

READING AND SPEAKING

Our plastic planet

- 1 The article you are going to read talks about *'the infinite number of plastic products that fill our lives.'*

In groups, make a list of all the plastic products you use in a typical day.

Share your list with the whole class.

- 2 Here are some more lines from the article. What do you think they are talking about?

I realised the sandy beach was being transformed into a plastic beach.

Twice the size of France, the Garbage Patch is like a plastic soup in the sea.

They are being gobbled up by small fish, which in turn are eaten by larger fish – which in turn are eaten by us.

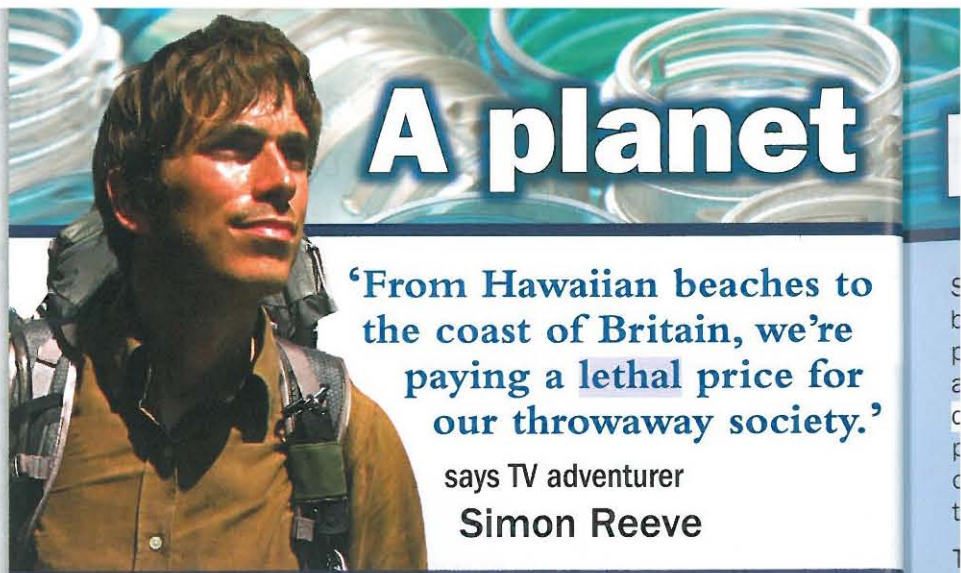
We need to spurn and reject the main culprits.

- 3 Read through the article quickly. Answer the questions.

- 1 Who is Simon Reeve?
- 2 Which products from your list in exercise 1 are mentioned?
- 3 Which of your ideas about the lines in exercise 2 were correct? Which were not?
- 4 Which places in the world are mentioned?
- 5 What are 'nurdles'?

- 4 Read the article again. Are these statements true (✓) or false (X)? Correct the false ones.

- 1 Hawaii is protected from rubbish because of its position in the Pacific Ocean.
- 2 Volunteers clear the nurdles from the beaches.
- 3 The sea makes the nurdles smaller and smaller.
- 4 600,000 tons of plastic rubbish is polluting our seas.
- 5 Factories are reducing the amount of plastics they produce.
- 6 There are three major ways that plastic is ruining our planet.
- 7 Most of the plastic garbage is made up of plastic bags, bottles and packaging.
- 8 Bangladesh and Modbury have something in common.



A planet

'From Hawaiian beaches to the coast of Britain, we're paying a lethal price for our throwaway society.'

says TV adventurer
Simon Reeve

Hawaii is generally considered to be the one place in the world where you should be able to guarantee finding paradise. The beautiful tropical islands have been used as the setting for countless TV series and films, ranging from *Lost* to *Jurassic Park*. Isolated in the middle of the vast Pacific Ocean, distance alone should protect Hawaii's spectacular landscapes and turquoise sea from the environmental problems facing the rest of the planet.

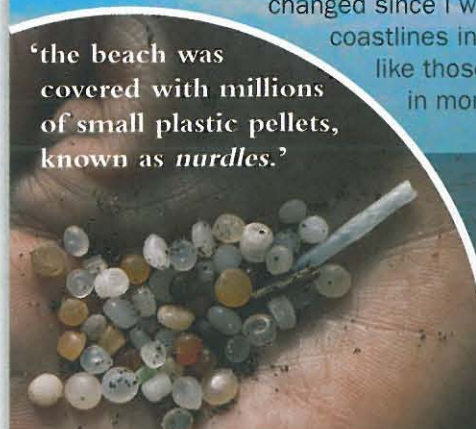
So when I arrived in Hawaii, I was **staggered** to discover beaches covered in plastic rubbish washed up from around the world. **Pristine** sand was covered by old plastic toothbrushes, combs, shoes, belts and mouldings. Sam Gon, a Hawaiian conservationist, took me to one beach where 70 local volunteers were doing their best to remove tons of garbage. But as soon as it was cleaned, the waves **dumped** another mountain of rubbish.

The larger pieces of waste can be collected by hand. But when Sam and I dropped to our knees, I could see the surface of the beach was covered with millions of small plastic pellets, known as *'nurdles'*. These are the raw material that factories use to form the infinite number of plastic products that fill our lives. These are dumped out of factories into our seas in their trillions.

