

Comprehension Level 7

SECTION A COMPREHENSION

Text A

The problem with plastics

This article warns of the dangers of plastics.

Plastics are wonder materials: adaptable and durable. We produce and use more plastics than we do almost any other man-made materials, apart from steel, cement and brick. Scientists calculate the total plastic ever made as 8.3 billion tonnes – as heavy as one billion elephants – an astonishing mass of material.

Mass-manufacturing of plastics began in the 1950s. Plastics are now all around us, in everything from food wrapping to aeroplane parts and flame retardants. It is precisely plastics' amazing qualities that present a growing problem.

'We're rapidly heading towards "Planet Plastic". If we don't want to live in that kind of world we have to rethink how we use materials, particularly plastic,' explains environmental scientist, Dr Ros Gaia. 'None of the commonly used plastics are biodegradable. You can permanently dispose of plastic waste by incinerating it – but that's complicated by concerns about health and emissions.'

Plastic items tend to be used for very short periods before being discarded. Waste plastic is sent largely to landfill; much of it just litters the wider environment, including the oceans.

Dr Gaia commented: 'People need to realise that a plastic bottle could be recycled 20 times. Currently, poor design limits us. The whole point of recycling is keeping material in use for ever if you can. Actually 90 per cent of the material that does get recycled only gets recycled once.'

In the meantime, the waste mounts up. Recycling rates are increasing, and there are new biodegradable alternatives, but manufacturing plastic is so cheap that there is little incentive for change. Each year eight million tonnes of plastic end up in the oceans, with clear evidence that some gets into the food chains because marine creatures ingest small fragments of micro-plastics.

Dr Gaia explains: 'We're facing a tsunami of plastic waste. The global waste industry needs to get its act together. We need a radical shift. On current trends, it will take until 2060 before more plastic gets recycled than landfilled and lost to the environment. We can't wait that long.'

Question 1

(a) Give **three** examples of man-made materials humans use more than plastic.

(1)

(b) Using your own words, explain what the text means by:

(i) 'adaptable and durable' (line 1):

(2)

(ii) 'an astonishing mass' (line 4):

(2)

(c) Re-read paragraph 3 (“We’re rapidly ... emissions.””).

Give **two** reasons why disposing of plastics is difficult.

(2)

(d) Re-read paragraphs 4 and 5 ('Plastic items ... recycled once.'').

(i) Identify **two** facts about how plastic items are dealt with, which lead to plastic waste littering the environment.

(2)

(ii) What changes are needed to improve the recycling of plastic?

(3)

(e) Re-read paragraphs 6 and 7 ('In the meantime ... that long.'').

Using your own words, explain the reasons why the problem of plastic waste is not being dealt with quickly enough.

(3)

SECTION B

SUMMARY

Read **Text B**, and then answer **Question 1(f)** on the question paper.

Text B

It's great that Blue Planet II is pushing hard on plastic pollution, but

The writer of the article has viewed a documentary about the world's oceans called Blue Planet II.

The documentary was first aired as a series on television and attracted large numbers of viewers.

I gasped in awe at the latest stunning images of marine life in the marvellous television documentary, Blue Planet II. Blue sharks dodged great whites to scavenge on oceanic carrion; sperm whales dozed vertically then plunged to unfathomable depths to feed.

It was jaw-dropping stuff.

However, in this final part of the series, the narrator's tone has changed. He has bad news. He shows us grim images: turtles and tropical fish tangled in plastic debris and, most heart-breaking of all, a mother pilot whale unable to let go of her long-dead infant.

'Today in the Atlantic waters whales have to share the ocean with plastic. A mother is holding her newborn young – it's dead,' he said. 'The mother's milk may have been contaminated by plastics.'

This had a big impact. One newspaper headline: 'Shocked viewers vow never to use disposable plastic again,' captured the reaction of many. Online message boards buzzed, demanding a ban on all plastics.

