

**Subject:** TAG

**Grade:** K-1-2

Note: TAG instruction occurs one day a week for each student. These plans are meant to replace the time that would be spent on core learning activities (reading, ELA/writing, math social studies/science) for that one day each week. Students should still complete activities for specials classes (art, music, PE) on their TAG day.

**WEEK 9**

|                   |   |
|-------------------|---|
| Standards         | <p><b>S2E3.</b> Obtain, evaluate, and communicate information about how weather, plants, animals, and humans cause changes to the environment.</p> <p>a. Ask questions to obtain information about major changes to the environment in your community.</p> <p>b. Construct an explanation of the causes and effects of a change to the environment in your community.</p> <p><b>TAG Creative Thinking &amp; Creative Problem-Solving Skills Standard:</b></p> <p>Gifted students will develop and practice creative thinking and creative problem-solving skills with a variety of complex topics within an area of study in order to generate original ideas and products.</p> <p>3. Incorporates brainstorming and other idea-generating techniques (synectics, SCAMPER, etc.) to solve problems or create new products.</p> <p>4. Demonstrates skills in fluency and flexibility to solve problems or create new products.</p> <p>5. Develops original ideas, presentations, or products through synthesis and evaluation.</p> |
| Brief Description | <p>Students will learn about plastic pollution in oceans and its effects on animals and plant life. They will use their creative problem-solving skills to brainstorm ways to reduce ocean pollution. Then they will choose one idea and create a plan to reduce pollution, students can choose the way they demonstrate their idea (poster, model, diagram, PowerPoint, newspaper article etc.)</p>  |

**Student Directions:**

1. Complete the Creative Thinking Warm-Up.
2. Read the Background Information on ocean pollution.
3. Complete the Brainstorm activity and Pollution project.
4. If possible, ask your parents to take a picture of your work with their phone and e-mail it to your TAG teacher.

## Creative Thinking Warm-Up: It's not a Lightning Bolt

Complete the picture adding as much detail as possible. What could it be? Remember, it's not a lightning bolt. Remember to be original and try to think of something no one else will think of!



## **BACKGROUND INFORMATION**



Sea turtles often mistake plastic bags for jellyfish.

PHOTOGRAPH BY SERGI GARCIA FERNANDEZ, BIOSPHOTO, MINDEN PICTURES

### **KIDS VS. PLASTIC**

## **Plastic Pollution**

What's the problem?

BY ALLYSON SHAW

A sea turtle swims through the water and spots a white blob floating near the surface. “Yum!” it thinks. “A jellyfish!” Chasing after its dinner, the turtle swallows the item. But the floating blob isn’t a jelly—it’s a plastic

bag that could make the sea turtle sick. This sea creature isn’t alone: Over 700 species of marine animals have been reported to have eaten or been entangled in plastic.

Scientists think that the amount of plastic in the ocean might triple by 2050—and that would mean seriously bad news for the ocean and the creatures that live there. But by understanding the issue and taking action, you can help stop that from happening.



PHOTOGRAPH BY APOMARES, GETTY IMAGES

### **What's the problem with plastic?**

First, let’s get real: Not all plastic is bad. Bike helmets, car airbags, and many medical supplies made with plastic save lives. Plastic water bottles can bring clean drinking water to people who don’t have it, and plastic straws can help people with disabilities drink.

The problem is that most of us use and then toss way more plastic than we need: things like grocery bags, drink bottles, straws, food wrappers, and plastic packaging around toys. This kind of plastic that’s used only once before being thrown away is called single-use plastic, and it makes up more than 40 percent of all plastic trash.

### **Where does the plastic go?**

That’s *a lot* of trash. Scientists think that 8.8 million tons of plastic winds up in the ocean every year—that’s as if you stacked up five plastic grocery bags full of trash on top of each other on every foot of coastline in the world.

### **How does it get into the sea?**

Plastic left on the ground as litter often blows into creeks and rivers, eventually ending up in the ocean. And because plastic trash is different from other types of waste—it doesn’t decompose back into nature like an apple core or a piece of paper—it stays in the ocean forever. That means discarded fishing nets and six-pack rings can entangle animals; harmful straws and grocery bags can be mistaken as food.

<https://kids.nationalgeographic.com/explore/nature/kids-vs-plastic/pollution.html>

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## **Ocean Pollution Project Checklist**

*Choose 1 idea, or combine multiple ideas from your brainstorming, and design a plan to reduce ocean pollution.*

**Project options:** Poster, 3-D Model, Labeled Diagram, PowerPoint, Write a newspaper article, *if you have an idea not listed...go for it! As long as you meet the checklist ideas*

### **Checklist:**

\_\_\_\_\_ I brainstormed many ideas before working choosing one for my project

\_\_\_\_\_ My project is well organized

\_\_\_\_\_ My project explains how it will solve/reduce ocean pollution with detail

\_\_\_\_\_ My project is creative and uses original ideas to solve the problem

### **Challenge Option**

\_\_\_\_\_ Record a video presentation of your idea and project to send to your teacher, your video should convince your teacher that your idea is the best way to handle ocean pollution