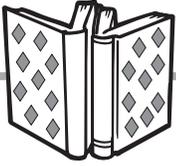


Table of Contents

Introduction	3
Practice Reading Passage: Geothermal Power	7
Practice Comprehension Questions	8
Standards Correlation	9
Reading Levels Chart	13
Science Passages	
Stargazers	14
Margaret Mead, Anthropologist	18
Similar Evolution: Zebras and Guinea Pigs	22
Secrets Hamper Science	26
The U.S. Army Corps of Engineers	30
Geography Passages	
Economies Are Connected	34
Saving Earth One Bag at a Time	38
Humans Versus Natural Disasters	42
That’s Not Just Sunshine—It’s Energy!	46
Is Earth Overpopulated?	50
World and U.S. History Passages	
Ancient Chinese Inventions	54
The Seven Wonders of the Ancient World	58
Germany and World War I	62
The Curse of the Bambino	66
Barack Obama, 44th President of the United States	70
Language Arts Passages	
Robots (Encyclopedia Entry)	74
Paul Newman (Web Page)	78
Visit the Bizarre Winchester Mansion (Tour Book Page)	82
Viz-a-Phone (Public Service Advertisement)	86
Native American Unsolved Mysteries (Back of Book)	90
Answer Sheets	94
Answer Key	96



Saving Earth One Bag at a Time

Have you ever heard of the Great Pacific Garbage Patch? It is a place in the Pacific Ocean where a large amount of trash circles in a current. This mass of debris is at least twice the size of Texas. It has been growing for more than fifty years. Oceanographers say that the garbage is 90 percent plastic. It weighs about one hundred million tons. The most common kind of trash floating there is plastic shopping bags. How did they all get there? All water flows downhill until it reaches the sea. Plastic bags that fall to the ground end up in water. That water ends up in the ocean.

The Garbage Patch is an environmental disaster. Ocean animals mistake pieces of plastic bags for food. They fill their stomachs with plastic. It does not pass through their guts as waste. The animals slowly starve to death. Yet scientists do not know of any way to clean up the mess. The only thing we can do is keep it from getting bigger.

What can you do to help? Stop using plastic bags! This would help our Earth in several ways. Like all plastic products, the bags are made with petroleum. The amount of petroleum used in fourteen plastic bags could drive a car a mile. Yet 380 billion plastic bags are thrown away each year just in the United States. That means millions of barrels of oil are used up in making the bags. And lots of those bags will end up in the Great Pacific Garbage Patch.

But using paper bags instead of plastic ones is *not* the answer. Making a paper bag releases 70 percent more global-warming gases than making a plastic bag. Eight out of every ten paper bags end up in landfills. Yet paper bags do not **biodegrade** there. Why? There is not enough oxygen. Without oxygen, bacteria cannot live. The paper bags need bacteria in order to decay. So paper bags, while useful for fifteen minutes, sit in landfills and take up space for hundreds of years.



Make a decision that you will never throw any bag into the trash. Each time you toss out a bag, you throw away natural resources. We cannot get them back. Plus, cities spend about 17 cents to dispose of each plastic or paper bag. This uses millions of tax dollars. That money could be spent in other ways. It might help the poor, make new jobs, or clean up the environment. New York City says that if each New Yorker used just one less bag per year, it would save \$250,000!

What's the solution? When you run into the store to get just one or two items, tell the cashier, "I don't need a bag." If you do have your items bagged, return the bags to the store for recycling. Most stores have bins in which you can put used plastic or paper bags from any retailer. Some curbside recycling bins accept paper

bags, too. Recycling bags uses less energy and materials than making them from scratch. Best of all, use bags made of fabric or canvas. Take these reusable bags into the store. Have your items put into them. You can use these bags many times before they need to be cleaned and hundreds of times before they'll need to be replaced. Most importantly, they will not end up in the sea.



Saving Earth One Bag at a Time

Have you ever heard of the Great Pacific Garbage Patch? It is a place in the Pacific Ocean where an enormous amount of trash circles in a current. This mass of debris, which is at least twice the size of Texas, has been forming for more than fifty years. Oceanographers estimate that the garbage is 90 percent plastic and weighs approximately one hundred million tons. The most common kind of trash floating there is plastic shopping bags. How did they all get there? Consider this: All water flows downhill until it reaches the sea. Plastic bags that fall to the ground eventually end up in water—water that ends up in the ocean.

This is an environmental disaster. Sea turtles, sea birds, and other ocean animals mistake pieces of plastic bags for food. They fill their stomachs with plastic that may not pass through their intestines as waste. The animals slowly starve to death. Yet scientists do not know of any way to clean up the mess. The only thing we can do is keep it from growing.

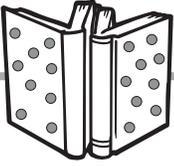
What can you do to help? Stop using plastic bags! This would help our Earth in multiple ways. Like all plastic products, the bags are made with petroleum. The amount of petroleum used in fourteen plastic bags could drive a car a mile. Yet 380 billion plastic bags are thrown away each year in the United States alone. That means millions of barrels of oil are used up for something that gets tossed out after a single use. Even worse, lots of those billions of bags will end up in the Great Pacific Garbage Patch.

