



5TH GRADE **ELA**

Student Materials

Unit 3 ***Protecting the Earth:*** ***Plastic Pollution***



Daily Lesson Materials

Name: _____

Date: _____

Today's reading was "Single-Use Plastics: A Roadmap for Sustainability" – Figure 1.2-Figure 1.8.

1. **Figure 1.2:** What can we learn from this graphic about why plastic is a problem?

2. **Figure 1.3:** What can we learn from this graphic about why plastic is a problem?

3. **Figure 1.4:** What can we learn from this graphic about why plastic is a problem?

4. **Figure 1.5:** What can we learn from this graphic about why plastic is a problem?

5. **Figure 1.6:** What can we learn from this graphic about why plastic is a problem?

6. **Figure 1.7:** What can we learn from this graphic about why plastic is a problem?

7. **Figure 1.8:** What can we learn from this graphic about why plastic is a problem?

Name: _____ Date: _____

Note Taking Page

Rotate to each graphic, taking notes on important details, features, or takeaways.

| Figure # | Notes |
|----------|-------|
| 1.2 | |
| 1.3 | |
| 1.4 | |
| 1.5 | |
| 1.6 | |
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| 1.8 | |

Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 4 - 10 – to the top.

1. What is a gyre? Use the map on pages 6-7 to explain what it is.

2. Using details from page 6, describe what Captain Moore saw in the ocean. What effect did this have on him?

3. What did Ebbesmeyer learn as a result of tracking the path of thousands of bath toys that spilled into the ocean?

4. Based on pages 8–10, what is the effect of the gyre on the plastic within the ocean? Why is this a problem?

5. Why does the author include the diagram on page 9? How does it help the reader better understand what happens with plastic trash?

Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 10 - 13.

1. What description does Moore use to describe the plastic trash he finds? Why?

2. What did Moore and his team find when they analyzed the samples from the jar? Why were they **astounding**?

3. Why does the author describe Moore's story as **dramatic** on page 12?

Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 14 - 20.

1. How did early Mesoamerican civilizations create and utilize rubber? Why did Europeans need to adapt the use of rubber?

2. What invention did Charles Goodyear make? What problem did this invention solve?

3. What did the chemist Alexander Parkes discover? How did John Wesley Hyatt improve his discovery?

4. What did the chemist Leo Baekeland discover? How?

5. Why was Baekeland's invention called the "material of a thousand uses"?

6. Why were rubber, celluloid, and plastic so popular?

Name: _____ Date: _____

Sequence of Events Graphic Organizer

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Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 20 - 25 – start from the bottom paragraph.

1. How is crude oil used to create different **synthetic** materials? What different products come from crude oil?

2. Why were plastics important during World War II?

3. In the 1950s, plastics "flooded into everyday life" (p. 22). What **convenience** did plastics offer?

4. Based on Chapter 2, what was the effect of plastic consumption on the United States after the 1950s?

Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 26 - 31.

1. Why does the author start with the story of the albatross?

2. The author says, "Most plastics do not begin their water journey dramatically" (p. 26). How does trash get into the ocean? What evidence supports this claim?

3. What facts does the author include to emphasize that plastic in the ocean is a problem?

4. How does plastic impact marine animals?

Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 32 - 40.

1. How does "hitchhiking marine life...upset nature's balance" (p. 32)?

2. How does plastic become a link in the gyre's food chain? Why is this a problem?

3. How are **microplastics** in the seawater similar to air pollution?

4. How do plastics and harmful chemicals get into the food we eat? Give two or three different examples.

Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 40 - 43 "Single-Use Plastics: A Roadmap for Sustainability" – Figure 1.2-Figure 1.8.

1. Where does trash in the United States go?

2. Where does trash go in countries with no waste management system?

3. Why does the author include the quote from activist Matt Prindiville that says, "If you make something, you need to take responsibility for the environmental and social impacts of that product" (p. 42)?

Name: _____ Date: _____

Two Paragraph Outline

Paragraph 1

Topic Sentence: _____

- Detail: _____

- Detail: _____

- Detail: _____

Concluding Sentence: _____

Paragraph 2

Topic Sentence: _____

- Detail: _____

- Detail: _____

- Detail: _____

Concluding Sentence: _____

Name: _____ Date: _____

Brainstorming Page 1

Use the table below to gather details and evidence related to the writing prompt, highlighting the most important details:

One solution for minimizing the amount of plastic pollution in the ocean is to educate others. Your job is to educate other classrooms around the school about why we have a plastic problem and how the plastic problem is impacting the ocean.

To do so, you'll need to:

| Write a strong paragraph that describes why we have a plastic problem. | Write a strong paragraph that describes how plastic pollution impacts the ocean. |
|--|--|
| | |

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|---|--|
| <ul style="list-style-type: none">• Plastic became popular because it is moldable• Plastic had many advantages• Plastic products became very popular after World War II• Began buying single-use plastic, throwing it away• People used disposable pens and cups instead of reusable ones• Wind and rain sweep plastic into waterways and oceans• Plastic is broken down in spinning gyres | <ul style="list-style-type: none">• Dead albatross had plastic in its stomach• It takes plastic 500 years to break down• Animals eat plastic, enters the food chain• Animals get trapped in plastic nets• Animals travel on plastic rafts• Species in new area can be invasive or eat too much of the food source• Around 20 percent of fish have eaten plastic• Zooplankton eat plastic microbeads• Chemicals in plastic are dangerous for people |

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Name: _____ Date: _____

Two Paragraph Outline

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Topic Sentence: _____

- Detail: _____

- Detail: _____

- Detail: _____

Concluding Sentence: _____

Paragraph 2

Topic Sentence: _____

- Detail: _____

- Detail: _____

- Detail: _____

Concluding Sentence: _____

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- Detail: _____

Concluding Sentence: _____

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- Detail: _____

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Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 44 - 48.

