

Keywords and important points for Module 1

Saima Saleem

Energy

Potential Energy – energy stored in a body due to its position

Kinetic Energy – energy stored in a body due to its motion

Transfer of Energy

Different forms of energy

Light energy

Heat or Thermal Energy

Chemical Energy

Mechanical Energy

Electrical Energy

Sound Energy

Generating Electrical Energy – Page 7 – Module 1

Motors and Generators

Capacitor

Battery

Difference between capacitors and batteries

Practical Tasks – review all the practical tasks done in Module 1

Don't forget the review questions on page 18 and 19

Keywords and important points for Module 2

Saima Saleem

What is renewable energy

What is non – renewable energy

What is the difference between renewable and non-renewable energy

Why is renewable energy better than non renewable energy

What is the drawback (bad point) about non renewable energy

Page 5 and 6 activity

Solar Energy

Solar Cells

Solar Panels

Active Solar Energy

Passive Solar Energy

Wind Energy

Vertical Axis Wind Turbine

Horizontal Axis Wind Turbine

On shore and offshore wind turbine

Efficiency of wind turbines

Water Energy

Tidal Energy

Tidal Barrages

Hydroelectric power

Practical tasks

Page 19 and 20 of Module 2

Keywords and important points for Module 3

Saima Saleem

Definition of pneumatic systems

Why are pneumatic systems preferred by dentists?

Understand the benefits of Pneumatic systems

Understand the disadvantages of pneumatic systems

Principle of operation of pneumatic systems – page 4

The three main components of pneumatic systems

Learn the labels for the pump – page 6

Principle of operation of the pump – page 7

The labels for cylinders

Air flow of the cylinder – page 8

Three position valve.. outlet and exhaust port

Air flow for the three position valve – page 10

Review questions on page 18 and 19

Don't forget the practical tasks for Module 3.

High momentum

Smooth operation

Compressed

Elasticity

Pressure

Return spring

Pump barrel

Piston seal

Piston

Flexible diaphragm

Outlet port

Piston rod

Airport

Cylinder barrel

Exhaust port

