

Ocean Garbage

“Only we humans make waste that nature can’t digest.”

—Captain Charles Moore



Pre-Reading

A. Warm-Up Questions

1. How does garbage end up in the ocean?
2. How do you feel when you see beaches and oceans littered with trash?
3. What is the most dangerous type of debris in our oceans?

B. Vocabulary Preview

Match up as many words and meanings as you can.

Check this exercise again after seeing the words in context on page 2.

- | | |
|----------------------------------|--|
| _____ 1. debris | a) unaided vision, without binoculars, satellites, or cameras |
| _____ 2. current | b) to eat or swallow |
| _____ 3. microplastic | c) to get stuck in something such as a net or rope |
| _____ 4. the naked eye | d) something that makes an experience difficult or problematic |
| _____ 5. ingest | e) a system of pipes and drains that carry wastewater |
| _____ 6. hazard | f) tiny bits of plastic |
| _____ 7. plankton | g) a danger |
| _____ 8. malnutrition | h) to discard garbage carelessly |
| _____ 9. entangle | i) tiny organisms in the water that fish feed on |
| _____ 10. nuisance | j) not enough nutrients to sustain a healthy life |
| _____ 11. litter (<i>verb</i>) | k) a constant flow of surface water in one direction |
| _____ 12. sewer | l) leftover or unwanted materials, trash |

Reading

OCEAN GARBAGE

More plastic than plankton

1. Marine **debris** comes in all shapes, sizes, and depths. It may float on the ocean's surface or sink to the ocean floor. Trash also washes up on the shores. In 1997, Captain Charles Moore discovered a massive pile of trash in the North Pacific Ocean. Due to ocean **currents**, this trash heap continues to grow and is now known as the "Great Pacific Garbage Patch."
2. Marine biologists looked carefully at ocean garbage after Captain Moore's discovery. They found that most of the debris was made of plastic. Over time, sun reduces plastic into tiny pieces called **microplastics**. This debris is difficult to see with **the naked eye**. Scientists began studying the effect on marine life. They found that hundreds of thousands of birds and sea creatures were **ingesting** microplastics and bottle caps.
3. Ingestion of plastics isn't the only **hazard** of marine trash. Debris reduces the amount of sunlight that shines beneath the ocean's surface. Tiny organisms, such as algae and plankton, rely on the sun for survival. Sadly, today's ocean water samples often contain more plastic than **plankton**. This results in **malnutrition** in many different species. Sea creatures also get **entangled** in our trash. To a hungry sea turtle, a floating plastic bag may appear tasty like a jellyfish. The turtle will feel helpless when it gets stuck inside the bag.
4. Ocean garbage doesn't just affect marine life. Human health is also at risk from this debris. Chemicals from plastics, batteries, electronics, and cleaning products end up in our seafood. This may cause diseases in humans and reduce our ability to reproduce.
5. Ocean garbage is also bad for the economy. Cleaning up oceans and beaches takes money, time, and resources. Nobody wants to spend their vacation in a garbage patch. The debris is also a **nuisance** for fishermen. It's not uncommon for a fisherman to catch more trash than fish.
6. How does trash end up in the ocean in the first place? **Littering** at the beach or on a cruise is one way. Being careless is another. When trash cans overflow, garbage blows into **sewers**. Before long, this trash makes its way into rivers, lakes, and oceans. Will you think twice before you add your empty bottle to the top of an overflowing bin?

Comprehension

Discuss these questions in pairs and write the answers below.

1. What did Charles Moore discover?

2. Why don't the oceans appear as unhealthy as they really are?

3. How does ocean debris affect tiny organisms like plankton?

4. How is the health of humans at risk from marine debris?

5. What is one simple thing humans can do to reduce the amount of trash that ends up in sewers?

Vocabulary Review

Which word from page 1 is described in the sentence?
More than one option may be possible.

#	Sentence	Word
1	It looked like it was from the airplane crash, but it was just garbage.	
2	We had to remove the leaves so that the rainwater could drain into it.	
3	Plastic bags pose a danger to marine life.	
4	We couldn't believe that the kids were throwing garbage out the car window.	
5	The birds were unable to find enough food to eat, and they were suffering.	
6	The penguin's head was stuck in one of those plastic rings from a six-pack of beer cans.	
7	Small fish feed on these microorganisms.	
8	The wind causes the water to swirl in a northerly direction.	
9	It's annoying to have to clean garbage off the beach every morning.	
10	You can't see the microorganisms without your binoculars.	

Grammar Review

LOOK, APPEAR, FEEL

A. Reference

The verbs “look,” “appear,” and “feel” can cause a bit of trouble for English learners. This is because these verbs are sometimes followed by an adjective and sometimes followed by an adverb. When used with an adjective, these verbs indicate no action.*

***Note:**

When used with an adverb, these verbs indicate an action.

Examples:

1. look | appear | feel + ADJECTIVE (non-action)
 - The beach **looks trashy**.
 - The ocean **appears calm**, but it’s not.
 - The ocean floor **feels slimy**.

2. look | appear | feel + ADVERB (action)
 - The captain **looked carefully** at the debris around his boat.
 - The cleanup crew **appeared suddenly** and began cleaning up the beach.
 - The tourist **felt quickly** for his video camera when the whales appeared.

B. Adjective or Adverb?

look | appear | feel + ADJECTIVE or ADVERB?

Choose the correct word from inside the parentheses to complete each sentence and write it on the line.