But using paper bags instead of plastic ones is *not* the answer. Making a paper bag releases 70 percent more global-warming gases than making a plastic bag. Eight out of every ten paper bags end up in landfills. Yet paper bags do not **biodegrade** there. There is not enough oxygen. Without oxygen, the bacteria that would normally break down paper bags cannot live. So paper bags, while useful for fifteen minutes, sit in landfills taking up space for centuries.



Make a decision that you will never throw any bag into the trash. Each time you toss out a bag, you throw away natural resources that we cannot reclaim. Cities spend about 17 cents to dispose of each plastic or paper bag. This uses millions of tax dollars that could be spent in other ways, such as helping the poor, creating new jobs, or cleaning up the environment. In fact, New York City estimates that if each New Yorker used just one less bag per year, it would save the city \$250,000!

What's the solution? When you run into the store to get just one or two items, tell the cashier, "I don't need a bag." If you do have your items bagged, return the paper or plastic bags to the store for recycling. Most stores have bins in which you can deposit used plastic or paper bags from any retailer. Some curbside recycling bins accept paper bags, too. Recycling bags uses fewer resources than creating them from scratch. Best of all, use bags made of fabric or canvas. Take these reusable bags into the store, and have your items put into them. You can use these bags many times before they need to be laundered and hundreds of times before they'll need replacement. Most importantly, they will never end up in the ocean.



Saving Earth One Bag at a Time

Have you ever heard of the Great Pacific Garbage Patch? It is an enormous amount of trash rotating in a current in the Pacific Ocean. This enormous debris mass, which is at least twice the size of Texas, has been growing for more than fifty years. Oceanographers estimate that the garbage weighs approximately one hundred million tons and is 90 percent plastic. The most common kind of trash floating there is plastic shopping bags. How did they get there? All water flows downhill until it reaches the sea. Plastic bags that fall to the ground eventually end up in water that eventually ends up in the ocean.

The Great Pacific Garbage Patch is an environmental disaster unlike any other. Sea turtles, sea birds, and other ocean animals consume pieces of plastic bags, thinking they are food. The animals fill their stomachs with plastic that may not pass through their intestines, causing them to slowly starve to death. Unfortunately, scientists do not know of any way to clean up this mess, which means that the only thing we can do is keep it from growing even larger.

What can you do to help? Stop using plastic bags! This would help our Earth in multiple ways. Like all plastic products, the bags are made with petroleum, and the amount of petroleum in fourteen plastic bags could drive a car a mile. Yet 380 billion plastic bags are thrown away annually in the United States. Something that gets tossed out after a single use consumes millions of barrels of oil—a natural resource we are close to depleting. Even worse, many of those bags will end up in the Great Pacific Garbage Patch.

But using paper bags instead of plastic ones is *not* the answer. For one thing, making a paper bag releases 70 percent more global-warming gases than making a plastic bag. For another, 80 percent of paper bags end up in landfills where they do not **biodegrade** because there is not enough oxygen. Without oxygen, the bacteria that would normally break down paper bags cannot live. So paper bags, while useful for fifteen minutes, take up space in landfills for centuries.



Right now, make a decision that you will never throw any bag into the trash. Each time you toss out a bag, you throw away natural resources that we cannot reclaim. In addition, municipalities spend approximately 17 cents to dispose of each bag, using millions of tax dollars that could be spent to help the poor, create jobs, or clean up the environment. New York City estimates that if each New Yorker used just one less bag per year, it would save the city \$250,000!

What's the solution? When you get just one or two items, tell the cashier, "I don't need a bag." If you do have your items bagged, return the paper or plastic bags to the store for recycling. Most stores have bins for you to deposit used plastic or paper bags from any retailer. Some curbside

recycling bins also accept paper bags. Recycling bags uses fewer resources than creating them from scratch. Best of all, use bags made of fabric or canvas. Take these reusable bags into the store, and have your items packed in them. You can use these bags many times before they need to be laundered and hundreds of times before they'll need replacement. Most importantly, they will never end up in the ocean.



Saving Earth One Bag at a Time

Directions: Darken the best answer choice.

1. The Great Pacific Garbage Patch began forming when
 - (A) white settlers reached the West Coast.
 - (B) people redirected the currents in the Pacific Ocean.
 - (C) people began using paper bags.
 - (D) people began using plastic bags.

2. The word **biodegrade** means to
 - (A) shrink.
 - (B) last a long time.
 - (C) decompose.
 - (D) stay the same.

3. You get a plastic bag from the store. What is the best sequence of events?
 - (A) Take it home, empty it, and throw it into the trash.
 - (B) Take it home, empty it, and throw it on the ground.
 - (C) Take it home, empty it, and burn it in a woodstove.
 - (D) Take it home, empty it, and return it to the store's recycling bin.

4. In terms of the environment, the best type of bag to use is a
 - (A) fabric bag.
 - (B) paper bag.
 - (C) plastic bag.
 - (D) biodegradable bag.

5. Nine out of every ten items floating in the Great Pacific Garbage Patch are made of
 - (A) rubber.
 - (B) plastic.
 - (C) wood.
 - (D) leather.

6. What would you be most apt to see near the Great Pacific Garbage Patch?
 - (A) a sea turtle with a plastic six-pack ring around its neck
 - (B) seagulls nesting in paper bags
 - (C) flies buzzing around trash
 - (D) commercial fishing boats