

## Science Article of the Week: TURTLES

*Directions:*

**B**

**Step 1:** Read the article.

**Step 2:** Read the article again. As you read underline information that is important, surprising, interesting or thought provoking. When you underline something, STOP reading and write a sentence that explains WHY you choose to underline the passage. Imagine you are having a conversation with the article in your head. You can make comments or ask questions. The goal is to explain your thoughts, opinions or questions. Mark at least 4 passages.

**Step 3:** Answer the questions.

- Which of the following sentences from the article explains why eating plastic can injure sea turtles?
  - The plastic can cut through their intestines or it can block their intestines, which will not let them digest any food.
  - "Turtles can be killed directly by ingesting plastics," Schuyler said.
  - But she says the technology to throw out the plastic is not growing as quickly.
  - She also worries about invisible micro plastics, which can get into the ocean from the products we use and the clothes we wear.
- Which selection from the article could be used to argue that the actions of people led to the plastic problem for sea turtles?
  - After that, they did physical experiments. They dissected sea turtles to see how likely it was for turtles to have eaten eat certain amounts of plastic.
  - It is hard to imagine, but a new study says that half of the sea turtles on the planet have swallowed some form of plastic. study comes just days after another study showed that about 90 percent of seabirds have also consumed plastic.
  - Schuyler pointed to a recent study on seabirds that showed that less plastic in the water leads to seabirds eating less plastic. She says this gives her hope that we may be able to turn things around.
  - To make a difference, she said, people should just say no to single-use plastics, like grocery bags and disposable water bottles. She also says people should avoid face scrubs and cleansers that have micro beads in them. The beads help people get their face or body clean, but they also have plastic in them, which can hurt ocean life once it goes down the shower drain.
- Which of the following are two central ideas of the article?
  - Scientists have found that turtles are dying because people buy too many plastic bottles; some turtles are also being threatened by illegal hunting.
  - Scientists have found that turtles are dying when they eat plastic discarded by humans; the problem will get worse unless humans change their behavior.
  - Plastic is harmful to all animals but is especially harmful to turtles; scientists are searching for ways to produce plastic that is less poisonous to turtles.
  - Plastic can cause turtles and other animals to become sick; scientists do not yet understand why plastic is so harmful to turtles.
- Which detail is MOST relevant to the main ideas of the article?
  - Her study estimates that 52 percent of sea turtles worldwide have eaten plastic waste.
  - They dissected sea turtles to see how likely it was for turtles to have eaten certain amounts of plastic.
  - They feel like they have eaten and may not eat food with the nutrients they need to survive.
  - She also says people should avoid face scrubs and cleansers that have micro beads in them.

# Sea turtles are munching on plastic garbage floating in the ocean

By Washington Post, adapted by Newsela staff

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It is hard to imagine, but a new study says that half of the sea turtles on the planet have swallowed some form of plastic. The study comes just days after another study showed that about 90 percent of seabirds have also consumed plastic.

The research was led by Qamar Schuyler, who works at the University of Queensland in Australia. Her study estimates that 52 percent of sea turtles worldwide have eaten plastic waste. Some 13 million tons of this garbage is dumped into the oceans every year.

The east coasts of Australia and North America, Southeast Asia, southern Africa and Hawaii seem to be particularly dangerous. Schuyler used a combination of statistics and evidence from animal autopsies, to reach her conclusions.

## Turtles Mistake Floating Plastic For Food

First, Schuyler said her team used statistics. They used math, a computer and other people's research to figure out how plastic might be spread out in the ocean. Then they used the computer to figure out how many sea turtles would encounter the plastic.

After that, they did physical experiments. They dissected sea turtles to see how likely it was for turtles to have eaten certain amounts of plastic.

Olive Ridley Turtles eat jellyfish and other floating animals in the open ocean. These types of turtles were shown to be the most at risk for eating plastic. The species is also rare. Olive Ridley Turtles are considered to be "threatened" in most parts of the world. They are already endangered off the coast of Mexico because of people illegally hunting them.

## "The Problem Will Get Worse"

According to Schuyler's research, we need to protect these creatures from more than just hunters. We need to protect them from our trash.

"Turtles can be killed directly by ingesting plastics," Schuyler said. The plastic can cut through their intestines or it can block their intestines, which will not let them digest any food.

They can also die because of toxic chemicals that were used to create the plastic. These chemicals can be absorbed in the water and poison the turtles.

Turtles can also starve to death because they feel full after swallowing plastic waste. They feel like they have eaten and may not eat food with the nutrients they need to survive.

Schuyler says plastics are currently being made faster and faster. But she says the technology to throw out the plastic is not growing as quickly. She also worries about invisible micro plastics, which can get into the ocean from the products we use and the clothes we wear.

"Unless we take ... action," she says, the problem will get worse.

## All Kinds Of Plastic Flowing Into The Oceans

Schuyler pointed to a recent study on seabirds that showed that less plastic in the water leads to seabirds eating less plastic. She says this gives her hope that we may be able to turn things around.

To make a difference, she said, people should just say no to single-use plastics, like grocery bags and disposable water bottles. She also says people should avoid face scrubs and cleansers that have micro beads in them. The beads help people get their face or body clean, but they also have plastic in them, which can hurt ocean life once it goes down the shower drain.

"We now know that both sea turtles and seabirds are experiencing very high levels of debris ingestion, and that the issue is growing," Chris Wilcox, who helped with the seabird study, said. "It is only a matter of time before we see the same problems in other species, and even in the fish we eat."