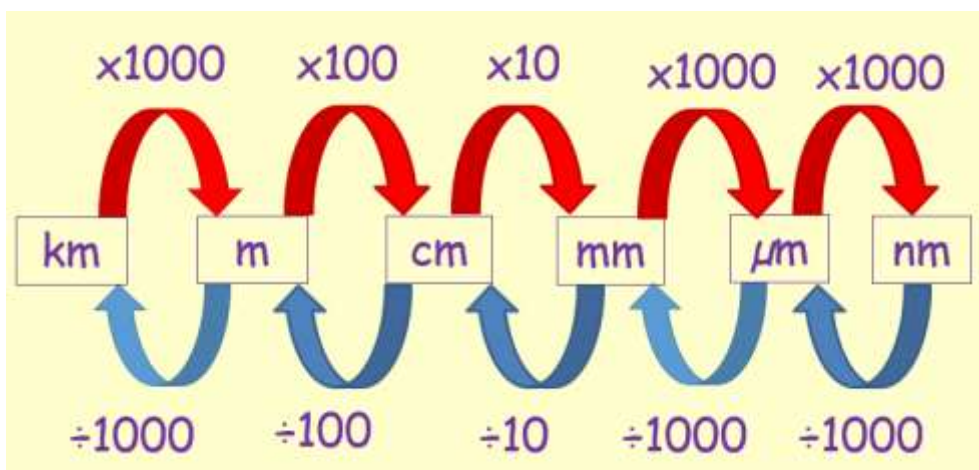


Btec Level 3 Transition Work Summer 2023

Name: _____

Unit Conversions



1. Convert the figures into the units using the information above to help.

cm	mm	μm	m
134.6			
96.21			
0.773			
3.13			
821.05			

Averages, significant figures and standard form

2. For each set of values calculate the mean ignoring any anomalous results.

Then give the answer to 2 significant figures

1	2	3	Mean	Answer to 2 significant figures
4152	2996	4018		
935.5	925.8	926.7		
16.2	19.1	17.4		
80.1316	80.1324	80.1466		
2229	2011	1610		
127.664	127.416	127.489		

