

# THE FACTS ABOUT PLASTIC



## WHAT IS PLASTIC?

- **Plastic** is a material created by humans.

*Question: what are some examples of things you use made of plastic?*

## SINGLE-USE PLASTICS




- **Single-use plastics** are made to be used 1 time then thrown away.

*Question: Where do you normally put plastic once you are done with it?*

- Most plastic that has ever been made still sits in **landfills**.

## PLASTIC IN THE OCEAN



- By 2050 there will be more plastic in the oceans than there are fish!
- Animals are now living in the **Great Pacific Garbage Patch**  meaning that they are consuming the plastic **waste**.

## *Glossary*

**Landfill:** A designated area for the disposal of solid **trash** or **waste**, often buried under layers of soil.

**Great Pacific Garbage Patch:** A large area of floating plastic Pacific Ocean

**Plastic:** A s material made from *polymers*, a strong material.

**Single-Use Plastic:** Plastic items designed for a single use before being thrown away such as bags, straws, and bottles.

**Waste:** Unwanted or discarded materials, also known as trash

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## History of Plastic

- Plastic is a material created by in New York in **1907**.
- Belgian-American chemist *Leo Baekeland* created **Bakelite**, the first **plastic**.

## Plastic Waste

- More than 8.3 billion metric tons (9.1 billion US tons) of non-recycled plastic has been produced to date.
- Plastics are **non biodegradable**. This means that the materials used for plastic production are **oil** and **natural gas**.
- When plastics end up in landfills, they aren't harmless. They break down into tiny toxic particles that contaminate the soil and waterways called **microplastics**.

## Plastic in the Ocean

- At least **14 million tons of plastic** end up in our **oceans** every year.
- Microplastics in different forms are present in almost all water systems in the world, be they streams, rivers, lakes, or oceans.
- There is more microplastic in the ocean than there are stars in the Milky Way.

# THE FACTS ABOUT: PLASTIC

## *Glossary*

**Landfill:** A designated area for the disposal of solid **waste**, often buried under layers of soil.

**Great Pacific Garbage Patch:** A large area of floating plastic debris in the North Pacific Ocean, primarily composed of **microplastics**.

**Plastic:** A synthetic material made from *polymers*, known for its durability and versatility.

**Single-Use Plastic:** Plastic items designed for a single use before being discarded, such as bags, straws, and bottles.

**Waste:** Unwanted or discarded materials, often generated from human activities.

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## History of Plastic

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- Belgian-American chemist *Leo Baekeland* created **Bakelite**, the first **plastic**.

## Plastic Waste

- More than 8.3 billion metric tons (9.1 billion US tons) of virgin (non-recycled) plastic has been produced to date.
- Plastics are **non biodegradable**. This means that the materials used for plastic production are **oil** and **natural gas**.
- When plastics end up in landfills, they aren't harmless. They break down into tiny toxic particles that contaminate the soil and waterways called **microplastics**.

## Plastic and Health

- **Bisphenol A** also known as **BPA**, used to make billions of plastic beverage containers, dinnerware, protective linings of food cans and toys, is considered an **endocrine disruptor**, meaning it can both decrease or increase endocrine activity in humans and cause adverse health effects.
- BPA is able to be absorbed by fat tissue, and is associated with increased risk of breast cancer.

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- There is more microplastic in the ocean than there are stars in the Milky Way.
- In 2018, a huge survey of the **159** coral reefs across Asia-Pacific region showed that over **11.1 billion plastic particles** are entangling the corals.

### *Additional Resources:*



***Video on the Great Pacific Garbage Patch***



***Article on Amount of Fish and Plastics in our Oceans***



***Article on Plastic Pollution***