1. What role do **decomposers** play in their ecosystem? What is the effect of **decomposers** on plastic pollution?

2. On page 48, Erik van Sebille says finding new ways to recycle plastic "is like mopping up a leaking tap without fixing the tap itself." What evidence/reasons does the author give to support this idea?

3. How could biodegradation solve the plastic problem?

Name: _____ Date: _____

Solutions for Plastic Pollution

Read Chapter 4 of *Trash Vortex*. Use the table below to keep track of the possible solutions to plastic pollution in the ocean, listing the pros and cons for each.

| Possible Solution | Pros | Cons |
|-------------------|------|------|
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| Possible Solution | Pros | Cons |
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Name: _____

Date: _____

Today's reading was *Trash Vortex: How Plastic Pollution Is Choking the World's Oceans* pg. 48 - 55 – from the bottom of the page.

1. Describe the life cycle of a bottle. Why is recycling a preferable end to the life cycle despite the use of biodegradable plastics?

2. On page 52, the author says, "But what if the cleaning up of the ocean does not require a war on plastic but rather a war on litter?" What evidence or reasons does the author give to support this idea?

3. What solutions are in place to help limit the amount of plastic being used? Are the solutions volunteer, policy, or education-based?

Name: _____ Date: _____

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| Possible Solution | Pros | Cons |
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Name: _____ Date: _____

Two Paragraph Outline

Opinion Statement: _____

Reason 1

Topic Sentence: _____

• Detail: _____

• Detail: _____

• Detail: _____

Reason 2

Topic Sentence: _____

• Detail: _____

• Detail: _____

• Detail: _____

Conclusion: _____

Name: _____ Date: _____

Opinion Brainstorm

| Yes, ban single-use plastics | No, don't ban single-use plastics |
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| My opinion: |
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Name: _____ Date: _____

Opinion Brainstorm

| Yes, ban single-use plastics | No, don't ban single-use plastics |
|---|--|
| Endangers wildlife | Non-plastic straws expensive |
| Bans can reduce litter <ul style="list-style-type: none">A 2018 ban on plastic bags led to a 70% decrease in litter surveys | People need straws |
| | Producing goods = more impact than waste |
| | Goal = reduce overall consumption |

My opinion:

We should not ban single-use plastics because they are often necessary, and banning them will not solve environmental problems.

Name: _____ Date: _____

Opinion Brainstorm

| Yes, ban single-use plastics | No, don't ban single-use plastics |
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| My opinion: |
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Name: _____ Date: _____

Opinion Brainstorm

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Name: _____ Date: _____

Opinion Brainstorm

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Name: _____ Date: _____

Two Paragraph Outline

Opinion Statement: _____

Reason 1

Topic Sentence: _____

• Detail: _____

• Detail: _____

• Detail: _____

Reason 2

Topic Sentence: _____

• Detail: _____

• Detail: _____

• Detail: _____

Conclusion: _____

Name: _____ Date: _____

Two Paragraph Outline

Opinion Statement: *We should not ban single-use plastics because they are often necessary, and banning them will not solve environmental problems.*

Reason 1

Topic Sentence: *Banning single-use plastic straws would unfairly punish people who truly need them.*

- Detail: *People w/disabilities need them*
- Detail: *Mobility problems → requires straws*
- Detail: *Not always someone to help them get straw from home*
- Detail: *Metal straws not flexible*

Reason 2

Topic Sentence: *Another little-known fact is that single-use plastics aren't actually the biggest problem with our environment.*

- Detail: *Producing goods = more impact than waste*
- Detail: *Energy for reusable products > single use*
- Detail: *Goal = buy fewer goods*

Conclusion: *In conclusion, banning single-use plastics is not the best solution for a healthier earth.*

Name: _____ Date: _____

Opinion Brainstorm

| Yes, ban single-use plastics | No, don't ban single-use plastics |
|-------------------------------------|--|
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My opinion:

Name: _____ Date: _____

Two Paragraph Outline

Opinion Statement: _____

Reason 1

Topic Sentence: _____

• Detail: _____

• Detail: _____

• Detail: _____

Reason 2

Topic Sentence: _____

• Detail: _____

• Detail: _____

• Detail: _____

Conclusion: _____

Name: _____

Date: _____

Today's reading was "Ten "stealth microplastics" to avoid if you want to save the oceans" – 820L or 1020L.

1. How are **microplastics** and secondary **microplastics** the same? How are they different?

2. What **microplastics** are we using daily? How does each **microplastic** impact the environment?

3. What voluntary actions could people take to stop the use of **microplastics**?

4. What education or policy changes are needed to reduce plastic waste?

Name: _____

Date: _____

Today's reading was "Companies are following this Girl Scout's no plastic plan" – 960L.

1. Why is Shelby passionate about plastic pollution? How does passion drive her actions?

2. What responses did Shelby get from different companies? Why?

3. What impact did Claire's letter have on her community?

4. In the article, Claire says, "You don't have to be an adult to make a difference in the world." (Grewe, para. 22) What does she mean by this?