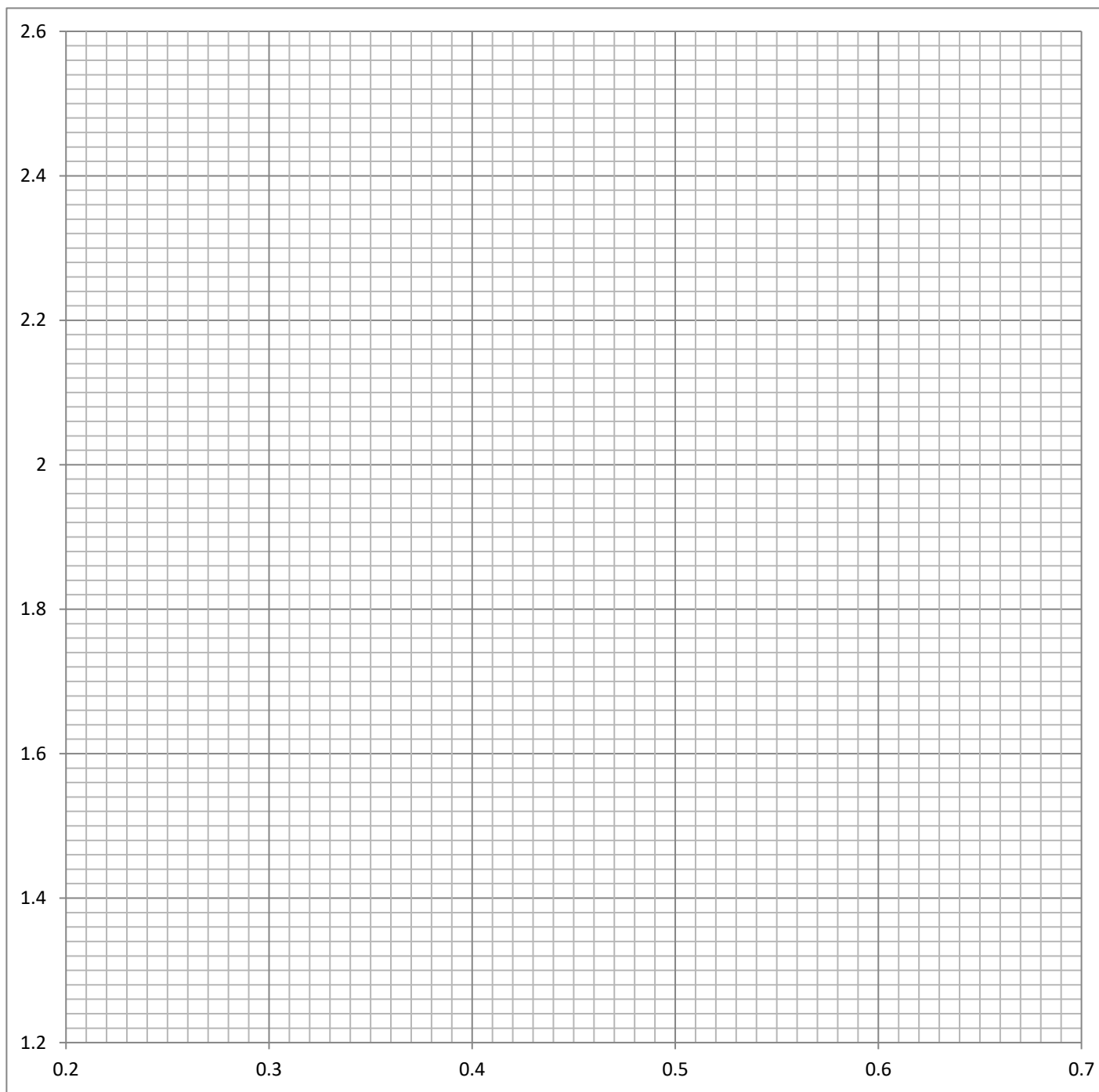
3. For each value write it in standard form (e.g. $1000 = 1.0 \times 10^3$).

