

# The Atlantic Daily Bulletin

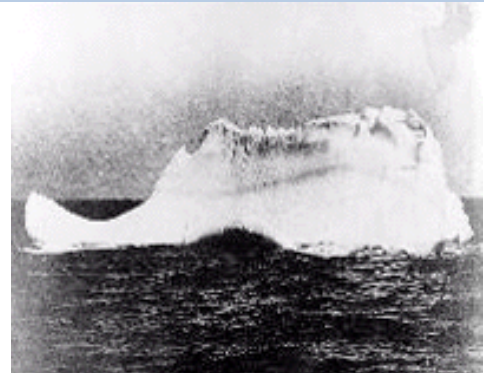
## The daily newspaper of the *RMS Titanic*

April 1912

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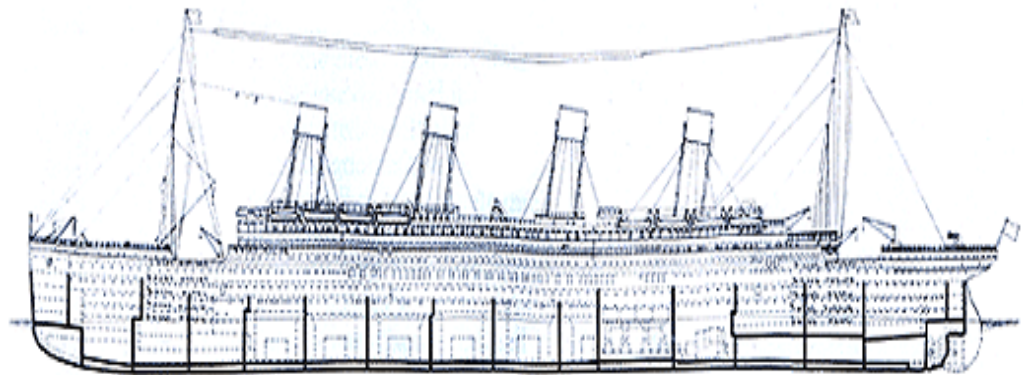
### **Icebergs On the Horizon!**

Spring is the season for icebergs so as you stroll along the promenade deck you may see these buoyant pieces of nature! But do not fear! Knowing about icebergs is part of Captain Smith's and his crew's training.



### ***Titanic's* Safety Features**

How can a ship be called unsinkable? Thomas Andrews, the designer of the *Titanic* and passenger aboard this maiden voyage, included a state of the art design. This vessel's sixteen water-tight compartments will trap any water inside so that it cannot founder the entire ship.



Ignorance is bliss!

## Consider This:

*How did the collision and damage to the Titanic change the buoyancy? How did the ship's design contribute to the disaster? How did the density of the ship increase?*

One major problem: Ceilings on the *Titanic's* watertight compartments were excluded due to costs. They were like “jars without a lid” (*Titanic: The Birth of a Legend*, 2012).

Once you have an understanding of buoyancy then you can relate to other objects that sink or float: ships, icebergs, submarines, and divers.

You may want to try this! *Buoyancy: Floaters and Sinkers*

Materials Needed:



Procedures:

- Fill the plastic soda bottle with water (do not fill it too full.)
- Fill the glass eyedropper 1/4 full with water. You may need to experiment with the amount of water in the pipette to make it work.
- Place the eyedropper into the soda bottle. The eyedropper should float and the water in the bottle should be overflowing. Seal the bottle with the cap.
- Squeeze the sides of the bottle and notice how the eyedropper (called a diver) sinks. Release your squeeze and it floats back up to the top.
- Squeeze again and observe the water level in the eyedropper (it goes up).

Can you explain why this happens?

# Extend: Make a game of it!

## Extension Activity #1:

Use a ketchup packet instead of an eyedropper.



## Extension Activity #2:

Make a game of it!



# Parents' Corner

Fun with ICEBERGS! Your child has explored various ice formations and the impact that one in particular had on the tragedy of the *Titanic*. Together, you can explore these broken bits of glaciers with a few simple steps.

### ***You will need:***

- Several containers of various sizes and shapes
- Water
- Large tub



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### ***Procedures:***

- Fill the containers with water and carefully place them in the freezer.
- Once frozen, break the mold free from the ice and place the ice formations in the tub of water.

### **Have your child explain the following:**

- Why do the ice formations float?
- How much of the ice is under the water?
- Will all ice formations float?
- What is buoyancy? Surface area? Density? How are these related?