Name: _____ Date: _____

Brainstorming Page 2

Begin by brainstorming the most common sources of plastic waste in school:

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Use the table below to gather details related to the prompt:

Research alternatives for plastic, and then write a paragraph that describes a solution for reducing the school's use of plastic.

| Details | Source |
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Name: _____ Date: _____

Brainstorming Page 2

Begin by brainstorming the most common sources of plastic waste in school:

- Plastic straws in cafeteria
- Food wrapped in plastic
- Single-use plastic water bottles
- Plastic utensils

Use the table below to gather details related to the prompt:

Research alternatives for plastic, and then write a paragraph that describes a solution for reducing the school's use of plastic.

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|--|--|
| <p>Plastic → 500 years to decompose</p> <p>Some restaurants ban/only provide if requested</p> <p>Incentives as motivation</p> | <p><i>Trash Vortex</i>, Danielle Smith-Llera, pp. 27, 51, 52</p> |
| <p>harm ocean animals</p> | <p>"Single Use Plastic Straws," Beyond Plastics, https://www.beyondplastics.org/fact-sheets/plastic-straws</p> |
| <p>alternative materials = stainless steel, paper, Twizzlers, bamboo, or wood</p> | <p>"Paper, bamboo, Twizzlers: Restaurants consider alternatives to the plastic straw," Abha Battarai, The Washington Post, https://www.washingtonpost.com/business/economy/paper-bamboo-twizzlers-restaurants-consider-alternatives-to-the-plastic-straw/2018/02/02/9be47608-02ab-11e8-8acf-ad2991367d9d_story.html</p> |

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Brainstorming Page 2

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| <p>It takes a decade for a water bottle from California to float to Japan and back. Plastic survives these journeys easily, since it takes 500 years or more to break down.</p> <p>Countries have banned all plastic bags and straws.</p> | <p>Trash Vortex, Danielle Smith-Llera, p. 27</p> <p>p. 51</p> |
| | <p>"Single Use Plastic Straws," Beyond Plastics, https://www.beyondplastics.org/fact-sheets/plastic-straws</p> |
| <p>Instead of plastic, alternative materials can be used: stainless steel, paper, Twizzlers, bamboo, or wood</p> | <p>"Paper, bamboo, Twizzlers: Restaurants consider alternatives to the plastic straw," Abha Battarai, The Washington Post, https://www.washingtonpost.com/business/economy/paper-bamboo-twizzlers-restaurants-consider-alternatives-to-the-plastic-straw/2018/02/02/9be47608-02ab-11e8-8acf-ad2991367d9d_story.html</p> |

Name: _____ Date: _____

Single Paragraph Outline

Topic Sentence: _____

● Detail 1: _____

● Detail 2: _____

● Detail 3: _____

● Detail 4: _____

Concluding Sentence: _____

Name: _____ Date: _____

Single Paragraph Outline

Topic Sentence: To reduce our school's use of plastic, we should stop using plastic straws for breakfast and lunch.

- Detail 1: Don't decompose
- Detail 2: Use paper straws
- Detail 3: Incentives → less plastic use

Concluding Sentence: If we all work together to stop using plastic straws, we will be able to make an impact.

How did plastic become a problem?

Plastic pollution is a problem because we use lots of plastic products that end up in the ocean. Before World War II, we didn't have a plastic problem. During World War II, plastics were used to make parachutes, airplane parts, guns, helmets, and much more. When the war ended, factories still wanted to make money, so they found more ways to use plastic. Plastic then started showing up everywhere! People start using lots of plastic, but they don't save it. After they have used something plastic, they throw it away. For example, people around the world use a trillion grocery bags a year but for just 12 minutes on average. Then, those bags end up in the ocean. Or, people throw away about 2.5 million plastic bottles every hour. Where does that plastic go? It eventually ends up in the ocean. About 90% of the trash in the ocean right now is plastic. Plastic trash is polluting our oceans!



Much of the plastic we use ends up in the oceans

[photo-1603999540542-b8c65c6d3e89](https://www.fishtanklearning.com/photo-1603999540542-b8c65c6d3e89)

How does plastic impact oceans?

Plastic pollution impacts the ocean by interrupting the delicate ecosystem in many ways. While most natural materials break down relatively quickly, plastic takes much longer to decompose. Because it breaks down into tiny pieces of **microplastic**, these pieces can stay in the ocean for 500 years. All of this plastic can be eaten by sea animals of all sizes, entering the food chain and being passed on to larger and larger creatures. As a result, some animals die because their stomachs fill with plastic instead of food. Even if animals don't eat plastic, they can become trapped and killed in plastic nets. Plastic also impacts the ocean by transporting plants and animals long distances. Since species are introduced to new areas, they can become invasive or take food from native species. Plastic trash disrupts the systems and patterns in the ocean that allow sea creatures to thrive.



Some animals mistake plastic bags for food, like jellyfish, and eat them.

[photo-1719754519931-Oe5763a44d36](https://www.fishbase.org/summary/photo-1719754519931-Oe5763a44d36)

- **Microplastics** - very small pieces of plastic
- **Decompose** - to break down into smaller parts

What can WE do about the plastic problem?