1. The dolphin appears _____ today.
(unhappy / unhappily)

2. The tourist felt _____ for her video camera.
(frantic / frantically)

3. The biologist felt that the sea turtles in the bay looked _____.
(hungry / hungrily)

4. The garbage patch appeared _____.
(sudden / suddenly)

5. The helicopter pilot looked _____ for the plane.
(careful / carefully)

6. The ocean water feels extremely _____ today.
(cold / coldly)

C. Writing

Work together to make up some of your own sentences (or a story) using *look*, *appear*, and *feel* with adjectives and adverbs.

Hint:

If you can substitute the Be verb for *look*, *appear*, or *feel*, you know the verb should be followed by an adjective.

Discussion

1. Why are many people unaware of this major environmental issue?
2. How do cruise ships contribute to this problem?
3. Why do humans rely so much on plastics?
4. How does ocean garbage make it difficult to find wreckage from an airline disaster?
5. Do you think there is any way to reverse the damage we have already done to our oceans?

Critical Thinking

Environmentalists like Charles Moore believe that eliminating plastic beverage bottles from the earth would make a huge difference to our oceans. Could this be done? What would be some first steps to achieve this goal?

Listening

Fill in the blanks as you listen to the recording.

OCEAN GARBAGE

More plastic than plankton

1. Marine debris comes in all shapes, sizes, and _____. It may float on the ocean's surface or sink to the ocean floor. Trash also washes up on the shores. In 1997, Captain Charles Moore discovered a massive pile of trash in the North Pacific Ocean. Due to ocean currents, this trash heap continues to grow and is now known as the "Great _____ Garbage Patch."
2. Marine biologists looked carefully at ocean garbage after Captain Moore's discovery. They found that most of the debris was made of plastic. Over time, sun _____ plastic into tiny pieces called microplastics. This debris is difficult to see with the naked eye. Scientists began studying the effect on marine life. They found that hundreds of thousands of birds and sea creatures were ingesting microplastics and _____.
3. Ingestion of plastics isn't the only hazard of marine trash. Debris reduces the amount of sunlight that shines beneath the ocean's surface. Tiny organisms, such as algae and plankton, rely on the sun for survival. _____, today's ocean water samples often contain more plastic than plankton. This results in malnutrition in many different species. Sea creatures also get entangled in our trash. To a hungry sea turtle, a floating plastic bag may appear tasty like a jellyfish. The turtle will feel helpless when it gets _____ inside the bag.
4. Ocean garbage doesn't just affect marine life. Human health is also at risk from this debris. Chemicals from plastics, _____, electronics, and cleaning products end up in our seafood. This may cause diseases in humans and reduce our ability to reproduce.
5. Ocean garbage is also bad for the economy. Cleaning up oceans and beaches takes money, time, and resources. Nobody wants to spend their vacation in a garbage patch. The debris is also a nuisance for fishermen. It's not _____ for a fisherman to catch more trash than fish.
6. How does trash end up in the ocean in the first place? Littering at the beach or _____ is one way. Being careless is another. When trash cans overflow, garbage blows into sewers. Before long, this trash makes its way into rivers, lakes, and oceans. Will you think twice before you add your empty bottle to the top of an overflowing bin?

Answer Key

LESSON DESCRIPTION:

Students read about the environmental threats of ocean garbage. The lesson includes vocabulary review exercises, comprehension questions, discussion questions, and grammar practice.

TEACHING TIPS:

See *Discussion Starters Teaching Guide* (<https://esllibrary.com/courses/72/lessons/>) for a variety of ways to use the reading.

LEVEL: High Int

TIME: 1.5–2 hours

TAGS: discussion, environment, marine, marine life, green, ocean, environmental English

Pre-Reading

A. WARM-UP QUESTIONS

Have students work in small groups or as a class. Discuss the quote.

B. VOCABULARY PREVIEW

- | | | | | | |
|------|------|------|------|-------|-------|
| 1. l | 3. f | 5. b | 7. i | 9. c | 11. h |
| 2. k | 4. a | 6. g | 8. j | 10. d | 12. e |

Reading (and/or Listening)

Read individually, in small groups, or as a class. You can also play the listening as your students read along. A gap-fill version of the reading is available on page 7. Help your students with vocabulary and expressions that they are unfamiliar with.

Comprehension

1. Charles Moore discovered a massive pile of trash in the North Pacific Ocean.
2. The oceans don't appear as unhealthy as they are because microplastics are difficult to see with the naked eye.
3. Ocean debris blocks sunlight and prevents tiny organisms like plankton from living.
4. Human health is at risk from marine debris because the chemicals end up in our food source (seafood).
5. Humans could avoid using overflowing trash cans.

Vocabulary Review

- | | |
|-----------------|-----------------------------|
| 1. debris | 6. entangle (litter/hazard) |
| 2. sewer | 7. plankton |
| 3. hazard | 8. current |
| 4. litter | 9. nuisance |
| 5. malnutrition | 10. the naked eye |

(continued on the next page...)

Answer Key cont.

Grammar Review

A. REFERENCE

Review our editor's tips (and print a free worksheet) for teaching look, appear, and feel: <http://blog.esllibrary.com/2014/06/05/look-appear-feel-adjective-or-adverb/>

B. ADJECTIVE OR ADVERB?

- | | | |
|----------------|-------------|--------------|
| 1. unhappy | 3. hungry | 5. carefully |
| 2. frantically | 4. suddenly | 6. cold |

Discussion

Answers will vary.

Can be done individually or in small groups or pairs.

Critical Thinking

Answers will vary.

Can be done individually or in small groups or pairs.

Listening

1. depths, Pacific
2. reduces, bottle caps
3. Sadly, stuck
4. batteries
5. uncommon
6. on a cruise