.1** Cite specific textual evidence to support analysis of science and technical texts.

**CCSS.ELA-LITERACY.RST.6-8.2** Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.

**CCSS.ELA-LITERACY.RST.6-8.7** Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

**CCSS.ELA-LITERACY.RST.6-8.8** Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.

**CCSS.ELA-LITERACY.SL.8.1** Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

**CCSS.ELA-LITERACY.SL.8.4** Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.

**CCSS.ELA-LITERACY.SL.8.5** Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.

**CCSS.ELA-LITERACY.SL.8.6** Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

**CCSS.ELA-LITERACY.W.8.2** Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

**CCSS.ELA-LITERACY.W.8.7** Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

**CCSS.ELA-LITERACY.W.8.9** Draw evidence from literary or informational texts to support analysis, reflection, and research.

## Next Generation Science Standards:

**MS-LS2-1**. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem. [Clarification Statement: Emphasis is on cause and effect relationships between resources and growth of individual organisms and the numbers of organisms in ecosystems during periods of abundant and scarce resources.]

**MS-LS2-2.** Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems. [Clarification Statement: Emphasis is on predicting consistent patterns of interactions in different ecosystems in terms of the relationships among and between organisms and abiotic components of ecosystems. Examples of types of interactions could include competitive, predatory, and mutually beneficial.]

**MS-LS2-3.** Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. [Clarification Statement: Emphasis is on describing the conservation of matter and flow of energy into and out of various ecosystems, and on defining the boundaries of the system.]

**MS-LS2-4.** Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations. [Clarification Statement: Emphasis is on recognizing patterns in data and making warranted inferences about changes in populations, and on evaluating empirical evidence supporting arguments about changes to ecosystems.]