Material World and the Environment — Practice Test

Quebec Environmental Science and Technology, Secondary IV • 10 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Use the specific heat capacity of water as 4.19 joules per gram per degree Celsius. A sample of 400 grams of water warms by 5 degrees Celsius. The heat absorbed, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A circuit carries a current of 4 amperes through a resistance of 5 ohms. By Ohm law the voltage, in volts, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **Nuclear fission splits a heavy nucleus, while nuclear fusion**

- A joins light nuclei
- B splits a light nucleus
- C creates electrons
- D destroys protons

Understand It with Pulse | Flag a mistake

4 **On the pH scale, a solution with pH 7 is**

- A acidic
- B neutral
- C basic
- D saturated

Understand It with Pulse | Flag a mistake

5 **Oxidation is a chemical change involving the**

A gain of protons

B loss of neutrons

C gain of mass only

D loss of electrons or gain of oxygen

Understand It with Pulse | Flag a mistake

6 **Photosynthesis and respiration are related chemical changes because one stores energy and the other**

A releases energy

B creates matter

C destroys matter

D cools the Sun

Understand It with Pulse | Flag a mistake

7 **Static electricity appears when materials are rubbed and charges**

A disappear

B accumulate on a surface

C turn into heat only

D turn into light only

Understand It with Pulse | Flag a mistake

8 **The law of conservation of mass states that mass is**

A neither created nor destroyed

B created in reactions

C destroyed in reactions

D doubled in reactions

Understand It with Pulse | Flag a mistake

9 **Use the specific heat capacity of water as 4.19 joules per gram per degree Celsius. A sample of 100 grams of water warms by 15 degrees Celsius. The heat absorbed, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **Use the specific heat capacity of water as 4.19 joules per gram per degree Celsius. A sample of 600 grams of water warms by 3 degrees Celsius. The heat absorbed, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	8380	**5.**	D	**9.**	6285
2.	20	**6.**	A	**10.**	7542
3.	A	**7.**	B		
4.	B	**8.**	A		

© 2026 Brett Robbins. All Rights Reserved.