Plastic pollution is one of the biggest challenges facing the world today. In Every Nine Minutes, artists use the plastic itself to communicate the severity of the problem.
Standards

COMMON CORE ANCHOR STANDARDS FOR READING

CCSS.ELA-LITERACY.CCRA.R.1 / Key Ideas and Details
Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

CCSS.ELA-LITERACY.CCRA.R.7 / Integration of Knowledge and Ideas
Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words

CCSS.ELA-LITERACY.CCRA.R.10 / Range of Reading and Level of Text Complexity
Read and comprehend complex literary and informational texts independently and proficiently.

COMMON CORE ANCHOR STANDARDS FOR WRITING

CCSS.ELA-LITERACY.CCRA.W.1 / Text Types and Purposes
Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.

CCSS.ELA-LITERACY.CCRA.W.4 / Production and Distribution of Writing
Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience.

CCSS.ELA-LITERACY.CCRA.W.5 / Production and Distribution of Writing
Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

COMMON CORE ANCHOR STANDARDS FOR SPEAKING & LISTENING

CCSS.ELA-LITERACY.CCRA.SL.1 / Comprehension and Collaboration
Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

CCSS.ELA-LITERACY.CCRA.SL.5 / Presentation of Knowledge and Ideas
Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Tags oceans, plastics, art, activism

KeyVocabulary ocean, recycle, activism, pollution
Filmmaker Interview

Why did you become a filmmaker and how did you get started?
Filmmaking was actually something I found when I was about 20. I was an environmental science student my first year of college, and to be honest, the content we were learning was just downright upsetting. At the same time I took a film production course and I not only excelled at it, but loved it with vibrant passion. While still committed to being an environmentally conscious citizen, I turned away from a formal education in the matter and took up a dual degree in the science and power of images and stories: double major of Film Production and Communications. From there I simply got started by making films – not just by studying them. I made a lot of them, mostly bad ones. But in the effort of making films, I learned a lot on what was possible, what was quality, and what was not. Eventually I had done enough projects where I had a few small tid-bits that were actually sort of nice – things I could show people and build a website out of. From there, it was just being an entrepreneur. I had the stuff, I just needed to get people behind it, buy it or let me sell it. My style was created out of being a kid who would try to make any project work, simply because I liked making videos so much. This is arguably the most important part of becoming a professional filmmaker; yes you need to be at least ‘good’ at it, but you really need to be a business person at the end of the day.

When you made the film, did you have a specific audience in mind?
Everyone! Ocean plastic pollution is a titanic issue that needs to be addressed by everyone. Unfortunately, due to our inclination towards convenience, adults can be a bit more set in their ways and not be as reachable to a habit changing message. Kids though, kids have so much potential to carry the torch for the rest of us when we need to address change.

When editing the film, was there anything you wished you could have included in the final cut?
Every film project is an exercise in efficiency, directness, and leaving your babies on the cutting room floor. There are many pieces on that floor that we just had to chop – even though we loved “that shot” or “that moment,” did they serve the story? Did they promote our message? Sometimes the best thing you can do as a filmmaker is have another set of eyes look at your project and disagree with you on what you’ve made.

Is there an action you hope people are inspired to take after seeing this film?
Use less plastic and become an advocate and changemaker in your community. Talk to people about their plastic use – or maybe even point out useless plastic waste to your friends when you see them doing the convenient thing, but not necessarily the right thing.

What are some of the challenges you encountered while making this film?
Time, this project took forever.

What’s the next big adventure or film project on the horizon for you?
I’ll be going to Sierra Leone to film a project about entrepreneurs in developing nations trying to gain access to credit and resources to help them build their own business.

What is one piece of advice you can give students that you wish someone had shared with you?
If you want to be a filmmaker, buy a camera! Start taking pictures that communicate some kind of message!

“Kids have so much potential to carry the torch for the rest of us when we need to address change.”
Pre-Screening Activities

Grades K–2: Activity

For this activity, to help students activate prior knowledge and help develop vocabulary, use developmentally-appropriate picture books, books and articles.

**Recommended Picture Books:**

*Life in the Ocean: The Story of Oceanographer Sylvia Earle* by Claire A. Nivola will help to create a sense of wonder and understanding for the oceans, especially for students who have never been to the ocean.

