



Treasure Hunting: Secrets of the Deep

Grades PreK - 2nd Grade

This Lesson is written to be directed and supervised by a parent or adult and is recommended for children in PreK to 2nd Grade

In this Lesson Plan, students will learn about treasure hunting and marine archeology by listening and reading books, exploring databases, inventing, and more! This Lesson can be simplified or made more complicated as desired.

This lesson contains activities that have been connected to Missouri Learning Standards using the Missouri Department of Elementary and Secondary Education (DESE) guidelines. Although these lessons have been connected to a state learning standard, they are not intended to replace the educational curriculum provided through public, private, or at-home learning.

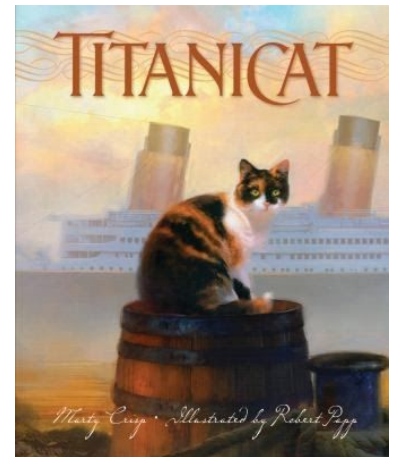
To access videos and databases, click on the hyperlinked text in the lesson plan. An active Christian County Library card is necessary to access select activities. For help, email youthservices@christiancountylibrary.org or call your local community branch.

1. Introduction to the Lesson

- a. Listen to a library staff member [introduce the lesson](#).
- b. Print out the documents and handouts to have ready for the lesson and gather any needed supplies.
- c. “Marine archaeologists” is a term for underwater history detectives and artifact preservers. (Preserving means keeping something safe and in good condition.) They go into oceans, rivers, and other bodies of water to learn about and preserve old artifacts, such as shipwrecks.
 - i. Use Handout A to write or draw about what you think a day in the life of a marine archeologist would be like. At the end of the lesson, go back and see what you got right, what was wrong, and what needs more information.
 - ii. DESE Standard: Listen for a purpose 3.A.c.; Reading 1.A.f.(1st Grade); Writing 2.B.a.;

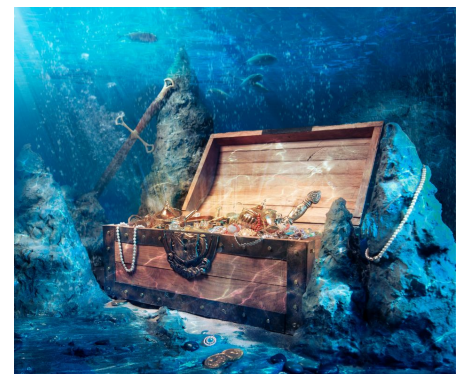
2. Listen and Write

- a. Listen to a library staff member read [“Titanicat” by Marty Crisp](#)
 - i. Writing Prompt: What event led to Jim leaving the ship? Would Jim have left the ship without 4-0-1? Write about your pet or a pet you know aboard the Titanic. Do they escape like Titanicat? Do they end up saving the ship?
 - ii. DESE Standard: Listen for a purpose 3.A.c.; Reading 1.A.f. (1st Grade);



3. Treasure!

- a. If someone asked you to tell them what you think the word “treasure” means, what would you say?
- b. Many people would give many different answers, but all of them would agree that treasure is something that *has value to*

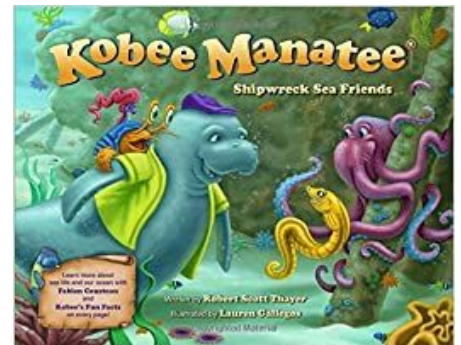


them. This lesson focuses on treasure hunters and marine archaeologists, so let's try to figure out how each of them would define "treasure."

- c. Watch this [video](#) about one family who hit \$1 million in gold while treasure hunting.
- d. Compare the video you just watched to this [video](#) of a marine archaeologist. What is he excited about?
- e. Discussion: After watching both of these videos, what you think treasure hunters think is treasure? What about marine archaeologists?
 - i. DESE Standard: Writing 2.B.a; Reading 3.C.b.d.; Speaking and Listening 3.A.c.

4. Read and Discuss

- a. There are many creatures in the oceans that interact with shipwrecks and other archeological sites. Search "Kobee Manatee" on [Explora Elementary](#) and read the book "Kobee Manatee: Shipwreck Sea Friends" by Nick Hunter to learn more!
 - i. Which sea creature did you think was most interesting? Why? Tell someone about one thing you learned.
 - ii. DESE Standard: Reading 3.C.a.; Speaking and Listening 3.A.c.