Yet the big shock came when Sam told me to dig into the sand. Plastic doesn't biodegrade. Instead it breaks down into ever smaller pieces. Among the grains of sand were billions of tiny plastic **flecks**, which the pounding of the sea was reducing in size. As I dug through the plastic, I realised the sandy beach was being transformed into a plastic beach. A chill went down my spine.

From the beaches of Hawaii to the seas around Britain, we are **soiling** our own nest. It was a shock to realise how much British beaches have changed since I was a child playing on beautiful coastlines in Dorset and south Wales. Just like those in Hawaii, they are now covered in more litter than ever before.

'the beach was covered with millions of small plastic pellets, known as *nurdles*.'



poisoned by plastic



Since 1994, plastic litter has increased by an extraordinary 121 per cent. The plastic we see on our beaches is just a fraction of the plastic waste that is clogging our oceans. Incredibly all the plastic ever created – totalling hundreds of millions of tons – is still out there in the environment in some form.

There are an estimated 600,000 plastic containers dumped overboard by ships every single day. In total, at least 100 million tons of plastic rubbish is thought to be sloshing around in our seas. The scale of the problem is extraordinary. The beaches I visited in Hawaii are being swamped by rubbish from the Great Pacific Garbage Patch, a vast accumulation of the world's plastic debris floating in the Pacific Ocean. Twice the size of France, the Garbage Patch is like a plastic soup in the sea and is doubling in size each decade.

And it is not alone. Scientists believe that sea currents have created five vast swirling garbage patches in our oceans, including a huge one in the North Atlantic with up to 520,000 bits of rubbish per square mile. This is an international scandal and a global problem, for which we are all responsible.

‘Factories produced more plastic in the first decade of this 21st century than in the entire 20th century.’

From bicycle helmets to food packaging, from water bottles to toothbrushes, plastic makes our lives easier. But its production and use is completely out of control. ‘Factories produced more plastic in the first decade of this 21st century than in the entire 20th century.’

Because tiny fragments of plastic in our oceans are so small and look like food, they are being gobbled up by small fish, which in turn are eaten by larger fish – which in turn are eaten by us.

So plastic is ruining our beaches, choking the oceans, and poisoning our food chain. The consequences are still not fully understood, but they are likely to be devastating. We need to spurn and reject the main culprits: plastic bags, packaging and single-use water bottles, a wasteful obscenity. These make up the bulk of plastic garbage.

In Bangladesh, they have done away with plastic bags and replaced them with natural jute bags. If they can do it, so can we. England has recently joined the growing number of countries which impose a tax on plastic bags, and the small town of Modbury in Devon has banned them completely.

At stake is the future of beaches, our seas, and the food chain. It is nothing short of an environmental emergency.

What do you think?

- Give your personal reactions to the text. Use these phrases.

I didn't know/I already knew that ...
 What surprised me was ...
 It's incredible that ...
 It's a shame that ...
 I wonder what can be done to ...

- Do you believe plastic is causing ‘an environmental emergency’?
- Are there other things that are more harmful to the environment than plastic? What?

Vocabulary work

- 1 How many words meaning ‘rubbish’ can you find in the article?
- 2 Discuss the meaning of the highlighted words.
- 3 Match the words in A and B. What are the contexts?

A	B
1 turquoise	a number
2 infinite	b water bottles
3 grains of	c chain
4 food	d society
5 mountain of	e currents
6 sea	f sea
7 single-use	g rubbish
8 throwaway	h sand

A PLANET POISONED BY PLASTIC

Instructions: Write the correct word in the space before its definition. There may be more than one definition for each word.

at stake culprit debris dump estimate fleck gobble grain
infinite lethal patch pound raw material rubbish soil stagger
swamp tiny vast

1. _____ ● having no bounds or limits; not measurable; limitless.
2. _____ ● someone who is charged with or guilty of a mistake, fault, or crime.
3. _____ ● to make unclean; dirty.
4. _____ ● immense in size or area.
5. _____ ● extremely little; minute; miniature.
6. _____ ● an area that is part of a larger area but differs from it in color, texture, quality, or the like.
7. _____ ● any tiny, hard particle.
8. _____ ● to empty (the contents of a container), especially by inverting or tilting.
9. _____ ● worthless, discarded material or objects; garbage; trash.
10. _____ ● to shock or stun; astound.
11. _____ ● to calculate the approximate amount, size, or value of.
12. _____ ● to become flooded with water or sink, as a boat.
13. _____ ● in geology, an accumulation of broken pieces of rock.
14. _____ ● to eat in a hasty, greedy, and sometimes noisy manner.
15. _____ ● a tiny bit; speck.
16. _____ ● material or a product in its natural or original state, before processing or assembling.
17. _____ ● intended to cause or capable of causing death or extreme harm; deadly.
18. _____ ● in a position to be lost; in jeopardy.
19. _____ ● to strike repeatedly and heavily.

Instructions: Complete these sentences using the words on this list.

● estimated ● gobbled ● grain ● infinite ● lethal ● staggered ● swamped
● wasteful

1. The news that he had won the money _____ him.
2. A person's imagination is _____.
3. He _____ up the pie and asked for more.
4. An _____ ten thousand people gathered to protest the war.
5. We were _____ with junk mail.
6. The ant carried away a _____ of sugar.
7. Taken in large doses, this drug could be _____.
8. It is _____ to take more food than you can eat.