GOTEACH LESSON MATERIAL

Microplastics: The Invisible Health Crisis

Date: May 3, 2026 Topic: How Microplastics Affect Your Body What Are Microplastics Doing Inside Your Body...

LEARNING OBJECTIVES

- Identify common sources and health impacts of microplastics in the human body.
- Apply advanced vocabulary related to environmental science and human biology in context.
- Analyze environmental issues using passive voice and cause-effect language for academic discussion.

VOCABULARY

Word	Definition	Example
microplastics (noun)	Extremely small pieces of plastic debris in the environment resulting from the disposal and breakdown of consumer products.	*Scientists found microplastics in the local river system.*
ubiquitous (adjective)	Present, appearing, or found everywhere.	*Cell phones are ubiquitous in modern society.*
ingest (verb)	To take food, drink, or another substance into the body by swallowing or absorbing it.	*Humans may ingest thousands of plastic particles every year.*
accumulate (verb)	To gather or build up over time.	*Toxins can accumulate in the fatty tissues of animals.*
endocrine (adjective)	Relating to glands which secrete hormones or other products directly into the blood.	*Certain chemicals are known to cause endocrine disruption.*
particle (noun)	A minute portion of matter.	*A dust particle can be seen floating in the sunlight.*
bioavailability (noun)	The proportion of a substance which enters the circulation when introduced into the body.	*The bioavailability of the medicine is higher when taken with food.*
precautionary (adjective)	Taken as a safeguard or to prevent something unpleasant or dangerous from happening.	*The doctor advised a precautionary blood test.*

GRAMMAR & KEY CONCEPTS

The Passive Voice in Scientific Contexts

In scientific or formal writing, the passive voice is used to focus on the action or the object being affected rather than the person doing the action.

- *Microplastics are found in the bloodstream.*
- *The samples were collected from the ocean floor.*
- *Health risks are being studied by scientists.*

READING PASSAGE

In recent years, the conversation around environmental health has shifted toward a tiny but formidable threat: **microplastics**. These are plastic fragments less than five millimeters long, and they have become **ubiquitous** in our modern world. From the deepest trenches of the ocean to the highest peaks of the Himalayas, these synthetic fibers and shards are everywhere. However, the most concerning discovery is that we now **ingest** these materials daily through the water we drink, the food we eat, and even the air we breathe. Research suggests that as these materials enter our systems, they can **accumulate** in vital organs, including the lungs, liver, and even the bloodstream. One of the primary concerns for medical researchers is the potential for **endocrine** disruption. Many plastics contain chemical additives that mimic hormones, potentially interfering with our metabolic and reproductive health. A single **particle** might seem insignificant, but the cumulative effect of thousands of such fragments over a lifetime is still being studied. Scientists are particularly interested in the **bioavailability** of the chemicals attached to these plastics; this refers to the extent and rate at which these toxins are absorbed into the living system. While long-term human data is still emerging, many experts advocate for a **precautionary** approach. This means taking action to reduce plastic exposure now, rather than waiting for absolute proof of irreversible harm. By choosing glass over plastic and filtering our tap water, we can begin to mitigate the risks associated with this invisible health crisis.

PRACTICE EXERCISES

1. What does the term 'ubiquitous' imply about microplastics?

A) They are very rare.

B) They are found everywhere.

C) They are only in the ocean.

D) They are harmless.

2. Which system in the body is specifically mentioned regarding hormone interference?

A) Respiratory system

B) Digestive system

C) Endocrine system

D) Nervous system

3. When you eat or drink something, you _____ it into your body.

4. The _____ approach suggests we should act now to prevent future harm.

5. What does 'bioavailability' measure?

A) How long a plastic lasts in the ocean

B) How much of a substance is absorbed into the blood

C) The size of a plastic particle

D) The color of the plastic

6. Small pieces of plastic can _____ in our organs over many years.

7. What is the maximum size for a piece of plastic to be considered a 'microplastic'?

A) 5 centimeters

B) 5 millimeters

C) 5 inches

D) 5 microns

8. A single _____ of plastic is too small to see with the naked eye.

9. According to the text, why are chemical additives in plastic dangerous?

A) They make the plastic too hard.

B) They can mimic hormones.

C) They change the color of water.

D) They are very expensive.

10. The text mentions that _____ are found even in the air we breathe.