To reduce our school's use of plastic, we should stop using plastic straws for breakfast and lunch. Why? Because plastic straws don't decompose. Plastic breaks down into tiny **microplastics**, and they don't disappear. Those **microplastics** end up in the stomachs of fish and other animals that live in the ocean. Since this is very dangerous, I think a better alternative to plastic straws would be paper straws. Paper straws do decompose, so when they are thrown away, they don't end up in the ocean. The result is less exposure of plastics to fish and other ocean creatures. This leads to reduced plastic exposure for fish and other ocean creatures. It may be hard to get people to stop using plastic straws because they are convenient and cheap. One idea is to give people **incentives** for not using plastic straws. We could have a homeroom competition to see which homeroom uses the least number of straws per week. After a few weeks, it will become a habit, and people will forget about the plastic straws, leading to less plastic waste overall in our school. I am confident that if we all work together to stop using plastic straws, we will be able to make an impact.



Plastic straws



Straws made from:

- Metal
- Paper
- Bamboo
- No straw!

Name: _____ Date: _____

Brainstorming Page 2

Begin by brainstorming the most common sources of plastic waste in school:

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Name: _____ Date: _____

Brainstorming Page 2

Begin by brainstorming the most common sources of plastic waste in school:

- Plastic straws in cafeteria
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Begin by brainstorming the most common sources of plastic waste in school:

- Plastic straws in cafeteria
- Food wrapped in plastic
- Single-use plastic water bottles
- Plastic utensils

Use the table below to gather details related to the prompt:

Research alternatives for plastic, and then write a paragraph that describes a solution for reducing the school's use of plastic.

| Details | Source |
|--|--|
| <p>Plastic → 500 years to decompose</p> <p>Some restaurants ban/only provide if requested</p> <p>Incentives as motivation</p> | <p><i>Trash Vortex</i>, Danielle Smith-Llera, pp. 27, 51, 52</p> |
| <p>harm ocean animals</p> | <p>"Single Use Plastic Straws," Beyond Plastics, https://www.beyondplastics.org/fact-sheets/plastic-straws</p> |
| <p>alternative materials = stainless steel, paper, Twizzlers, bamboo, or wood</p> | <p>"Paper, bamboo, Twizzlers: Restaurants consider alternatives to the plastic straw," Abha Battarai, The Washington Post, https://www.washingtonpost.com/business/economy/paper-bamboo-twizzlers-restaurants-consider-alternatives-to-the-plastic-straw/2018/02/02/9be47608-02ab-11e8-8acf-ad2991367d9d_story.html</p> |

Name: _____ Date: _____

Single Paragraph Outline

Topic Sentence: _____

● Detail 1: _____

● Detail 2: _____

● Detail 3: _____

● Detail 4: _____

Concluding Sentence: _____

Name: _____ Date: _____

Single Paragraph Outline

Topic Sentence: To reduce our school's use of plastic, we should stop using plastic straws for breakfast and lunch.

- Detail 1: Don't decompose
- Detail 2: Use paper straws
- Detail 3: Incentives → less plastic use

Concluding Sentence: If we all work together to stop using plastic straws, we will be able to make an impact.

Name: _____ Date: _____

Single Paragraph Outline

Topic Sentence: _____

● Detail 1: _____

● Detail 2: _____

● Detail 3: _____

● Detail 4: _____

Concluding Sentence: _____

Name: _____ Date: _____

Single Paragraph Outline

Topic Sentence: To reduce our school's use of plastic, we should stop using plastic straws for breakfast and lunch.

- Detail 1: Don't decompose
- Detail 2: Use paper straws
- Detail 3: Incentives → less plastic use

Concluding Sentence: If we all work together to stop using plastic straws, we will be able to make an impact.

How did plastic become a problem?

Plastic pollution is a problem because we use lots of plastic products that end up in the ocean. Before World War II, we didn't have a plastic problem. During World War II, plastics were used to make parachutes, airplane parts, guns, helmets, and much more. When the war ended, factories still wanted to make money, so they found more ways to use plastic. Plastic then started showing up everywhere! People start using lots of plastic, but they don't save it. After they have used something plastic, they throw it away. For example, people around the world use a trillion grocery bags a year but for just 12 minutes on average. Then, those bags end up in the ocean. Or, people throw away about 2.5 million plastic bottles every hour. Where does that plastic go? It eventually ends up in the ocean. About 90% of the trash in the ocean right now is plastic. Plastic trash is polluting our oceans!



Much of the plastic we use ends up in the oceans

[photo-1603999540542-b8c65c6d3e89](https://www.fishtanklearning.com/photo-1603999540542-b8c65c6d3e89)

How does plastic impact oceans?

Plastic pollution impacts the ocean by interrupting the delicate ecosystem in many ways. While most natural materials break down relatively quickly, plastic takes much longer to decompose. Because it breaks down into tiny pieces of **microplastic**, these pieces can stay in the ocean for 500 years. All of this plastic can be eaten by sea animals of all sizes, entering the food chain and being passed on to larger and larger creatures. As a result, some animals die because their stomachs fill with plastic instead of food. Even if animals don't eat plastic, they can become trapped and killed in plastic nets. Plastic also impacts the ocean by transporting plants and animals long distances. Since species are introduced to new areas, they can become invasive or take food from native species. Plastic trash disrupts the systems and patterns in the ocean that allow sea creatures to thrive.



Some animals mistake plastic bags for food, like jellyfish, and eat them.

[photo-1719754519931-Oe5763a44d36](https://www.fishbase.org/abstract/2017/1719754519931-Oe5763a44d36)

- **Microplastics** - very small pieces of plastic
- **Decompose** - to break down into smaller parts

What can WE do about the plastic problem?