*On the Reef* by Judith McMurray and Shandley McMurray delves more into the topic of oceans and plastic, when the family encounters a turtle that cannot swim because of a plastic bag. This is a longer picture book, which may or may not be appropriate for the younger students.

Prior to reading, you can discuss the following questions with your students:

1. What is the ocean?
2. Has anyone been to the ocean?
3. Think/pair/share one thing you know about the ocean.
4. Using the pictures in the books, count how many different sea creatures and fish you see.

If your school district has access to Reading A-Z, there are several lower-level books that would help to engage student interest and activate prior knowledge. You could print the books and read to students in a small group, read to a partner, read to self, etc.

- *Because You Recycle* (Level D, Lexile 250L, 1st Grade) **also available in Spanish at a Level E
- *Ocean Animals* (Level J, Lexile 490L, 1st Grade) **also available in Spanish at a Level J
- *The Ocean* (Level aa, Lexile BR40L, Kindergarten)

Using Newsela.com (you create a free login using your school’s Google Drive account or personal account), search for one of the following articles:

- *Creatures at the bottom of the ocean are eating our plastics pollution* as adapted from The Guardian (November 2017) (Lexile 390L, 2nd Grade)
- *What you throw in the ocean stays in the ocean--but where?* as adapted from The Guardian (July 2017) (Lexile 430L, 2nd Grade)

It is recommended that you read the articles as a whole class and then ask the students to summarize verbally what the article means and/or write down any questions they may have (which can also be done verbally) after reading one or both of the articles.
Grades 3–6: Activity 1

For this activity, you will have students read and comprehend an article about plastic waste and the oceans to activate prior knowledge before watching the film, Every Nine Minutes.

Using Newsela.com (you create a free login using your school’s Google Drive account or personal account), search for one of the following articles:

- **Plastics found in stomachs of deepest sea creatures** as adapted from The Guardian (November 2017) (max Lexile 790L, 6th Grade)
- **If you drop plastic in the ocean, where does it end up** as adapted from The Guardian (July 2017) (max Lexile 810L, 6th Grade)

If you are not already familiar with Newsela, you can adjust the Lexile score according to the students you support, which is easy to differentiate for the whole class (i.e. you can print the same article with different reading levels, but it doesn’t alter the meaning of the article). Since you will be interacting with the text multiple times, it is best for each student to have a physical copy of the article.

For this activity, divide students into groups with a physical copy of the article (keep in mind that the text of the article is different based off of what reading level it is at, so it would be best to group the same Lexile Scores together).

Have the students read the article as a group once or it can be read to them, dependent upon extra support needed.

Once students have read through once, have them write questions in the margins for each section and/or every other paragraph. When students are done with their questions, they can share with a partner the questions that they had, regardless of reading level. Ask the class what questions they shared with their partner and write them on the board.

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**Example from Plastics found in stomachs of deepest sea creatures:**

Animals from the deepest places on Earth have been found with plastic in their stomachs. The discovery confirms fears that man-made fibers have contaminated the most remote places on the planet.

The study was led by academics at Newcastle University. It found that animals from trenches across the Pacific Ocean were contaminated with plastic fibers. These fibers probably originated from plastic bottles, packaging synthetic clothes.

Dr. Alan Jamieson, who led the study, said the findings were startling. They proved that nowhere on the planet was free from plastics pollution.

“There is now no doubt that plastics pollution is so pervasive that nowhere — no matter how remote — is immune,” he said.

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Student question:

Why is there so much plastic in the ocean when I bring my bag to the grocery store every time?
Grades 3–6: Activity 2

For this activity, students will define the vocabulary word *plastic*, by identifying its synonyms, antonyms, examples and non-examples. After, students will watch a short video, titled *How We Can Keep Plastics Out of Our Ocean* by National Geographic to activate prior knowledge about plastics and the ocean.

**Prior to watching the video, work as a class to define the vocabulary word plastic.** Depending on time, you can either pass out pieces of paper to each student or work as a whole class on the board.

*plastic (noun):* a material that is produced from oil by a chemical process and that is used to make many objects, is light in weight and does not break easily.

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<thead>
<tr>
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<td>fake</td>
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Divide the paper/board into quadrants and write the word *plastic* in the middle and write the words *synonyms*, *antonyms*, *examples*, *non-examples* at the top of each quadrant. Guide discussions around synonyms for the word plastic and fill in as a group.

