

# PAPER OR PLASTIC CHAIN CHALLENGE!

*Grades 1 to 8 – Class, School*

## Plastic pollution is a big problem!

### MATERIALS NEEDED:

- ▶ Glue and/or string
- ▶ Construction paper
- ▶ Pencils/pens/markers
- ▶ Collection of single-use plastic items (e.g. food wrappers, water bottles, etc.)

Plastic waste threatens lake and ocean health, food safety and quality, human health, and contributes to climate change. Plastic also takes many years (sometimes hundreds!) to decompose. Wild animals are often affected by it, either through accidentally consuming pieces of plastic, or by getting legs, wings, beaks or other body parts stuck in plastic litter. Because plastic doesn't break down easily, if a wild animal has ingested or is caught up in plastic items, it is very difficult for them to survive.

All kinds of plastics are piling up in landfills - by 2050, the amount of plastic waste could reach 13 billion tons worldwide. And although items can be recycled, about 86% of plastics in Canada end up in landfill.

The choices we make can have a huge impact on the amount of plastic waste we produce.

### ACTIVITY:

#### The Paper or Plastic Chain Challenge aims to:

- ▶ Raise awareness of how much single-use waste is consumed on a daily basis within a class or school environment
- ▶ Encourage educators and learners to make choices that reduce consumption of plastics and other non-biodegradable items

#### Steps:

- ▶ Determine which day(s) the activity will run (e.g. every Monday for a month, Monday to Friday for one week, first Tuesday of the month for the school year, etc.)
- ▶ On selected days, collect cleaned single-use plastic and non-biodegradable items from students in the class that they typically use on a daily basis (e.g. sandwich bags, disposable forks, granola wrappers, take out cups, etc.); this can be done on a daily, weekly, or monthly basis depending on how long you want to carry out the activity
- ▶ This activity will require the class to make 2 chains – one of plastic/non-biodegradable items, and one from paper
- ▶ Select area where the chains will be displayed (e.g. hallway corridor, classroom, etc.)

- ▶ **CHAIN 1:** Create a chain of all collected plastic and non-biodegradable items (to demonstrate the diversity of plastics/materials, as well as volume) using glue and/or string (or staple to corkboard or other display area); discuss how these items cannot biodegrade easily and will stay in the environment for decades or even centuries (compared to biodegradable items such as food which cycle back to the Earth quickly) and the implications of such items in the environment long-term; discuss how to make choices that are less harmful to the environment
- ▶ **CHAIN 2:** Encourage students to look for and begin using eco-friendly versions of the item instead; each time a student uses a reusable or biodegradable item instead of a plastic or non-biodegradable item, create a new paper link (e.g. one paper link for using a reusable metal fork instead of a disposable plastic fork, one paper link for using a reusable cloth bag instead of a plastic bag for snacks, etc.)
- ▶ Students can write the change that they made on a new paper link – they may continue adding paper links to the chain for each time they make an eco-conscious choice
- ▶ Continue the activity as long as desired and compare the two chains – is the paper chain getting longer more quickly? What changes still need to be made to shorten the plastic chain and lengthen the paper chain?
- ▶ **Want to go further?** Challenge students to think about non-biodegradable items in their household – what plastic items go to landfill that can be replaced with more eco-friendly options (e.g. laundry detergent bottle, toothpaste tubes)? Ask students to research alternatives.

**Each paper link in the chain represents a small change that adds up to big results!**



This striped skunk underwent surgery at Toronto Wildlife Centre to remove a plastic cup lid that was tightly stuck on his neck. Many wild animals are admitted each year because of plastic garbage.