To reduce our school's use of plastic, we should stop using plastic straws for breakfast and lunch. Why? Because plastic straws don't decompose. Plastic breaks down into tiny **microplastics**, and they don't disappear. Those **microplastics** end up in the stomachs of fish and other animals that live in the ocean. Since this is very dangerous, I think a better alternative to plastic straws would be paper straws. Paper straws do decompose, so when they are thrown away, they don't end up in the ocean. The result is less exposure of plastics to fish and other ocean creatures. This leads to reduced plastic exposure for fish and other ocean creatures. It may be hard to get people to stop using plastic straws because they are convenient and cheap. One idea is to give people **incentives** for not using plastic straws. We could have a homeroom competition to see which homeroom uses the least number of straws per week. After a few weeks, it will become a habit, and people will forget about the plastic straws, leading to less plastic waste overall in our school. I am confident that if we all work together to stop using plastic straws, we will be able to make an impact.



Plastic straws



Straws made from:

- Metal
- Paper
- Bamboo
- No straw!



Vocabulary

| Word | Part of Speech | Definition |
|-------------|----------------|--|
| -able | suffix | able to be done |
| affordable | adj. | inexpensive |
| artificial | adj. | not natural or real |
| astounding | adj. | surprising in a way that causes disbelief |
| bio- | prefix | living |
| biodegrade | v. | to be decomposed by organisms |
| convenience | n. | a quality that makes something easy to do |
| de- | prefix | |
| decomposer | n. | an organism that breaks down organic materials |
| discarded | v. | threw something away |
| disposable | adj. | made to be thrown away after use once or a few times |
| dramatic | adj. | extreme |

| Word | Part of Speech | Definition |
|---------------|----------------|--|
| emanate | v. | to come out of or spread from something |
| finite | adj. | having a limit |
| fragment | n. | tiny piece |
| grotesque | adj. | very ugly or very different from normal |
| incentive | n. | a reward or reason that makes you want to do something |
| intrigued | v. | wanting to know more about something |
| -less | suffix | |
| mechanism | n. | a part of a machine |
| micro- | prefix | |
| microplastics | n. | very small pieces of plastic |
| relentless | adj. | continuing without becoming weaker or giving up |
| synthetic | adj. | made of non-natural substances |

| Word | Part of Speech | Definition |
|--------|----------------|------------------------------|
| -tion | suffix | |
| tragic | adj. | extremely sad or destructive |



Unit Rubrics & Assessments

Informational Writing Rubric

5th Grade English Language Arts

| | | | | |
|---------------------------|---|---|---|---|
| Rubric Scoring Key | Fully meets (4) All criteria present in the writing | Mostly meets (3) Most criteria present, with some misunderstandings | Partially meets (2) Criteria attempted, but major misunderstandings | Does not meet yet (1) Criteria are not attempted or not enough evidence to rate |
|---------------------------|---|---|---|---|

| Structure | Rubric Score | Notes |
|---|---------------------|--------------|
| Sections Groups information into multiple paragraphs or sections; Consistently uses paragraph structures to organize information depending on the type of information included and purpose of writing: sequence or chronology, cause-and-effect, comparison, problem and solution | 4 3 2 1 | |
| Introduction Starts by introducing a topic and why it is important; Introduction includes essential background knowledge; Consistently writes in the third-person | 4 3 2 1 | |
| Conclusion Includes a concluding section that summarizes the key ideas; Conclusion may include one of the following: question, quote, anecdote, or memorable image | 4 3 2 1 | |

| Development | Rubric Score | Notes |
|--|---------------------|--------------|
| Details Includes three to four relevant facts and details to develop and support the topic; Details <u>may</u> include facts, definitions, concrete details, examples, quotations, descriptions | 4 3 2 1 | |
| Text Features As called for by the task, uses three to four text features to reinforce main ideas, including a title, illustrations, headings, labels, captions, bold words, diagrams, photographs, multimedia, fact boxes, sidebars | 4 3 2 1 | |
| Linking Words and Phrases Effectively and consistently uses linking words or phrases to connect ideas or paragraphs | 4 3 2 1 | |

| Language | Rubric Score | Notes |
|--|---------------------|--------------|
| Grammar Expands, combines, and reduces sentences when revising for meaning, reader/listener interest, and style; Appropriately uses correlative conjunctions (e.g. <i>either/or</i> , <i>neither/nor</i>); Uses verb tense to convey various times, sequences, states, and conditions; Recognizes and corrects inappropriate shifts in verb tense when revising | 4 3 2 1 | |
| Conventions Uses correct capitalization and punctuation conventions; Uses commas correctly, including to separate items in a series, separate an introductory element from the rest of the sentence, set off the words "yes" and "no" (e.g. <i>Yes, thank you</i>), set off a tag question from the rest of the sentence (e.g. <i>It's true, isn't it?</i>), indicate a direct address (e.g. <i>Is that you, Norma?</i>); Uses underlining, quotation marks, or italics to indicate titles of works | 4 3 2 1 | |

