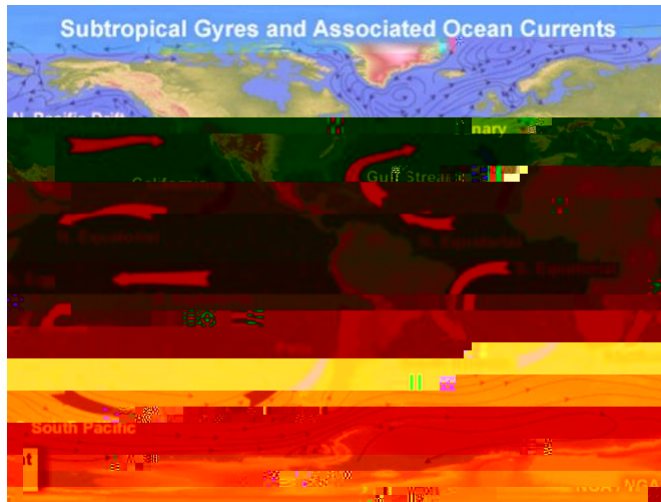




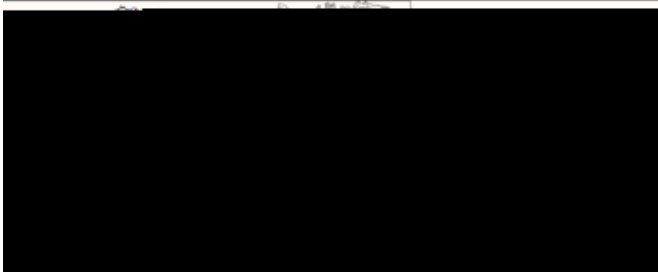


## OCEAN DRIFTERS LESSON PLAN



[https://www.nationalgeographic.org/topics/resource-library-ocean-currents/?q=&page=1&per\\_page=25](https://www.nationalgeographic.org/topics/resource-library-ocean-currents/?q=&page=1&per_page=25)

5. Learning Activities: (choose and list all that apply)
  - a. Descriptions of activities that are part of your lesson that will use multiple intelligences.
    - i. :  
Students will be able to build their own ocean drifters in their classrooms.
    - ii.  
Students will learn a large variety of vocabulary words that are significant in the STEM fields.
    - iii.  
Students will gain a better understanding of the ocean ecosystems.  
  
Students are able to construct an ocean drifter in their classrooms while utilizing various tools.
    - v.  
Students will have to determine how to properly build their ocean drifters. Additionally, students can use the data produced by the drifter for a number of different projects.
    - vi.  
Students are able to discuss the importance of learning about ocean currents and how they relate to global temperature.
6. Concrete to Abstract sequencing
  - a. Provide hook to motivate students and link prior knowledge
  - b. Explain relevance
  - c. Introduce important vocabulary using a word wall
  - d. Conduct think alouds and model steps to completing activity
  - e. Model graphic organizers
  - f. Guide students to independent practice
  - g. Incorporate collaborative strategies in small groups
  - h. Encourage student discussion
  - i. Perform checks of understanding (assessments)



## OCEAN DRIFTERS LESSON PLAN



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10. Classroom Management:

- a. A statement explaining the process of how you will maintain appropriate behavior of students in the classroom setting. Using CHAMPS format as shown below explain how each of the topics will be addressed for each activity you do in this lesson.

<https://www.dailyteachingtools.com/champs-classroom-management.html>

i. Conversation

Depending on the activity, we will either use a level 0 (no speaking), to a level three of carrying on conversations in an appropriate tone.

ii. Help

Activities will follow I do, you do, we do. Students will get focused guidance at the beginning of the lesson, but should be able to accomplish the task on their own by the end of the lesson.



## OCEAN DRIFTERS LESSON PLAN

12. Next Generation Sunshine State Standards (NGSSS)/Florida Standards (MAFS or LAFS):  
CTE-TECED.68.MARTEC.08.02: Explain how ocean currents form and their role in distribution of heat.  
CTE-TECED.68.MARTEC.08.06: Identify various ways wave energy is created and how it moves through the ocean.  
SS.2.G.1.3: Label on a map or globe the continents, oceans, Equator, Prime Meridian, North and South Pole.  
SS.3.G.1.3: Label the continents and oceans on a world map.  
SC.912.E.7.2: Analyze the causes of the various kinds of surface and deep water motion within the oceans and their impacts on the transfer of energy between the poles and the equator.  
SC.912.E.7.9: Cite evidence that the ocean has had a significant influence on climate change by absorbing, storing, and moving heat, carbon, and water.
13. Lesson Objectives:
- What is an ocean drifter?
  - Why is the information we receive from the drifter important?
  - Check out the drifter from this past MSRI Virtual Summer Camp (light blue track): [https://apps-nefsc.fisheries.noaa.gov/drifter/drift\\_jml\\_2020\\_1.html](https://apps-nefsc.fisheries.noaa.gov/drifter/drift_jml_2020_1.html)
14. Domain Objectives:
- The student will be able to ...
    - Psychomotor - manual or physical skills
    - Cognitive – mental skills
    - Affective – growth in feelings or emotional areas
15. Materials/Equipment:
- Access to laptop/computer with internet
  - Materials to build your ocean drifter (can be made from any materials)
  - GPS tracker
  - Journal
  - Writing utensils
  - Permanent markers or paint to decorate drifter
  - Brightly colored duct tape to mark the drifter
  - Floats
  - Weights

16. \_\_\_\_\_:

Minutes 1-10 mins	<p>Students will be asked to participate in a "quick write," where they will be given one minute to write what they know about the ocean or what they would like to know. Students will be given another minute to discuss their answers with their peers, and some students will be encouraged to share their answers.</p> <p>Students will be invited to learn about Jacksonville University's ocean drifters and how and why they are built. Below is the video from the MSRI Virtual summer camp where Dr. Jeremy Stalker of Jacksonville University describes how ocean drifters work:</p>
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