

AIS Learning

A/L Physics

Practice Tutorial

Lesson 01: Thermodynamics

1. Definition of Thermodynamics:

- a. What is thermodynamics?
- b. Briefly explain the scope of thermodynamics.

2. System and Surroundings:

- a. Define a thermodynamic system.
- b. What is the surroundings in the context of thermodynamics?

3. Internal Energy:

- a. What is internal energy in thermodynamics?
- b. How does the internal energy of a system change during a heating process?

4. First Law of Thermodynamics:

- a. State the First Law of Thermodynamics.
- b. How is the change in internal energy related to heat and work?

5. Heat and Temperature:

- a. Define heat and temperature.
- b. Explain how heat flows between a hot object and a cold object.

6. Work in Thermodynamics:

- a. Define work in the context of thermodynamics.
- b. Provide an example of a mechanical work done on a system.

7. Enthalpy:

- a. Define enthalpy.
- b. How is enthalpy different from internal energy?

8. Second Law of Thermodynamics:

- a. State the Second Law of Thermodynamics.
- b. Explain the concept of entropy.

9. Heat Engines:

- a. What is a heat engine?
- b. State the efficiency formula for a heat engine.

10. Thermodynamic Processes:

- a. Define an isothermal process.
- b. What happens to the temperature in an adiabatic process?

Try those questions by yourself and submit your answers to us.

We can evaluate it for you!!!!

Happy Learning!!!!

-Evaluation Team AIS Learning

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