

MARINA INTERNATIONAL SCHOOL

DESIGN & TECHNOLOGY SCHEME OF WORK

FORM 1 - TERM 1

WEEK	TOPIC	TOPIC DETAILS
1.1	Introduction to Design and Technology	Define and analyze Design and Technology - what is design and technology
1.2	Introduction to Design and Technology	Show awareness of the purpose of learning design and technology at school.
2.1	Introduction to Design and Technology	Know, understand and describe historical backgrounds of different technological developments over the years through designing e.g. Developments in Food, Transportation Communication, Health, Education etc.
3.1	Introduction to Design and Technology	Know and understand the terms NEEDS and WANTS of people.
3.2	Introduction to Design and Technology	Distinguish between general needs and specific needs e.g. specific needs of baby, student, kitchen, doctor etc.
4.1	Introduction to Design and Technology	Know the branches of Design and Technology.
5.1	Graphic designs	Know and understand the term graphic designs
5.2	Graphic designs	Understand simple graphical design-draw and make envelopes, cards (greetings birthday etc.) nets.

WEEK	TOPIC	TOPIC DETAILS
6.1	Materials	Know, understand and describe the different types of materials used in design and technology: metals, wood, plastic, cards, paper, rubber, fabrics etc.
7.1	Materials	Know and understand the physical and mechanical properties of materials
8.1	Materials	Know and understand the elementary processing of metals and wood.
9.1	Materials	Know and understand the commercial forms of wood, metal and plastic
10.1	Materials	Know and understand the uses of the different types of materials: metals, wood, plastic, ceramic, card, paper etc.
11.1	Energy	Define energy in terms of work capability
11.2	Energy	Know and state the different sources and forms of energy
12.1	Energy	Know and understand that electrical energy is a FLEXIBLE form of energy.
13.1	REVISION	REVISION
14.1	REVISION	REVISION
15.1	REVISION	REVISION

DESIGN & TECHNOLOGY SCHEME OF WORK

FORM 1 - TERM 2

WEEK	TOPIC	TOPIC DETAILS
1.1	Health and safety	Define the term safety precaution in general
1.2	Health and safety	Know and state safety precaution in specific work situations e.g. workshop, kitchen, tailor, teacher, classroom etc.
2.1	Maintenance	Define and state the methods of maintaining products and machines
3.1	Design communication	Know and understand the meaning and purpose of communication in design and technology
3.2	Design communication	Know and list the different media of communication in design and technology
4.1	Design communication	Know and understand that TECHNICAL DRAWING is one of the most important medium of communication in design and technology
5.1	Design communication	Know and state the branches of technical drawing
5.2	Design communication	Know, describe and sketch the instruments used in technical drawing.
6.1	Design communication	Know and draw the different types of conventional lines used in technical drawing
7.1	Design communication	Draw border lines, title block and main entries.
8.1	Lines and line constructions	Know the types of line: curved, straight, vertical, horizontal, inclined (slant, sloping or skew) lines

WEEK	TOPIC	TOPIC DETAILS
9.1	Lines and line constructions	Intersecting, converging, diverging, perpendicular, parallel and lines meeting at a point.
10.1	Lines and line constructions	Bisect lines into 2, 4 and 8
10.2	Lines and line constructions	Divide a line into equal and proportional parts.
11.1	Lines and line constructions	Construct perpendicular and parallel lines
11.2	Lines and line constructions	Draw a circle and divide it into 4, 6, 8 and 12 equal parts.
12.1	Measurements	Know and understand the importance of different types of measurements: mass, linear, angular, time etc. and their units.
13.1	REVISION	REVISION

DESIGN & TECHNOLOGY SCHEME OF WORK

FORM 1 - TERM 3

WEEK	TOPIC	TOPIC DETAILS
1.1	Measurements	Know and understand emphatically that MILLIMETRE is the basic unit of linear measurement
2.1	Measurements	Know the other I.S.O. units of measurement and their conversions
3.1	Angles and plane surfaces	Know, describe and sketch the types of angles
3.2	Angles and plane surfaces	Copy and bisect an angle
4.1	Angles and plane surfaces	Construct the following angles: 22.5° , 30° , 45° , 60° , 75° , 90° , 105° , 120° , 135° and 150° using ruler, pencil and compasses only
5.1	Angles and plane surfaces	Know and understand that plane surfaces are TWO DIMENSIONAL figures
6.1	Angles and plane surfaces	Know, describe and sketch the types of plane figures including their properties
7.1	Angles and plane surfaces	Draw a circle and label its parts
7.2	Angles and plane surfaces	Know and understand the relationship between NORMAL and TANGENT.
8.1	Angles and plane surfaces	Know and draw concentric and eccentric circles
8.2	Angles and plane surfaces	Find the centre of an arc or a circle

WEEK	TOPIC	TOPIC DETAILS
9.1	Construction of triangle	Know and construct the following triangles: equilateral, isosceles, right-angle and scalene
10.1	Construction of quadrilaterals	Know and construct the following quadrilaterals: square, rectangle, rhombus, parallelogram, trapezium, kite(deltoid) and trapezoid.
11.1	Construction of polygons	Know and construct the following polygons: regular pentagon, hexagon, heptagon and octagon.
12.1	REVISION	REVISION