Value	Standard form
2500	
26555146	
2568	
0.00012	
0.0000000164	

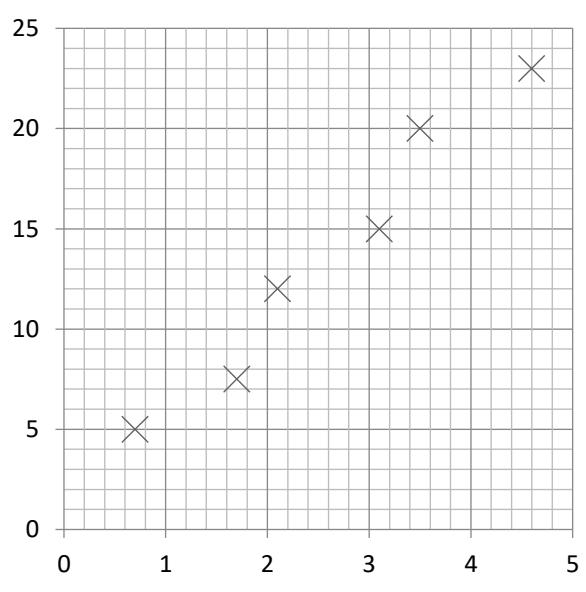
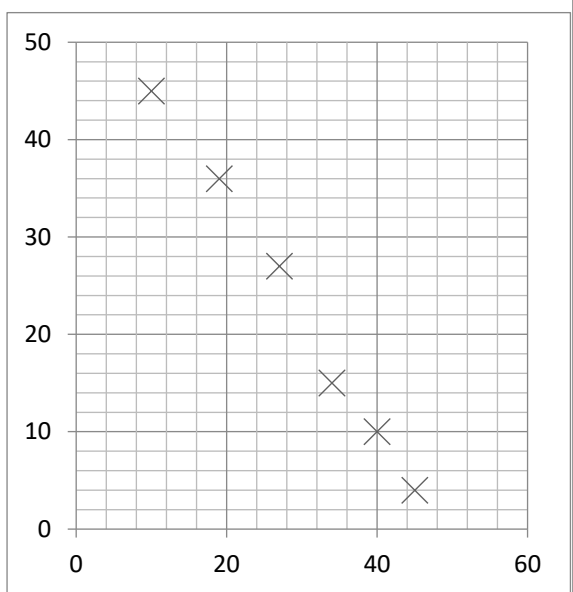
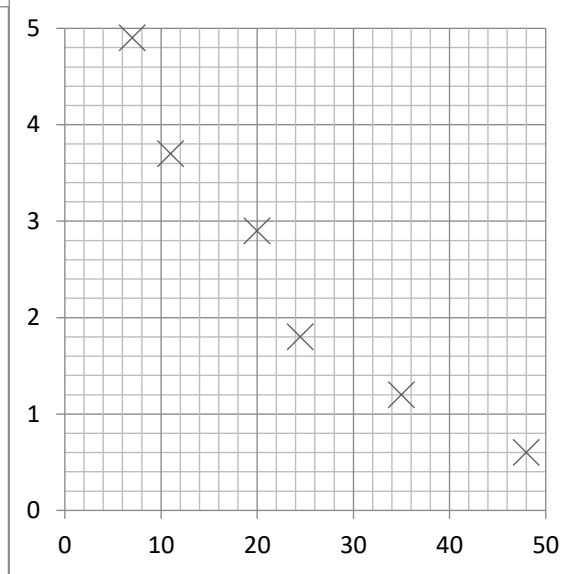
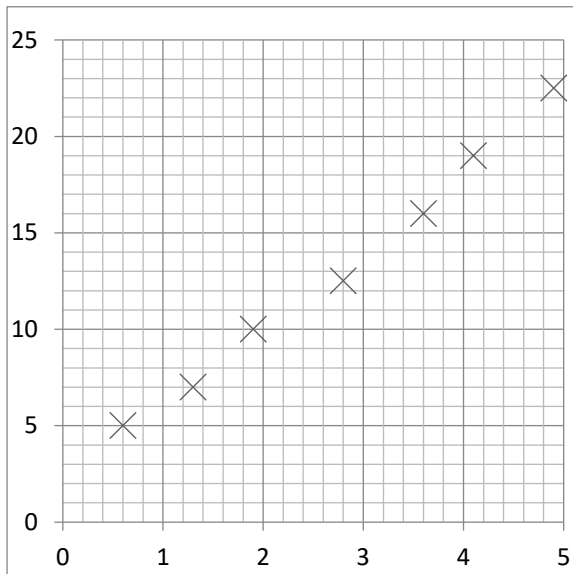
Graph Skills

4. You are going to practice plotting points on a graph. Plot the 3 lines below on the graph paper below. Use a different colour for each line.

Line 1		Line 2		Line 3	
x axis	y axis	x axis	y axis	x axis	y axis
0.44	2.44	0.34	1.75	0.67	2.12
0.27	1.39	0.49	1.99	0.58	1.64
0.39	2.13	0.26	2.22	0.65	2.52
0.62	1.23	0.31	2.49	0.29	1.92
0.37	1.52	0.52	2.36	0.45	1.47
0.22	2.56	0.61	2.23	0.53	1.27
0.42	1.84	0.64	1.83	0.24	1.71
0.48	1.70	0.55	2.15	0.67	1.45



5. Draw a line of best fit for each of the graphs.



Units

6. Write down the standard units for the following quantities.

Energy -

Wavelength -

Frequency -

Mass -

Weight -

Volume -

Temperature -

Equipment

7. Suggest what pieces of equipment you might use to measure:

100cm³ of water -

Temperature of the room -

32g of copper sulphate -

2cm³ of universal indicator -

How long it takes for salt to dissolve in water -

How far an ink sample moves up chromatography paper -

Health and Safety

International Hazard Symbol	Meaning	Safety precautions when handling substances that have this symbol
		
		
		
		