Opinion Writing Rubric

5th Grade English Language Arts

| Rubric Scoring Key | Fully meets (4) All criteria present in the writing | Mostly meets (3) Most criteria present, with some misunderstandings | Partially meets (2) Criteria attempted, but major misunderstandings | Does not meet yet (1) Criteria are not attempted or not enough evidence to rate |
|---|---|---|---|---|
| Structure | | | | |
| Organizational Structure Ideas grouped with multiple paragraphs; Each paragraph focuses on one reason that supports the position; All facts and details are grouped and ordered intentionally; Uses third-person to state opinion consistently | | Rubric Score 4 3 2 1 | | Notes |
| Introduction Clearly states a topic and opinion based on facts and details; Introduction <u>may</u> use a lead that captures the reader's interest, such as presenting interesting details or facts, describing a memorable image, or providing an anecdote | | Rubric Score 4 3 2 1 | | Notes |
| Conclusion Includes a concluding sentence or section that asks a question or makes a suggestion; Begins with a transition word or phrase unique to conclusions (e.g. <i>In conclusion, finally, in closing, in summary, thus, therefore</i>) | | Rubric Score 4 3 2 1 | | Notes |
| Development | | | | |
| Reasons Includes three to four facts and details to support their position; Effectively chooses compelling reasons and orders most compelling reasons first; Elaborates on reasons and details by providing explanations, examples, or context | | Rubric Score 4 3 2 1 | | Notes |
| Linking Words and Phrases Effectively and consistently uses linking words or phrases to connect opinion and reasons or paragraphs | | Rubric Score 4 3 2 1 | | Notes |
| Language | | | | |
| Grammar Expands, combines, and reduces sentences when revising for meaning, reader/listener interest, and style; Appropriately uses correlative conjunctions (e.g. <i>either/or, neither/nor</i>); Uses verb tense to convey various times, sequences, states, and conditions; Recognizes and corrects inappropriate shifts in verb tense when revising | | Rubric Score 4 3 2 1 | | Notes |
| Conventions Uses correct capitalization and punctuation conventions; Uses commas correctly, including to separate items in a series, separate an introductory element from the rest of the sentence, set off the words "yes" and "no" (e.g. <i>Yes, thank you</i>), set off a tag question from the rest of the sentence (e.g. <i>It's true, isn't it?</i>), to indicate a direct address (e.g. <i>Is that you, Norma?</i>); Uses underlining, quotation marks, or italics to indicate titles of works | | Rubric Score 4 3 2 1 | | Notes |

Name: _____ Date: _____

Single Point Informational Writing Rubric

| | Areas for Growth What could I do to make my writing even stronger? How can I improve? | Criteria Expectations for my writing assignment: | Strengths What am I doing well already? What am I proud of? |
|-----------------|---|--|---|
| Sections | | I group information into separate paragraphs for each main idea. | |
| | | I include a paragraph structure that supports the main idea. | |
| Details | | I include relevant details to support the main idea. | |
| | | I intentionally order the details to match the structure of the paragraph. | |
| | | I include signal words that help the reader understand the relationship between details. | |

Name: _____ Date: _____

Single Point Opinion Writing Rubric 1

| | Areas for Growth What could I do to make my writing even stronger? How can I improve? | Criteria Expectations for my writing assignment: | Strengths What am I doing well already? What am I proud of? |
|-----------------|---|--|---|
| Position | | My position is clearly stated and is: <ul style="list-style-type: none"> - Written in third-person - Based on facts and details, not my personal experiences - Chosen after considering both sides of the issue | |
| Reasons | | My supporting reasons are clearly explained and: <ul style="list-style-type: none"> - Include facts and details to support each reason - Are listed in order of importance | |
| | | I include opposing facts when explaining reasons to support an opinion. | |


Name: _____ Date: _____

Single Point Opinion Writing Rubric 2

| | Areas for Growth What could I do to make my writing even stronger? How can I improve? | Criteria Expectations for my writing assignment: | Strengths What am I doing well already? What am I proud of? |
|----------------------|---|--|---|
| Sections | | I group information into separate paragraphs for each main idea. | |
| | | I include a paragraph structure that supports the main idea. | |
| Details | | I include relevant details to support the main idea. | |
| | | I intentionally order the details to match the structure of the paragraph. | |
| | | I include signal words that help the reader understand the relationship between details. | |
| Text Features | | I include text features to help teach the reader about the topic. | |

Name: _____ Date: _____

Editing Checklist 1

| Language and Conventions Focus Area |  |
|--|---|
| I combine sentences using an appropriate connecting word: <ul style="list-style-type: none">● Preposition (<i>at, in, on during, until, toward, among, etc.</i>)● Relative pronoun (<i>who, whose, which, that</i>) | |
| | |
| | |
| | |
| | |
| | |

My writing goal:

Name: _____ Date: _____

Editing Checklist 2

| Language and Conventions Focus Area | ✓ |
|---|---|
| I combine sentences using an appropriate connecting word: <ul style="list-style-type: none">● Preposition (<i>at, in, on during, until, toward, among, etc.</i>)● Relative pronoun (<i>who, whose, which, that</i>)● Conjunctions (coordinating, subordinating, or correlative) | |
| | |
| | |
| | |
| | |

My writing goal:

Name: _____ Date: _____

Directions: Read the excerpt "Gathering Young Voices: Brandon Nguyen" from *People of Color Protecting Our Planet* and answer the questions that follow.

Gathering Young Voices: Brandon Nguyen

Excerpt from *People of Color Protecting Our Planet*

By Anuradha Rao, adapted by Fishtank Learning

- 1 Who knew that watching *Animal Planet* could help you start your own nonprofit organization? Brandon Nguyen laughs when he thinks about his earliest environmental inspirations, which included that television channel as well as keeping frogs and lizards as pets.
- 2 "I was really lucky," he recalls, "because I had a teacher who was really passionate about social and environmental issues, so she did a lot of activities with our class, teaching us about the effects that humans have on the environment around us." One of the things she showed them was all the little things they could change in their lives to help fight climate change, like turning off lights and recycling paper.