I know research suggests there could already be over five trillion pieces of plastic in the ocean; that by 2050 there could be more plastic than fish; that birds are starving as they fill their guts with plastic waste; that micro-plastic is in our seafood. I wanted to shout, 'Yes! Ban plastics!' but the scientist in me resisted.

In the whole programme, no direct link was made between the death of this baby whale and plastics; we saw pictures of whales and pictures of plastics in the sea, but no evidence that this whale-mother's milk actually contained contamination from plastics.

Nothing.

I convulsed with frustration at the idea of wildlife being killed by human waste, but was incensed by the lack of direct evidence shown in the programme.

Some wildlife programmes have been criticised for passing off footage of captive animals as hard-won material taken in the wild. If the facts are right, perhaps that's OK – it makes striking educational TV – but the linkages between this dead whale and plastic pollution were at best circumstantial.

Campaigners argue that plastic and toxic chemicals are capable of killing young whales, and everybody needs to realise the urgency of the pollution issue. Urgent action is needed, but we need to keep up the pressure for change with good evidence. I don't want exposing the production fakery to become the story, overshadowing the real story about plastic pollution. Please, programme makers, go beyond brilliant images and gripping storylines. Documentaries can change views with truth and scientific evidence.

Read **Text B, *It's great that Blue Planet II is pushing hard on plastic pollution, but***, and then answer **Question 1(f)** on this question paper.

Question 1f

According to Text B, what problems are associated with plastic waste and the way documentary programme makers are presenting the issue?

You must **use continuous writing** (not note form) and **use your own words** as far as possible.

Your summary should not be more than 120 words.

Up to 10 marks are available for the content of your answer and up to 5 marks for the quality of your writing.

(15)

SECTION C

SECTION 1
Read **Text C**, and then answer **Questions 2(a)–(d)** and **Question 3** on the question paper.

Text C

The penguin lessons

The narrator, Tom Michell, has borrowed his friend's luxury holiday apartment by the sea. It is out of season, and the friend is not using the apartment himself. Tom is enjoying a few days relaxing and exploring in the quiet resort, and unexpectedly meets a new friend and companion.

A few fishing boats and pleasure craft rocked gently in the small harbour on the fashionable western side of the point, basking serenely in the winter sunlight. Cries of gulls and the smell of fish filled the air. Vibrant colours of boats and painted houses played against the sapphire sea and azure sky.

Swimming in unison, shimmering shoals of sprats raced around the harbour, zigzagging, dividing and reuniting. Waves of mesmerising light reflected off these iridescent fish. There were penguins in the harbour, too. It was captivating to watch

them fly through the water, twisting and turning, snapping up sprats. I was only surprised that there were not more penguins there feasting on such rich and easy pickings.

I turned and walked round the promontory to the eastern side. I had only been strolling along the seashore for minutes, when I caught sight of the first of them: black, unmoving shapes. Initially, I was aware of only a few but, as I walked on, they grew in number, until the whole beach appeared to be covered with black lumps in a black carpet. Hundreds of penguins lay dead in the sand, covered in thick, cloying oil and tar. Each wave that broke piled another grim batch of carcasses on top of those already there. The sight was dreadful, sickening and depressing.

I understood then why there were so few penguins in the harbour – only a lucky few had avoided the oil slick. Consumed by dark thoughts, I continued walking. The pollution along the beach extended as far as I could see.

I had not heard reports of any oil spill, but in those days regulations were less stringent.

After discharging cargo at their destinations, oil tankers would put to sea again and wash out their tanks, creating vast, deadly floating oil slicks.

I had been walking briskly, unwilling to focus closely on the details of the dead creatures, when, out of the corner of my eye, I saw a movement in the stillness on the beach. I stopped. One valiant bird was alive: a single survivor struggling amid all that death.

Although it was lying on its belly and covered in tar like the others, this penguin was holding its head up and moving its wings with little spasmodic jerks. Could I walk on and abandon it to the poisonous oil and exhausting, suffocating tar? I decided that I could not; I headed towards it.

