

# The Plastic Cycle

## Activity - Worksheet

### Learning Outcomes

- Explore the reason for having multiple waste management bins, and what can go in the garbage versus the recycling
- Explain what the plastic cycle is and why it is important to be aware of
- Explain what can be done to reduce the negative impacts of plastic in our environment

### New Terms

As you work through this activity, write down any words that are new to you! Take a minute to look up what each word means, and write the definition in your own words.

*Example:*

*Oceanography - study of oceans. Includes physical (how they move, energy), chemical (what they're made of), and biological (living parts).*

Using the infographic, please sort the following phrases into the proper order, to reveal the story. Begin with Story 1, then do the same for Story 2. Using the numbers 1-9, write the appropriate number to the left of the phrase.

For example, "The plastic water bottle is produced from fossil fuels" is the beginning of the water bottle's life cycle. You would write a number "1" in the space to the left, as shown below.

### **Story 1: The Life of a Plastic Water Bottle- On Land**

\_\_\_\_\_ The microplastics land into the groundwater

\_\_\_\_\_ The plastic water bottle breaks down into smaller pieces called microplastics

\_\_\_\_\_ The plastic water bottle is used

1 \_\_\_\_\_ The plastic water bottle is produced from fossil fuels

\_\_\_\_\_ When it rains, the microplastics from the atmosphere are carried down to the land

\_\_\_\_\_ Groundwater is used for drinking and farming

\_\_\_\_\_ The microplastics are ingested by animals (by eating or drinking) and can get into the soil and plants

\_\_\_\_\_ These microplastics from the water bottle are taken by wind into the air

\_\_\_\_\_ The plastic water bottle is littered onto the ground or thrown out as waste instead of being recycled

## **Story 2: The Life of a Plastic Water Bottle- In Water**

\_\_\_\_\_ *These microplastics from the water bottle are taken into the air by the wind*

\_\_\_\_\_ *The plastic water bottle is used*

\_\_\_\_\_ *When it rains, the microplastics from the atmosphere are carried down to a river. The river takes the microplastics into a lake*

\_\_\_\_\_ *The plastic water bottle breaks down into smaller pieces called microplastics*

\_\_\_\_\_ *Bears, birds and humans eat the fish, containing the toxins of the microplastics*

\_\_\_\_\_ *The plastic water bottle is littered onto the ground or thrown out as waste instead of being recycled*

\_\_\_\_\_ *Zooplankton in the lake eat the microplastics*

1 \_\_\_\_\_ *The plastic water bottle is produced from fossil fuels*

\_\_\_\_\_ *A larger fish eats the zooplankton*

**Use the template on the next page to create your own comic strip! Demonstrate how you can reduce plastic waste, or how we can work together as a community to reduce the negative environmental impacts of plastic waste.**

**Include captions, colour, and be creative!**