Example:

- **synonyms**
  - fake
  - moldable
  - false
  - synthetic
  - superficial

- **antonyms**
  - natural
  - real

- **examples**
  - bags
  - clothing
  - computers

  - pens
  - markers

- **non-examples**
  - trees
  - plants
  - wood
  - humans
  - cotton

Once you have completed the vocabulary portion of the lesson, show the video (3:10), titled *How We Can Keep Plastics Out of Our Ocean* by National Geographic and lead a discussion with the class about any questions they may have about the video: [https://www.youtube.com/watch?v=HQTUWK7CM-Y](https://www.youtube.com/watch?v=HQTUWK7CM-Y)

Have the students write a question on a sticky note and put it on the board, to review after watching *Every Nine Minutes.*
Discussion Guide

GENERAL/OPEN PROMPTS
1. Have you ever been to the ocean? Can you describe it to a classmate using your five senses?
2. Why do you think it is important to help the ocean?

EXPLORING SELF
1. What are some ways you can reduce your own use of plastic?
2. What are some ways you can ask your family to reduce their use of plastic? What about your teachers and your school?

EXPLORING THE WORLD
1. Who do you think this film should be shown to? How can we help all people understand that it is important to reduce their use of plastic?
2. What would happen if there was no plastic?

EXPLORING FILMMAKING
1. Why do you think it was important to tell this story?
2. Why do you think the filmmaker chose to make this story?

EXPLORING SOCIAL ISSUES
1. What can you do to help your family, school and/or community be more aware of their use of plastic?

SENSE OF WONDER
1. What other sea creatures would you want to make from recycled plastic?
2. Where do you think the whale should be displayed to raise awareness about plastic pollution in the oceans?

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Activities

Grades K–2: Activity

In this activity, students will use recycled items from home and/or school to create a sea turtle and discuss a way to display the sea turtles to promote the message of recycling at their school.

MATERIALS NEEDED:

1. One for every student: 1-2 liter soda bottle with only the bottoms cut off or bottom of an egg carton cut individually or used applesauce container
2. Green or blue paint and paintbrushes or markers
3. Construction paper and/or foam sheets (preferably in green or blue)
4. Glue
5. Yarn, cut into 2-ft strips (if using soda bottles)
6. Hole-punch (if using soda bottles)
7. Newspaper or tablecloth to put on top of tables (if painting)

Directions for the craft:

1. Prep the soda bottles, egg cartons and/or applesauce containers by cutting one for each student.
2. Cut the turtle shapes out of construction paper and/or foam sheets (one for each student). Here is a pattern: https://patternuniverse.com/download/sea-turtle-pattern/
3. Give each student a soda bottle, egg carton, and/or applesauce container to paint and/or color using markers
4. Give each student a cut out of the sea turtle. If using a soda bottle, punch five holes in the outline of the shape, where the yarn (cut into 2-ft-strips) will secure the soda bottle.
5. Secure the soda bottle, egg carton and/or applesauce container to the construction paper and/or foam sheet using glue (egg carton and applesauce container) or yarn (soda bottle). If using the yarn and soda bottle, the student will thread the yarn through the holes and “sew” the soda bottle onto the foam paper/construction paper to secure.
6. Draw eyes on the head of the sea turtle.
Grades K–2: Activity 1 (cont.)

Examples of what final craft may look like:

- Applesauce container
- Soda bottle
- Egg carton

https://soeasybeinggreen-blog.com/sea-turtle-facts-kids
https://www.youtube.com/watch?v=l6lxA2wNwU
https://rainydaymum.co.uk/turtle-crafts-kids/

Once the students have created their sea turtles, think of ways that they can display them at school with a message about reducing plastic. How can they use their craft to create a positive message at school? Do they want to make a bulletin board? Do they want to create a mural in the classroom?

Pass out pieces of paper to each student to accompany their turtle, so they can write why it is important to reduce plastic use.

Example of card:

It is important to use less plastic because

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

Name ___________________________
Grades 3–6: Activity 1

MATERIALS NEEDED:
1. 8 ½ x 11 sheet of paper
2. Pencils or pens

For this activity, students will be writing a paragraph about the harmful effects of plastic on the oceans. They will combine what they learned from the pre-screening activity (either reading the article *Plastics found in stomachs of deepest sea creatures* or *If you drop plastic in the ocean, where does it end up?*) and information from Every Nine Minutes to write a paragraph about why it is important to reduce plastic use.

