A WORLD OF PLASTIC

We use plastics everyday in everything from toys, to the packaging of our food, to wire insulation, to clothing and fashionable baubles. Many plastic products are designed for one time use such as plastic eating utensils or water bottles. Since plastics are considered cheap to produce most plastic products are thrown away and replaced by another plastic product. But...

Do you know the real costs of plastic?

Lifecycle of a plastic product:

Natural gas and petroleum are harvested from the earth and refined in order to form polymers, the basic building blocks of plastic.

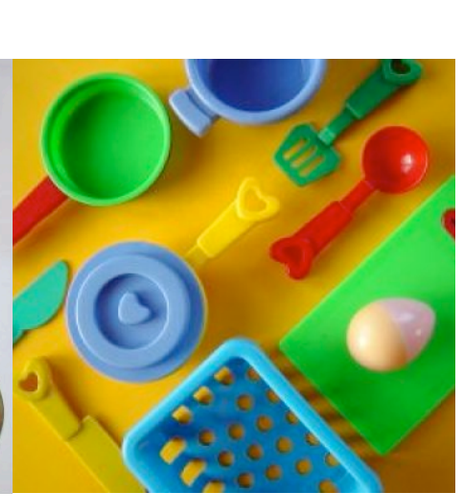
Additives are added to the plastic to give it the desired qualities (i.e. to make it easier to mold, stronger, give it color, etc.)

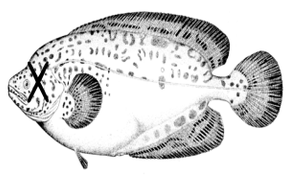
+ CH_4

(methane)

Some of the unintentional byproducts of this process are toxic emissions from the refining and manufacturing processes.

The plastic is then cooled and cut into little pieces called "nurdles" and shipped to various facilities to become plastic products.





Nurdles spilled along the way can end up in the waterways and oceans where animals mistake them for food.

What happens after a plastic product has outlived its usefulness?

Food or Fake?

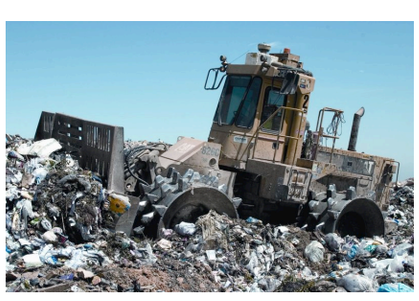
Look closely at these two images. One is of a jellyfish and the other is a deadly look-alike.

To a hungry sea turtle the plastic bag can look like a tasty jellyfish. Plastic waste can look like food to many marine animals. The animals may choke on the items or the harmful chemicals contained within the plastic may leach into their bodies. Ingestion of plastic can also trick the animal into feeling "full." In these cases the animal starves to death.

Hundreds of thousands of marine animals die every year from plastic ingestion.

PLASTIC LASTS FOREVER!

Plastic does not biodegrade. Instead it photodegrades, that is it breaks apart into smaller fragments from exposure to UV light. The options for a discarded plastic product are:



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1) Not all plastics are recyclable and they end up in the landfill—forever!

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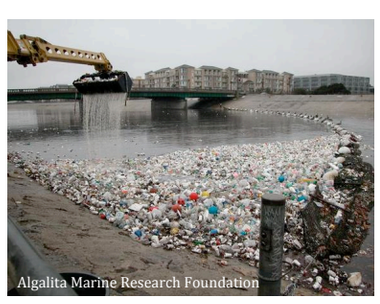
2) Recycling allows it a second life, but it is typically "downcycled" into different products which may not be recyclable. The process often has toxic byproducts and is very energy intensive.



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3) Litter ends up in stormdrains, waterways, and eventually the ocean. Accumulations of plastic refuse have become large floating islands of plastic in the oceans.

Freedom from plastic:

1) Don't use plastic bags. Instead use a reusable bag when you go shopping.

2) Be conscious of your purchases. Avoid products that have excess packaging.

3) Avoid Styrofoam and plastic to-go containers.

4) Use a refillable water bottle.

5) … and much more!

Can you think of ways to cut down on plastic?

Design by: Jade Nguyen, 2009