I had no clear plan – in fact, no plan at all. As I approached the solitary penguin, it struggled to its feet, flapping sticky wings and ready to fight for its life once more.

Amid all the obscenity, this single penguin sparking with anger stood there, eyeing me suspiciously. How would I approach this filthy, aggressive bird? I scanned the accumulated rubbish along the beach: bits of wood, plastic bottles, disintegrating fishing net. As I moved away, the penguin settled back down on its tummy again. Hurriedly, I gathered debris that I thought might be of assistance. Now, gladiator-like, I approached my quarry. Sensing the renewed threat, it immediately reared up to full height. Its black malevolent eyes shone with pure loathing and venom. Its beak snapped shut with a savage metallic clack. Swirling a piece of fishing net, I distracted the penguin and, with the swiftness and bravery of Achilles, dropped the net over its head, pushed it over with a stick and grabbed its feet.

Arriving back at the flat, I looked around and realised that I'd been carried away with the idea of rescuing the penguin. The average penthouse holiday flat is rarely equipped with the necessities for de-tarring penguins. I had not thought about the practicalities that cleaning would involve. The flat was elegant, tasteful, like an advertisement from a glossy magazine – the last place to bring a furious, oil-soaked

penguin. The chances of making a real mess, and getting injured into the bargain, seemed very real.

Read **Text C, *The penguin lessons***, and then answer **Questions 2(a)–(d)** on this question paper.

Question 2

Identify a word or phrase from the text which suggests the same idea as the words underlined:

(a)

Boats used for recreational purposes were moored in the harbour as well as the boats used by local fishermen.

(i)

(1)

(ii) The colours of the boats and houses by the harbour were **bright and cheerful**.

(1)

At the time of the incident, rules about where oil tankers could wash out their tanks were **not as strict** as they are now.

(iii)

(1)

Oil tanks washing out their tanks left huge **patches of sea covered with a film of poisonous oil**.

(iv)

(1)

(b) Using your own words, explain what the writer means by each of the words underlined:

I turned and walked round the promontory to the eastern side. I had only been **strolling** along the seashore for minutes, when I **caught sight** of the first of them: black, **unmoving** shapes.

(i) strolling

(1)

(ii) caught sight

(1)

(iii) unmoving

(1)

(c) Use one example from the text below to explain how the writer suggests his feelings about what he saw on the beach.

Use your own words in your explanation.

Initially, I was aware of only a few but, as I walked on, they grew in number, until the whole beach appeared to be covered with black lumps in a black carpet. Hundreds of penguins lay dead in the sand, covered in thick, cloying oil and tar. Each wave

that broke piled another grim batch of carcasses on top of those already there. The sight was dreadful, sickening and depressing.

(3)

(d) Re-read paragraphs 2 and 9.

(a) As you paragraph 2 and 9

- Paragraph 2 begins 'Swimming in unison ' and is about the wildlife in the harbour.
- Paragraph 9 begins 'Amid all the ' and is about approaching and capturing the bird.

Explain how the writer uses language to convey meaning and to create effect in these paragraphs. Choose **three** examples of words or phrases from **each** paragraph to support your answer. Your choices should include the use of imagery. Write about 200 to 300 words.

(15)

Re-read **Text C, *The penguin lessons***, in the insert and then answer **Question 3** on this question paper.

Question 3

Imagine you are a local journalist. Recent events have prompted you to write a magazine article about the need to better safeguard the area.

Write the magazine article.

In your article you should explain:

- the attractions of the local area and why people visit
- the problems affecting the area and the likely impact if things do not improve
- what Tom Michell did and why, and the result of his actions.

Base your article on what you have read in **Text C**, but be careful to use your own words. Address each of the three bullet points.

Begin your article with a suitable headline.

Write about 250 to 350 words.

(25)