This alligator was one of Brandon's early influences.

COURTESY OF BRANDON NGUYEN

- 3 But Brandon saw that most of the thousands of kids who were going through the Toronto school system hadn't received the same kind of exposure to these ideas. Looking around at his classmates, Brandon saw untapped potential and wanted to do something about it. So in tenth grade, he started the Toronto Coalition of EcoSchools (TCE) with a couple of friends to promote environmental literacy and awareness across high schools in Toronto.
- 4 Starting TCE was challenging for Brandon. Other students questioned and criticized him. "Lots of people said, 'You're too young. Just focus on school. You don't know what you're doing.'" None of his friends wanted to be environmental activists. He felt alone, but he didn't let that stop him. "Whereas a lot of other people might be discouraged," he says, "it was something I was okay with."
- 5 Brandon had been one of the only people in his primary school from an ethnic minority. "I used to bring Asian food for lunch," he remembers, "and I would hate it." The other kids would tease him about it and he felt embarrassed, so he was afraid to take it out of his bag. But he knew they just didn't know any better. As he grew older, he started to ask his parents about what it was like for them growing up in Vietnam and then coming to Canada.

DID YOU KNOW?

The Toronto Coalition of EcoSchools was founded in eight high-school students on a \$200 microloan and has since supported more than 30 other environmental clubs.

- 6 Learning more about his cultural heritage made him realize that it wasn't something to be ashamed of, and this made him feel more comfortable with being different from the other students.
- 7 "Something my culture has taught me is that differences are okay, and it's okay if you're alone in your beliefs. In the end, if it's something you strongly believe in, that's what matters the most." So he kept on talking to his friends and family about his passion for the environment. They still didn't see themselves as environmentalists, but they saw how important this work was to Brandon and decided to help. Some of them joined him in leading the organization, and others started to spread the word to people they knew in other parts of the city.
- 8 With this support, the TCE expanded to other schools, and Brandon found lots of other young people who were just as passionate about the environment as he was. By 2017, the TCE had grown to include more than 50 student leaders from more than 30 schools. And in helping him get started, his friends and family had become more interested in environmental issues themselves.
- 9 He started to look for more ways to involve people in his community with environmental issues that affected their daily lives. When he was in 11th grade, he learned that the City of Toronto was looking for members for its youth advisory board, the Toronto Youth Cabinet (TYC). Brandon thought he wasn't qualified, so he almost didn't apply. But he did—and became the TYC's Director of Public Relations.
- 10 The experience taught him how to use social media to reach out to young people and raise awareness about climate change. It also showed him how important it is for young people to speak up about things they care about.
- 11 "Even though we don't have voting powers," he stresses, "we should be voicing our concerns because we're going to have to deal with the consequences of the political decisions that are made today."

"If we give students and future leaders the knowledge and skills to make their own decisions, and if they realized how their actions affect the environment around them, that's a great way of fighting climate change."

- 12 In 2016, Brandon was a Canadian delegate to the United Nations Youth Assembly in New York City. "There, I was able to represent my organization alongside youth from 80 countries around the world. That gave me a global understanding of climate change." The experience also confirmed for him that youth are an important part of the fight against climate change, especially when they unite.
- 13 In 2017, he attended UNLEASH, a global innovation lab held in Denmark that year, which brought together 1,000 people from more than 100 countries and many different organizations to develop solutions to the world's biggest problems. It was a perfect place for him to build a network of other people to work with.
- 14 Again, though, Brandon was unsure of his abilities. "I thought it was out of my league and I wasn't qualified for it." But he applied and was accepted. At UNLEASH, he learned that the best solutions in one country may not work at all in another. And seeing people from many places sharing their diverse experiences proved to him that a single individual or organization can't accomplish all that is needed to solve global problems; people have to work together.

Reproduced from One Earth: People of Color Protecting Our Planet by Anuradha Rao. Text and images © Orca Book Publishers. Used with permission.

1. How did Brandon's childhood affect his interest in protecting the environment? Select all that apply.
 - a. Learning about the human impact on the environment in school made him want to help protect it.
 - b. Rescuing endangered animals helped him feel connected to wildlife and motivated him to protect the environment.
 - c. Watching TV shows about animals sparked his curiosity and made him care about them.
 - d. His experience bringing Asian food to lunch taught him to ignore other kids.
 - e. His culture encouraged him to pursue his passions, which helped him stay dedicated to protecting the environment.
 - f. He noticed that lots of other kids were already interested in protecting the environment.
2. What does the word **criticized** most likely mean as it is used in paragraph 4?
 - a. Helped him get started
 - b. Gave him advice
 - c. Said unkind or negative things about him
 - d. Asked him to join their group

3. According to the article, which statement best explains the relationship between environmental issues and young people?
 - a. Young people cannot yet have much impact on environmental issues.
 - b. Young people are strongly affected by environmental issues and can play an important role in solving them.
 - c. Young people should educate their families about environmental issues.
 - d. Young people do not have opportunities to work on environmental issues together.

