

The Floating Egg

Concept: Buoyancy

Materials:

- raw egg
- 3 tall, clear glasses
- salt
- water



Thinking and Predicting Question:

Which is more buoyant: saltwater or freshwater?

Will the amount of salt added to water affect its buoyancy?

What to do:

Fill all 3 glasses $\frac{3}{4}$ full with water.

Place a raw egg in glass #1 and observe. (It will sink.)

Put a several tablespoons of salt in glass #2. (Amount depends on the size of the glass.) Stir.

Now place the egg in glass #2 and observe. (Since you have lots of salt, it should float. If not, add more salt.)

Now put half as much salt in glass #3 as you did in glass #2.

Place the egg in glass #3 and observe. (The egg should float, but not as high.)

Experiment with the amount of salt. Through trial and error, you may be able to get the egg to suspend itself in the middle of the liquid.

Why this happens:

Salt changes the density of the water, therefore causing objects to be more buoyant.

Vocabulary:

buoyancy – the ability of an object to float in water

Name: _____

The Floating Egg

Draw a picture of an egg in a container of freshwater.

Draw a picture of an egg in a container of slightly salty water.

Draw a picture of an egg in a container of very salty water.

What is buoyancy?

How does the amount of salt added to the water affect buoyancy?

Name: _____

The Floating Egg

Draw a picture of an egg in a container of freshwater.

Picture should show an egg that sinks to the bottom.

Draw a picture of an egg in a container of slightly salty water.

Picture should show an egg the suspends in the middle, or floats to the top.

Draw a picture of an egg in a container of very salty water.

Picture should show an egg that floats high on the water.

What is buoyancy?

Buoyancy is the ability of an object to float in water.

How does the amount of salt added to the water affect buoyancy?

Objects are more buoyant in saltwater than freshwater. The more salt you add, the more buoyant the object becomes.