

STEAM Festival

For Young Learners

An UNTAME Event



Planet Protector



Organised by



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Science Centre Singapore

PLASTIC BOTTLE PENCIL CASE

Synopsis

Plastic waste that is not properly disposed of can end up in our rivers, seas and oceans. Millions of birds, fishes and other marine animals are killed due to plastic pollution each year. Let us do our part to reduce plastic waste and turn it into useful products!



Learning Objectives

1. Understand the negative impact of plastic waste on animals
2. Learn ways to reduce plastic waste

Materials Needed



Adult supervision is required for this activity



2 Plastic bottles of the same size (labels removed)



Zipper



Super glue OR Glue gun



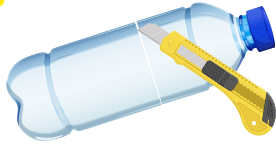
Scissors



Penknife

Instructions

1



Cut away the top part of a plastic bottle.

2



Cut away about $\frac{3}{4}$ of another plastic bottle.

3



Flip to the underside of the zipper and apply glue to one side of the zipper.

4



Attach the zipper to the bottom part of one bottle.

5



Unzip the zipper and apply glue to the other side of the zipper.

6



Attach the zipper to the bottom part of the other plastic bottle.

7



Zip up and your pencilcase is ready for use!

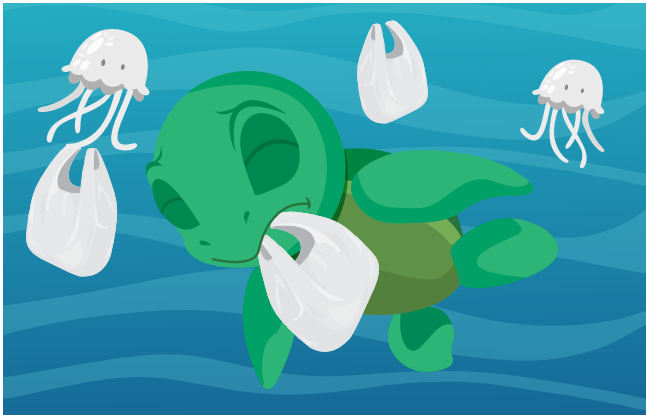
Science Facts

Why should we reduce plastic waste?

Large amounts of plastic waste enters the ocean each year due to irresponsible littering and industrial leakage. Plastic waste can also be swept into the ocean by rain or wind. These plastic items take a few hundred years to degrade in the ocean. If these plastics continue to stay in the ocean, it will cause harm to animals in the following ways:

Starvation

Animals that eat plastic die of starvation as the plastic items take up space in their stomach



Entanglement

Animals entangled by plastic items can die of breathing difficulty, starvation, drowning or wound infection



What can we do?

REDUCE

Reduce plastic product usage. Use these!



REUSE

Reuse plastic materials (e.g. soap bottle) and avoid using single-use items



RECYCLE

Place recyclable items into recycling bin



Guiding Questions

1

What are the different kinds of plastic products around you?

2

What happens if the plastic waste gets into the ocean?

3

Besides plastic, what other kinds of materials can be recycled?

4

How can we help to improve plastic pollution?

FIND OUT MORE!

Visit KidsSTOP™'s Planet Warrior exhibit and take part in saving the environment!



SCIENCE AT HOME



Set up a recycling corner at home for collecting recyclable items. Think of how to re-purpose these recyclable items before bringing them to the recycling bin!



SMALL GROUP LEARNING



Reinforce the idea of recycling and extend it to other types of materials. Set up 3 recycling bins for different materials and ask children to place objects into the correct bin. Inform the children that they should wash and dry their recyclables before putting them into the bins.

