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# 1.6 Billion Disposable Masks Entered Our Oceans in 2020



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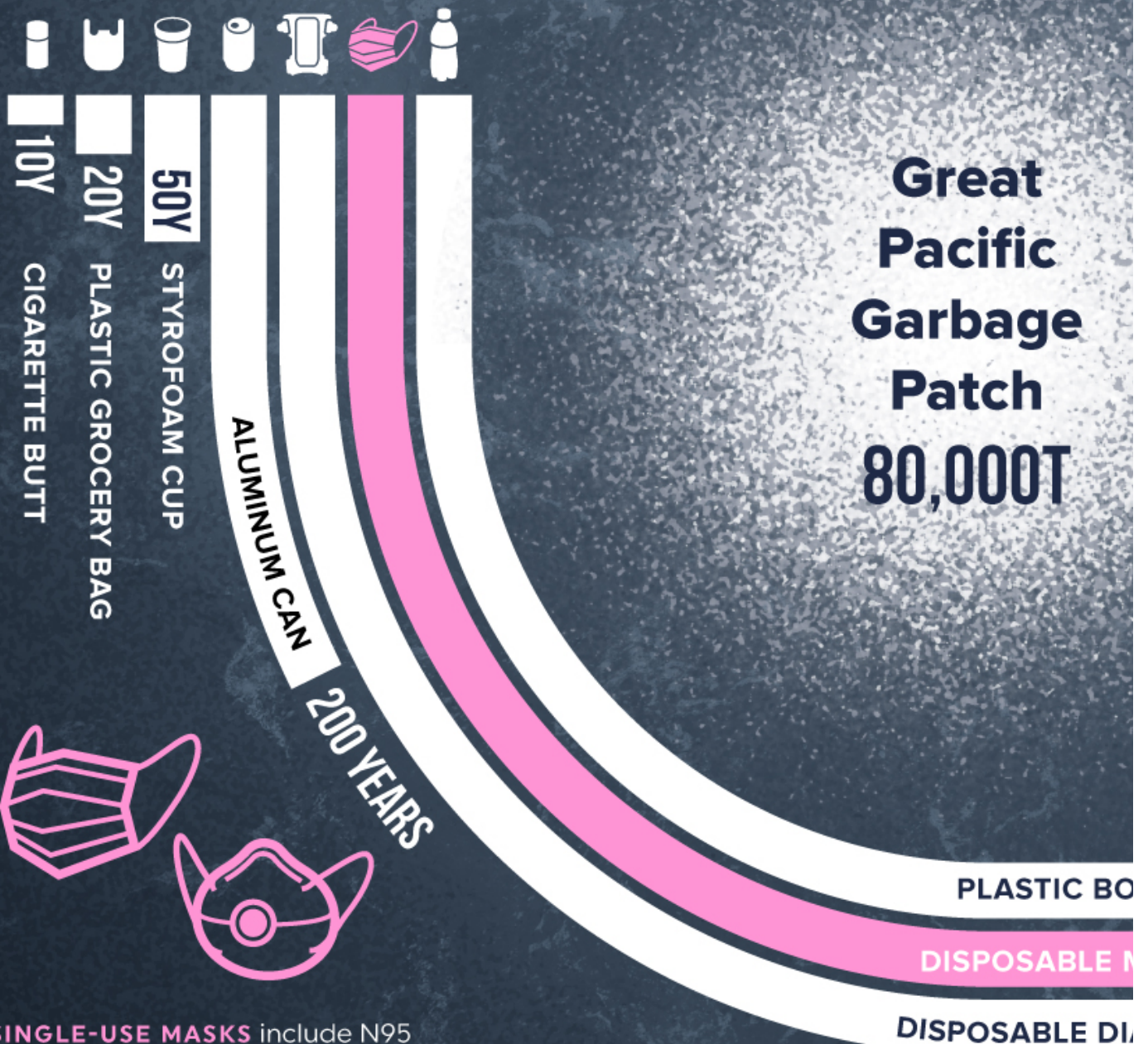
# DISPOSABLE MASKS

## A new pollution threat

In response to government mandates, the world's factories produced 52 billion disposable face masks in 2020. It's estimated that **1.6 BILLION** of them ended up in our oceans.

Here's how long they'll take to biodegrade.

Mask pollution from 2020 is equal to 7% of the Great Pacific Garbage Patch, a mass of plastic debris that floats in the Pacific Ocean.



