

Introduction to Thermodynamics Concepts

Thermodynamics · Answer Key · 10 Questions

1. What is the most common unit used to measure temperature in science?

- A) Fahrenheit
- B) Celsius**
- C) Kelvin
- D) Rankine

2. Which state of matter has a definite shape and a definite volume?

- A) Liquid
- B) Gas
- C) Solid**
- D) Plasma

3. Heat is a form of energy that transfers from a warmer object to a cooler object. What is this process called?

- A) Conduction
- B) Convection
- C) Radiation
- D) Heat Transfer**

4. When water boils and turns into steam, it changes from which state of matter to which state?

- A) Solid to Liquid
- B) Liquid to Solid
- C) Liquid to Gas**
- D) Gas to Liquid

5. Which of the following is the best insulator, meaning it slows down the transfer of heat?

- A) Metal spoon
- B) Glass of water
- C) Air trapped in a jacket**
- D) Stone

6. What happens to most substances when they are heated?

- A) They contract
- B) They expand**
- C) They change color
- D) They become denser

7. Which of the following is NOT a primary form of heat transfer?

- A) Conduction
- B) Convection
- C) Radiation
- D) Evaporation**

8. Which state of matter takes the shape of its container but has a definite volume?

- A) Solid
- B) Gas
- C) Liquid**
- D) Plasma

9. When you feel the warmth from the sun, heat is being transferred by which method?

- A) Conduction
- B) Convection
- C) Radiation**
- D) Absorption

10. What is the term for the measure of how hot or cold something is?

- A) Heat
- B) Energy
- C) Temperature**
- D) Volume