

COURSE: **Destination Reading IV**UNIT 14: **Believe It: Meeting Real Robots Among Us**



Comprehension Skill: Drawing Conclusions and Making Inferences

Complete the following items to practice the comprehension skill for this unit.

Why is it easier to float in the ocean than in a lake? First of all, you need to understand why things float at all, and, to know that, you have to understand density. The density of an object is the object's mass per unit of volume, that is, how much matter is in a specific amount of space. If a large amount of matter is packed into a small space, an object will have a higher density. If a small amount of matter is spread out in a large space, the object will have a lower density.

An object will float on water if it is less dense than the water. Air molecules, including oxygen, nitrogen, carbon dioxide, and other gases, are spread much farther apart than the molecules of water. This means that air is less dense than water. So, a rubber duck floats when you drop it in the bathtub; blow-up pool toys and life jackets will also float for the same reason. On the other hand, a jelly doughnut is filled with jelly, and the molecules in jelly are packed more tightly than those in water, so jelly is denser than water. Therefore, if you drop the jelly doughnut in the bathtub, it will sink.

So, exactly how does this help us understand why it is easier to float in the ocean than in a lake? You know that the ocean is salt water, while a lake is fresh water. You might think that the salt in the ocean water must be the reason it is easier to float, and you would be right. Because there is salt dissolved in the ocean water, the ocean water is denser than fresh lake water. As a result, it is easier to float on the denser ocean water. You can see this for yourself, even if you don't live near the ocean, by performing this simple experiment. Take a boiled egg, place it gently in a glass filled with water, and watch it sink. Slowly add salt to the water, stirring gently, until all the salt is dissolved. After several spoonfuls of salt have been added, you will notice that the egg begins to float. Once the egg reaches the surface of the water, pour a little fresh water into the glass. The egg will begin to sink again!

Learning Objective:

Identify logical conclusions and inferences in informational and persuasive texts. Distinguish between making inferences and drawing conclusions.

Your Turn

Help Stop Malaria!

Malaria is a serious disease that is widespread in certain parts of the world, especially Africa. It is caused by a parasite and is carried and transmitted to humans by mosquitoes. Malaria affects millions of people and is responsible for more than a million deaths a year, many of them

children.

So, what can you
do to help prevent
this terrible disease
from continuing to devastate
families, communities, and
nations? What can you—
one individual—hope to
accomplish against billions of
mosquitoes? The answer might
be as simple as nets. At a
cost of about ten dollars each,
mosquito nets, made to fit over

beds, can protect people from getting mosquito bites while they sleep. These nets can be treated with an insecticide, which makes them even more effective. Since mosquitoes

are most active at
night, using the nets
can drastically reduce the number
of malaria cases
in a community.
You can make a
big difference in
the life of a family by giving just
a few dollars to buy
a mosquito net. And

a mosquito net. And when fewer people contract malaria, the likelihood that mosquitoes will transmit the disease to others is reduced. So your gift to a family can impact an entire community. Don't miss this chance to give the gift of life! Mosquito nets are inexpensive and effective, so this is one solution we can all be a part of.

Each sentence on the next page is either a **conclusion the author makes** in one of the passages above, or an **inference a reader could make** based on the passages. If it is an inference, put a checkmark in the inference column. If it is a conclusion, put a checkmark in the conclusion column.

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Name	Date	



Sentence	Inference	Conclusion
1. Matter is made up of molecules.		
2. This means that air is less dense than water.		
3. Therefore, if you put the jelly doughnut in the bathtub, it will sink.		
4. Rubber ducks float because they are filled with air.		
5. As a result, it is easier to float on the denser ocean water.		
6. The water has become denser, and now the egg is less dense than the water, so it floats!		
7. The egg will float when the added salt makes the water denser than the egg.		
8. The egg sinks, so it must be denser than the water.		
Adding fresh water causes the water's density to decrease.		
10. People should give money to buy mosquito nets.		
11. Malaria is a terrible disease because it kills many children.		
12. We can all be a part of this solution to the problem of malaria, because nets are not expensive.		
Since mosquitoes are most active at night, using the nets can drastically reduce the number of malaria cases in a community.		
14. An insecticide must be something that kills insects.		