**SINGLE-USE MASKS** include N95 respirators and surgical masks.

Source: Statista, Ocean Conservancy

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## The Briefing

- 52 billion disposable face masks were produced in 2020 (this includes N95 respirators and surgical masks)
- It's estimated that 1.6 billion of these masks ended up in our oceans
- This equates to roughly 5,500 tons of plastic pollution

## Demand for Disposable Masks Skyrockets in 2020

Following the World Health Organization's formal declaration of the COVID-19 pandemic, governments around the world quickly mandated the use of face masks in public spaces.

This led to a massive demand shock, prompting factories to begin producing disposable masks at full capacity. The majority of these masks were produced in China, and in April 2020, the country reported a staggering **daily production** figure of **450 million** masks.

## Plastic Pollution: A Lesser Known Side Effect

In Ocean Asia's 2020 report, **Masks on the Beach**, researchers developed a formula to provide reasonable estimates for the number of disposable masks entering the environment.

Given an annual production figure of **52 billion** disposable masks and a loss rate of **3%** (the percentage of masks that escape water management systems), the team concluded that nearly **1.6 billion** face masks wound up in our oceans in 2020. This amounts to approximately **5,500 tons** of plastic pollution.

These masks are commonly made of **polypropylene**, which easily breaks up into microplastics. While the effects of microplastics on human health are not yet determined, these fragments are incredibly common in our water supply—for example, **94% of U.S. tap water** is deemed to be contaminated.

## Disposable Doesn't Mean They're Gone

Despite their single-use nature, disposable masks are expected to take more than **four centuries** to decompose while in the ocean. Here's how this compares to other items we use on a day-to-day basis.

Item	Years Needed to Biodegrade
Disposable masks	450
Disposable diaper	450
Plastic bottle	450
Aluminum can	200
Styrofoam cup	50
Plastic grocery bag	20
Cigarette butt	10

The pandemic has extended well into 2021, and the number of disposable masks polluting our oceans is likely to continue growing.

With this in mind, various companies and organizations are beginning to search for a solution. One noteworthy example is **Plaxtil**, which is **developing a method** for recycling surgical masks so that the raw materials can be used for other products.

»Like this? Then you might enjoy this infographic on the *flow of plastic waste*.

