

Ocean Exploration:

You've just been asked to explore the Atlantic Ocean for the *Paquette*. A ship that sank off the US coast that was carrying 50 tons of gold. You are racing other teams of explorers to find the gold how will you locate the ship?

Step 1:

Start with creating a timeline of ocean exploration. Include at least 12 explorers/exploration points. Make sure you can explain the purpose of the expedition or what was discovered that made this event remarkable.

Step 2:

Now that we have some background about how exploration evolved, we need to begin by creating a plan of attack. Every great expedition starts with a "to-do" list and a plan or procedures that will be performed. You will write this detailed plan to the head of NOAA, Dr. Kathryn D. Sullivan. You will create a proposal on how to explore the ocean and what methods or techniques you will need to use. You must include a list of materials and survey devices that you may need. Dr. Sullivan will arrange for all equipment to be stored on board. How will we begin exploring the Atlantic Ocean? The ocean is vast and you will need to explore a large portion of it. With each zone of the ocean there are specific challenges that are presented such as depth, light, and pressure. Some questions to think about:

How do you know where you are in the ocean when you can't see land?

What happens when you need to research below the surface?

What other factors are going to be problems that you may come across and how will you solve those problems?

Will different oceanic environments present specific technical problems and what are they?

List the oceanic zones you will be exploring and how will you explore them. What type of organisms are you expecting to see.

What are some ocean floor structures you will encounter.

Information we know about the ship are the last known coordinates:

Latitude:N 36° 44' 51.6758"

Longitude:W 25° 12' 49.043"

The *Paquette* was heading due West toward

Latitude:N 39° 54' 35.0504"

Longitude:W 69° 15' 28.125"

The only theory we have is a rogue wave may have knocked out communications and EPIRB's. The ship may have lost communications or it could have sunk completely. You need to correctly identify the survey techniques that should be used in each oceanic zone. Don't forget, you my need to know how they work, so make sure you know how...