5. Art and Imagination!

- a. Imagine a sunken city, shipwreck, or other historical underwater site. Where in the world is it located? When did it happen? Who was there? What happened to them? After you have decided all this, create a unique piece of art of your imaginary historical site. Use paint, crayons, paper or whatever you want!
 - i. DESE Standard: Art VA:Cr1Ak.; Speaking and Listening 3.A.c.

6. Treasure Hunt!

- a. Create your own treasure hunt!
- b. Use some kind of container as your body of water, such as a kiddie swimming pool or shallow tub. Fill the container with sand, water, and “treasures/artifacts” (you decide what that means.) Then, do an “archaeological excavation” of your “site.” If you have nets, colanders, or something similar that would help to sift, that would be ideal. Remember to be gentle with the “treasure” and “artifacts” and have fun!
 - i. DESE Standard: Art Strand I Product/Performance 1.D.

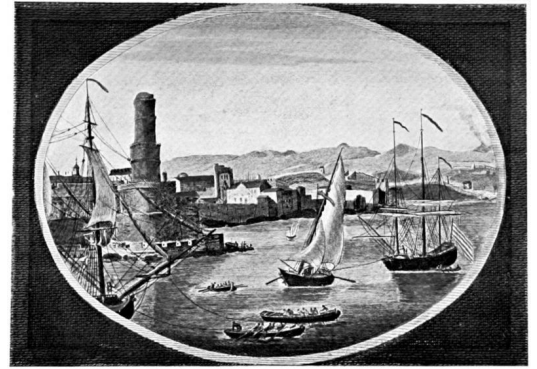


7. Titanic STEAM Activity

- a. The Titanic is possibly the most famous shipwreck of them all. On April 10, 1912, the ship hit an iceberg and sank. The Titanic was said to be “unsinkable” because of the bulkheads (special walls). If one section of the ship was broken and water was leaking in, it would stay in a compartment (a tight room), instead of flowing into the rest of the ship. Unfortunately, the walls were not high enough in these compartments, which caused water to flow over the walls into other compartments. Additionally, the iceberg scratched a long line of damage down the side of the ship, allowing water into too many of the compartments for the ship to stay afloat on the water. The iceberg that caused all this was large. If the iceberg was so large, why didn’t Titanic see it?
- b. Using Handout B, do an iceberg experiment to help you understand why.
 - i. DESE Standard: Reading 3.C.a.; Speaking and Listening 3.A.c.; Science K.PS1.A.1, K.ETS1.B.1.

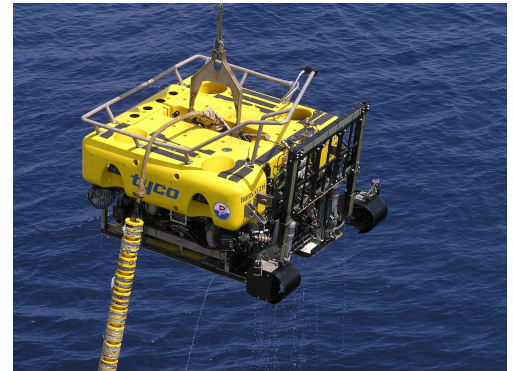
8. Cooking Activity

- a. A city is buried underwater off the shores of [Port Royal, Jamaica](#), and it was once home to many pirates! An earthquake, a tsunami (a really big wave in the ocean), and [liquefaction](#) sank two-thirds of this pirate city into the ocean, preserving the town in time. It is a [marine archaeologist's dream!](#)
- b. Hop onto [A to Z World Food](#), select “Jamaica” and look through the appetizer recipes. Pick one (or several!) and make it. What do you think? Did you like it? Why or why not?



9. Dive Into Technology

- a. Did you know technology is a huge part of marine archaeology and treasure hunting? Often artifacts and shipwrecks lie in hard to reach places for humans. Additionally, many clues are buried under the ocean floor. Look at the pictures of these [submersibles](#) (underwater robots) and learn more about one that looks cool to you!
 - i. Discussion: Did anything surprise you about these robots or about the kinds of things archeologists have to do to get to the artifacts? Would you ever want a job that would let you use or build this technology?
 - ii. DESE Standard: Reading 3.A.a.; Speaking and Listening 3.A.c.



10. Invent It!

- a. Using Handout C, invent something that will help marine archaeologists and treasure hunters preserve their special artifacts. Draw a picture and tell someone what it does, how it works, and how it will help rescue artifacts from the water.

- i. DESE Standard: Social Studies ETS1.A.; Speaking and Listening 3.A.a.; Writing 2.B.a.