### Where does this data come from?

**Source:** Oceans Asia, Statista, Plastic Collectors

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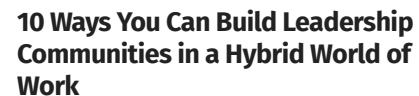
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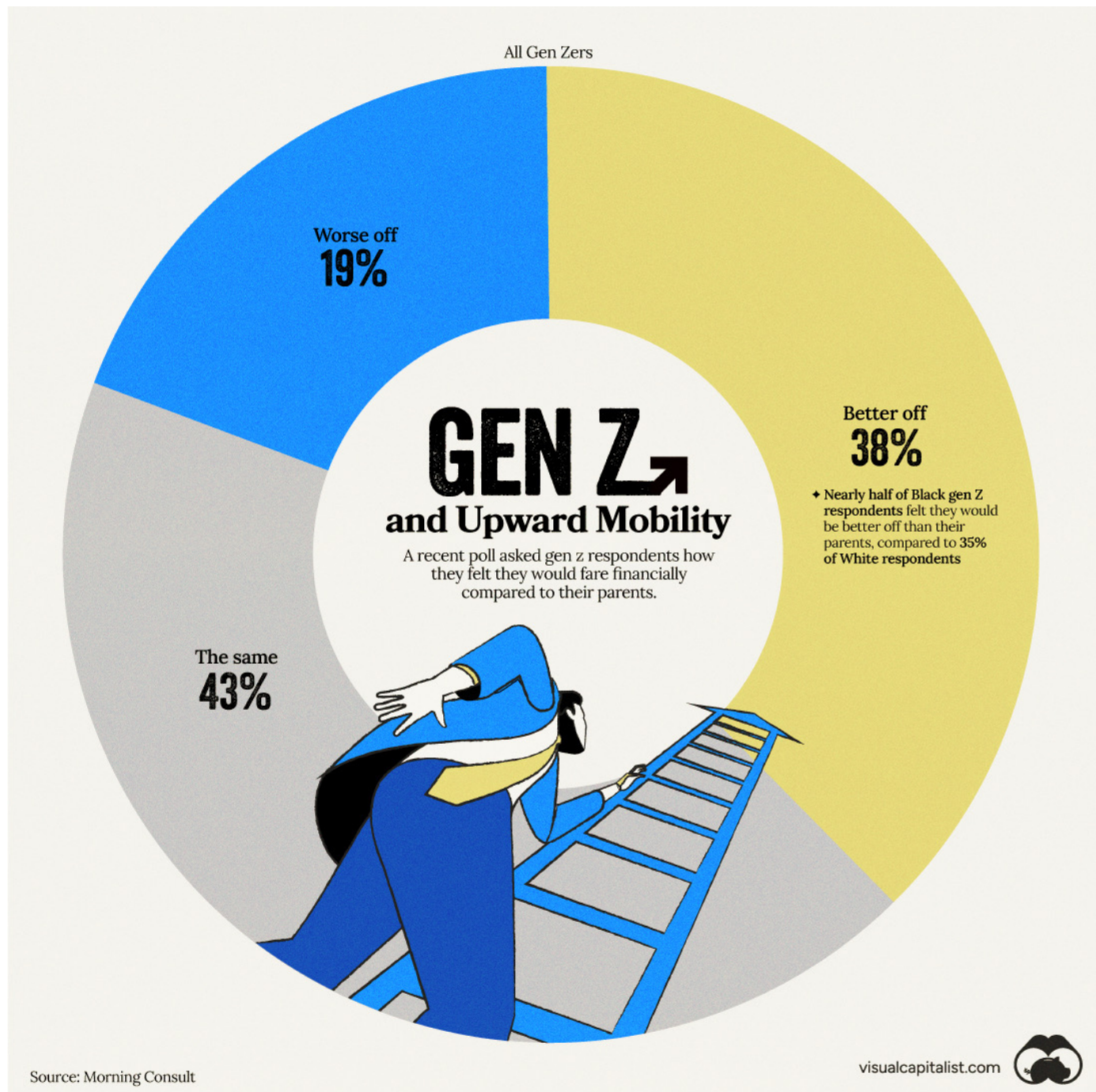
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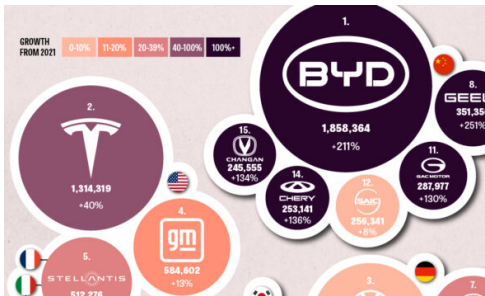
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- Gen Zers have a more positive outlook on their financial well-being than their millennial or Gen X peers

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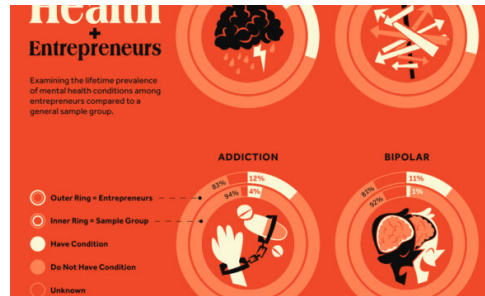
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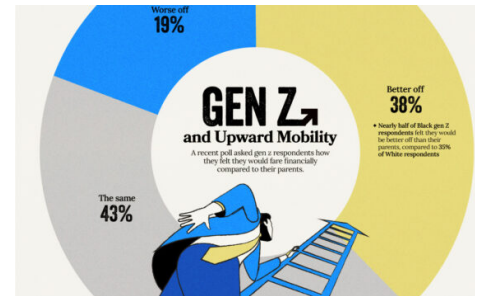
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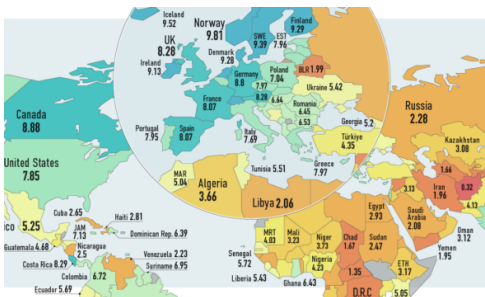
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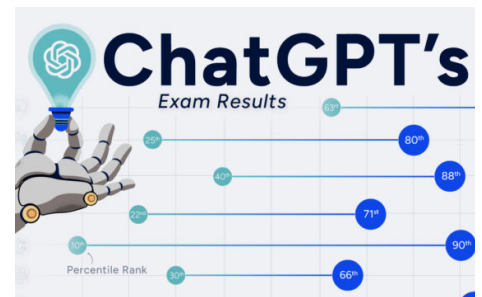
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