

Design and Technology Term 3:

Preparing for the Mechanisms and Controls Test

Grade 8

Revision Questions

Note: While doing these revision questions, use any resources at your disposal. Everything in the test will come out of your booklet, so make sure you are practicing questions and regularly going through your theory.

Question 1 Match column A to Column B. Write your answer in column C

	Column A		Column B		C
1.1	Lever	A	Fishing rod	1.1	
1.2	Wheel	B	Load divided by effort	1.2	
1.3	First class lever	C	Copper and tin	1.3	
1.4	Brass	D	Wheelbarrow	1.4	
1.5	Friction	E	Oil and grease	1.5	
1.6	Mechanical advantage	F	Rotational and linear	1.6	
1.7	Lubrication for wood	G	Revolutions per minute	1.7	
1.8	Third class lever	H	Simplest mechanism	1.8	
1.9	Bronze	I	Back wheel gear in bicycle	1.9	
1.10	Speed	J	Candlewax and soap	1.10	
1.11	Velocity ratio	K	See-saw	1.11	
1.12	Bearings	L	Copper and zinc	1.12	
1.13	Lubrication for metal	M	Resistance of one moving surface in contact with another	1.13	
1.14	Second class lever	N	Relationship between the distance moved by the effort compared to the distance moved by load	1.14	
1.15	Sprocket	O	Rotating lever	1.15	


Question 2

Give one word or phrase for the following:

- 2.1) Turning power
- 2.2) Distance around a circle
- 2.3) Pulley where force is applied
- 2.4) Transmits force around corners
- 2.5) Has the ability to transfer force and movement through 90 degrees
- 2.6) Cable with strong flexible sleeve made from spring steel

Question 3

Complete the table:

	Drawing of tool	Name of tool	Use of tool	Safety Precautions
3.1		Warrington hammer	<i>Light nailing and cabinet making.</i>	<i>Use for light nailing jobs only or the hammer will be damaged</i>
3.2		Chisel		
3.3		File		
3.4		Craft knife		
3.5		Coping saw		
3.6		Tenon saw		
3.7		Try square/ Carpenters Square		