11. Optional Activity

- a. Visit a museum with marine artifacts such as the [Shipwrecked Treasure Museum](#) in Branson, the [Titanic Museum](#) in Branson, or the [Arabia Steamboat Museum](#) in Kansas City.
- b. Too expensive or too far to visit? Create your own museum with artifacts you create or things you find in a local body of water, such as a river, creek, lake or pond. Be sure to explain what the artifacts are and why they are important. You can even make signs if you want. Then, have your friends or family take a tour!



- i. DESE Standard: Art VA:Cr1Ak; Speaking and Listening 3.A.a.

➤ Explore more! Here are some optional links for more learning and fun!

- [Monitor National Marine Sanctuary](#)
- [National Maritime Historical Society](#)
- [NOAA Marine Archaeology Lessons](#)
- [Papahānaumokuākea Marine National Monument](#)

➤ Learning Standard

- c. The learning standards attached to each activity can be found at the following links:
 - i. [Missouri Learning Standards/Missouri Department of Elementary and Secondary Education \(DESE\)](#)

Introduction to the Lesson

“Marine archaeologists” is a fancy term for underwater history detectives and artifact (old things that tell us something about history) preservers. (Preserving means keeping something safe and in good condition.) They go into oceans, rivers, and other bodies of water to learn about and preserve old things, such as shipwrecks. Write or draw about what you think a day in the life of a marine archeologist would be like.

At the end of the lesson, go back and see what you got right, what was wrong, and what needs more information.

Titanic STEAM

Adapted from: <https://www.science-sparks.com/titanic-science-make-an-iceberg/>

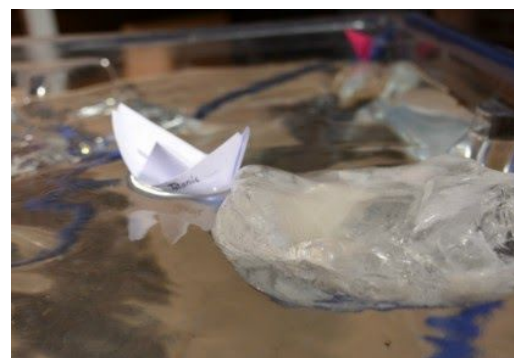
The Titanic famously sank on the 14th April 1912 in the North Atlantic Ocean after colliding with an iceberg. This activity models how an iceberg sits in the ocean and explains one of the reasons why the iceberg that collided with Titanic wasn't spotted until it was too late!

MATERIALS:

- Balloon
- Water
- Ruler
- Water filled container
- "Boat" (Can be made of paper, aluminum foil, etc.)

INSTRUCTIONS

1. Fill a balloon with water, fasten the end, and leave in a freezer until frozen.
2. Once frozen, carefully cut away the balloon and discard.
3. Place the iceberg into your container of water.
4. Measure how much of the iceberg is above and below the water.



Titanic Science
Make an Iceberg

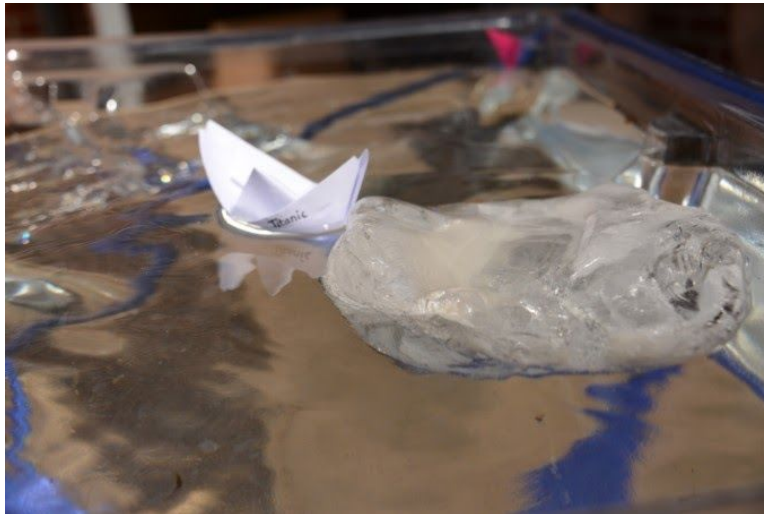


WHY DOES THIS HAPPEN?

Did you know around 90% of an iceberg is underwater? Is this the same for your iceberg? So much of an iceberg is under water because water expands as it freezes, meaning the ice is less dense than the surrounding water. Sea water, because it is salty, is more dense than fresh water meaning that the ice floats slightly higher in sea water than in our experiment.

EXTENSION TASKS

How could you work out how much water is displaced by the balloon?
The iceberg that hit the Titanic was formed from fresh water, but what do you think would be different if you made your iceberg using salty water?



Invent It!

Invent something that will help marine archaeologists and treasure hunters preserve their special artifacts. Draw a picture and tell someone what it does, how it works, and how it will help rescue artifacts from the water.