On the board, write the following prompt:

“Is plastic harmful to the oceans? Give three reasons and three pieces of evidence to support your claim.”

Depending upon the level of scaffolding the students you support need, it could be helpful to complete the topic and conclusion sentence as well as bulleting the supporting details and pieces of evidence.

Have the students generate the three ideas on their own or as a group.

Another option to help support student thinking, is to list the three supporting details and then re-watch the documentary and/or re-read the article looking for pieces of evidence that support each supporting detail.

Example to guide student thinking:

**TOPIC SENTENCE:** Plastics are harmful to the oceans because a lot of plastic cannot be recycled, plastics end up in the stomachs of sea creatures, and there is too much plastic to be recycled.

**SUPPORTING DETAIL 1:** plastic cannot be recycled

**EVIDENCE 1:** only 9% of plastic can be recycled (from Every Nine Minutes)

**SUPPORTING DETAIL 2:** plastics end up in the stomachs of sea creatures

**EVIDENCE 2:** Plastics were found in the stomachs of sea creatures in the deepest trenches of the ocean (from *Plastics found in stomachs of deepest sea creatures*).

**SUPPORTING DETAIL 3:** there is too much plastic to be recycled

**EVIDENCE 3:** It is estimated that between four and 12 million metric tons of plastic makes its way into the ocean each year (from *If you drop plastic in the ocean, where does it end up?*).

**CONCLUSION SENTENCE:** Plastics are harmful to the oceans because the majority of plastic cannot be recycled, is harmful to sea creatures, and there is too much plastic waste to recycle.
Prompt: Is plastic harmful to the oceans? Give three reasons and three pieces of evidence to support your claim.

**Topic Sentence** (use words from the prompt)

**Supporting Detail 1** (use transition word)

**Elaborate** (evidence, examples, quote, explanation)

**Supporting Detail 2** (use transition word)

**Elaborate** (evidence, examples, quote, explanation)

**Supporting Detail 3** (use transition word)

**Elaborate** (evidence, examples, quote, explanation)

**Conclusion Sentence** (restate topic sentence and include three supports)
Grades 3–6: Activity 2

MATERIALS NEEDED:
1. Glue
2. Markers or colored pencils
3. Seahorse photo (see below)

For this activity, students will be given a photo (below) and asked to create a poster to raise awareness surrounding plastic pollution in the oceans. Photo can be found at: https://www.montereybayaquarium.org/conservation-and-science/our-priorities/ocean-plastic-pollution

Ask students to generate a list of facts from the article and/or video in the pre-screening activities that they could use on their poster.

Students will be asked to combine at least one fact and image (above) to create a poster to help raise awareness and inspire others to reduce the use of plastic.

When students are done, ask them to share with a partner and/or the class. Discuss ways to share around the school to inspire other students to reduce their use of plastic as well.

Examples to guide student thinking:
- Only 9% of discarded plastic gets recycled.
- The weight of a blue whale ends up the ocean every nine minutes.
- A normal plastic bottle takes 450 years to break down completely.
- It is predicted that by 2050, the amount of plastic in the oceans will outweigh the number of fish.
- Scientists found plastic in over 83% of global tap water samples.
- 330 million tons of plastic litter the oceans.
- Nine million tons of plastic enter our oceans every year.
As a class, see if you can come up with a pledge to reduce your use of plastic. Can your class take the pledge to use an old backpack instead of buying a new one? Can the students make a pledge to use only containers for their lunches instead of plastic bags? See if you can track the progress on a graph, or see if everyone can pledge to use no “new” plastic for one day a week (with parent buy-in and education as well).

The Monterey Bay Aquarium has a great article titled, *Ocean Plastic Pollution*, which outlines “What you can do” to help create a plastic-free ocean. Have students review and see which one they would like to work on as a class: [https://www.montereybayaquarium.org/conservation-and-science/our-priorities/ocean-plastic-pollution](https://www.montereybayaquarium.org/conservation-and-science/our-priorities/ocean-plastic-pollution)

**REFERENCES**


