

Weekly assessment



# Integrated Sciences

2025

Week  
13

1<sup>st</sup> Year  
secondary

Prepared and reviewed by  
Science Development Office

**Ch 4: The role of science in environmental sustainability**  
**Lesson (2) : The Effect of Pollutants on the Environment**  
**and Human Health**

## **Week (13) Assessment**

### **Choose the correct answer**

**(1) ) What is the main effect of lead exposure on human health?**

- (A)  Increased physical ability**
- (B)  Development of nervous system issues**
- (C)  Improved bone health**
- (D)  Reduced cancer incidence**

**(2) What is the most common purpose for using activated carbon in water treatment?**

- (A)  Neutralizing acids**
- (B)  Removing organic matter and chemical contaminants**
- (C)  Adding nutrient minerals**
- (D)  Sterilizing water using ultraviolet light**

**(3) What is the main source of phosphate that can cause water pollution in agricultural areas?**

- (A)  Organic solvents**
- (B)  Pesticides**
- (C)  Agricultural fertilizers**
- (D)  Industrial waste**

**4. What health issue can result from inhaling air polluted with particulate matter?**

- A) Improved lung function**
- B) Respiratory diseases like asthma**
- C) Enhanced immune response**
- D) Decreased heart rate**

**5. Which analysis technique is commonly used to measure heavy metals as mercury in water?**

- A) Chromatography**
- B) Ultraviolet spectroscopy**
- C) Atomic absorption spectroscopy**
- D) Gas chromatography**

**6. What is a potential effect of exposure to benzene?**

- A) Decreased risk of respiratory diseases
- B) Increased risk of cancer
- C) Improved cognitive function
- D) Enhanced bone density

**7. What is biological treatment in the context of waste management?**

- A) Using chemicals to treat pollutants
- B) Utilizing microorganisms to break down pollutants
- C) Burning waste materials
- D) Separating waste into recyclable and non-recyclable

**8. All the following are heavy metals which accumulate in the environment and in the cells of living organisms EXCEPT .....**

- A) Lead
- B) Mercury
- C) Cadmium
- D) Benzene

**9. The accumulation of heavy metals such as lead and mercury in the soil as a result of industrial waste .....**

- A) increases the crops yield
- B) increases the photosynthesis
- C) increases the soil fertility
- D) can affect plant growth

**Q2: Analyze the corresponding figure, and then answer the following questions:**

- 1) Write down one of the pollutants that caused the death of fish and other aquatic organisms



**2) Explain a way to treat this environmental pollution**

**Q3: Give Reason**

**1) Mercury is one of the dangerous chemical pollutants**

**2) Using pesticides must be prevented**

**3) Ozone can be used to wastewater treatment**

**4) Activated carbon can be used in drinking water treatment**

**5) Some types of bacteria or fungi in water treatment**