4. Which detail from the text best supports the author's point that young people have power?
 - a. "Looking around at his classmates, Brandon saw untapped potential and wanted to do something about it." (paragraph 3)
 - b. "...the TCE expanded to other schools, and Brandon found lots of other young people who were just as passionate about the environment as he was." (paragraph 8)
 - c. "'There, I was able to represent my organization alongside youth from 80 countries around the world. That gave me a global understanding of climate change.'" (paragraph 11)
 - d. "At UNLEASH, he learned that the best solutions in one country may not work at all in another." (paragraph 13)

5. How does the author support the idea that young people can have a big impact?
 - a. By showing a photograph of Brandon as a young boy.
 - b. By describing how difficult it was for Brandon to get his friends involved
 - c. By emphasizing that Brandon was able to do things he didn't think he could
 - d. By including a "Did You Know" box about the Toronto Coalition of EcoSchools.

6. Which piece of evidence does the author use to show that education helps people care about the environment?
 - a. "They still didn't see themselves as environmentalists, but they saw how important this work was to Brandon and decided to help." (paragraph 7)
 - b. "But Brandon saw that most of the thousands of kids who were going through the Toronto school system hadn't received the same kind of exposure to these ideas." (paragraph 3)
 - c. "Learning more about his cultural heritage made him realize that it wasn't something to be ashamed of, and this made him feel more comfortable with being different from the other students." (paragraph 6)
 - d. "The experience taught him how to use social media to reach out to young people and raise awareness about climate change." (paragraph 10)

Name: _____ Date: _____

Part One: Vocabulary

1. Complete the following sentence.

After using the plastic bag, the boy _____ it in the trash can.

- a. fragmented
- b. decomposed
- c. discarded
- d. emanated

2. This question has two parts. First, answer Part A. Then, answer Part B.

Part A: What does it mean if something **biodegrades**?

- a. It breaks down naturally over time by living things.
- b. It stays the same for many years without changing.
- c. It breaks into smaller pieces but never fully goes away.
- d. It disappears instantly without leaving anything behind.

Part B: Give an example of something that **biodegrades**.

3. What does the prefix **micro-** mean as used in the word **microplastics**?

- a. living
- b. able to be done
- c. without
- d. small

4. Which of the following describes an **incentive**?

- a. A prize for winning a contest
- b. A reward for doing a good deed
- c. A reason that makes you want to do something
- d. A sum of money that you earn

5. Pick two of the words from the list below. Use each word in a sentence that shows what the word means.

| | | | |
|-------------------|--------------------|-------------------|---------------|
| disposable | convenience | affordable | finite |
|-------------------|--------------------|-------------------|---------------|

- _____

- _____

Student: _____ Examiner: _____ Date: _____
Words Read Correctly: _____ Errors: _____

Excerpt from *TRASH VORTEX*

| | |
|--|-----|
| Beginning in the 1950s, plastics trickled and then flooded into everyday | 11 |
| life, replacing such materials as glass and expensive metals and rubber. | 22 |
| Plastic took the shapes of countertops, clear plastic wrap for food, | 33 |
| squeeze bottles, electrical plugs, telephones, toothbrushes, and even | 41 |
| contact lenses and clear adhesive tape. Children assembled plastic | 50 |
| building block sets and played with dolls molded from plastic instead | 61 |
| of fragile porcelain. One toy was simply a lump of plastic putty that playful | 75 |
| hands could press, pull, and twist into endless shapes. Factories in the 1960s | 88 |
| produced stackable chairs molded from a single piece of plastic. Plastics | 99 |
| even ventured to the moon in the nylon threads of the flag planted by | 113 |
| Neil Armstrong. Later they traveled into the human body with the first | 125 |
| artificial heart. | 127 |
| Plentiful and affordable plastics helped shape a new lifestyle. They helped | 138 |
| people of all incomes get more for their money. "We were a nation of | 152 |
| consumers now, a society increasingly democratized by our shared | 161 |
| ability to enjoy the conveniences and comforts of modern life," wrote | 172 |
| author Susan Freinkel. Among the modern conveniences and comforts were | 182 |
| dishwashers and air conditioners. | 186 |

Smith-Llera, Danielle, *Trash Vortex: How Plastic Pollution is Choking the World's Oceans*, Compass Point Books, 2018, pp. 22-23.

Excerpt from *TRASH VORTEX*

Beginning in the 1950s, plastics trickled and then flooded into everyday life, replacing such materials as glass and expensive metals and rubber. Plastic took the shapes of countertops, clear plastic wrap for food, squeeze bottles, electrical plugs, telephones, toothbrushes, and even contact lenses and clear adhesive tape. Children assembled plastic building block sets and played with dolls molded from plastic instead of fragile porcelain. One toy was simply a lump of plastic putty that playful hands could press, pull, and twist into endless shapes. Factories in the 1960s produced stackable chairs molded from a single piece of plastic. Plastics even ventured to the moon in the nylon threads of the flag planted by Neil Armstrong. Later they traveled into the human body with the first artificial heart.

Plentiful and affordable plastics helped shape a new lifestyle. They helped people of all incomes get more for their money. "We were a nation of consumers now, a society increasingly democratized by our shared ability to enjoy the conveniences and comforts of modern life," wrote author Susan Freinkel. Among the modern conveniences and comforts were dishwashers and air conditioners.

Smith-Llera, Danielle, *Trash Vortex: How Plastic Pollution is Choking the World's Oceans*, Compass Point Books, 2018, pp. 22-23.



Texts & Supporting Readings



In addition to the materials in this document, students will engage with third party, copyrighted materials as part of this unit. To see a list of those texts and their authors please visit:

<https://www.fishtanklearning.org/curriculum/ela/5th-grade/materials/>