Environmental Science

Lesson: April 9, 2020

Learning Target:

Students will recognize plastic pollution and the impact they can have on reducing it.

Let’s Get Started:

Consider all of the items made from (or packaged in) plastic. On your own paper, make a list of all the plastic items you use daily.

Jump start answer key:

1. Plastic items can include:
    a. Milk jug
    b. Food wrapper
    c. Toothbrush
    d. Headphones
    e. Window blinds
    f. Shampoo bottle
    g. Soap bottle
    h. etc.

Lesson Activity:

Directions:

Watch the video about plastic. While watching the video use your previous response list and:

1. make note of any plastics products you use but didn't think to put on your list.

2. Make a notation next to any plastic product that would be considered a "single use" plastic.

Watch Video Here: Video

After watching the video, review your list of plastic products that you use. Go through your home and see if you missed anything.

Application/practice:

1. How much of the plastics that you use do you recycle? (1 out of 10 times, 8 out of 10 times?)
2. How much of the plastic you use could be eliminated by substituting it with something else? (ex: replace plastic bags with reusable shopping bags)
3. The USA population is approximately 330 million people. If every person in the country committed to eliminating that same amount of plastic, how much would be kept out of the environment?

Answer key.

1. Answers will vary.

2. Answers will vary.

3. Answers will vary, but the formula used to find the answer is: the answer from number 1 times 330,000,000

Continued Practice:
As you have explored how plastic works and can affect humans, you will explore through this video on Microplastics . As the video progresses, you will need to answer the following on your sheet of paper:

1. How small are microplastics?
2. How are they made?
3. How do microplastics harm the food chain?
4. Why can’t we simply stop using plastics?
5. How can we address the plastic problem?

Answer key.

1. Microplastics are less than 5 mm.
2. Usually are created when plastics are exposed to UV rays and crumble into small pieces.
3. Microplastics harm the food chain by starving animals and fish, and also collecting in the bodies of organisms that are eaten by humans.
4. We simply cannot stop using plastics because some of the alternative methods are too expensive, use more water, and can be worse on the environment.
5. We can address the plastic problem by pressuring companies to choose alternatives, and also by our own consumption choices.

Additional Practice

If you need to review over the concepts again of how plastics affects humans and the environment here are other video resources:

How does plastics we use change the world around us

How can humans come up with alternatives to plastics?