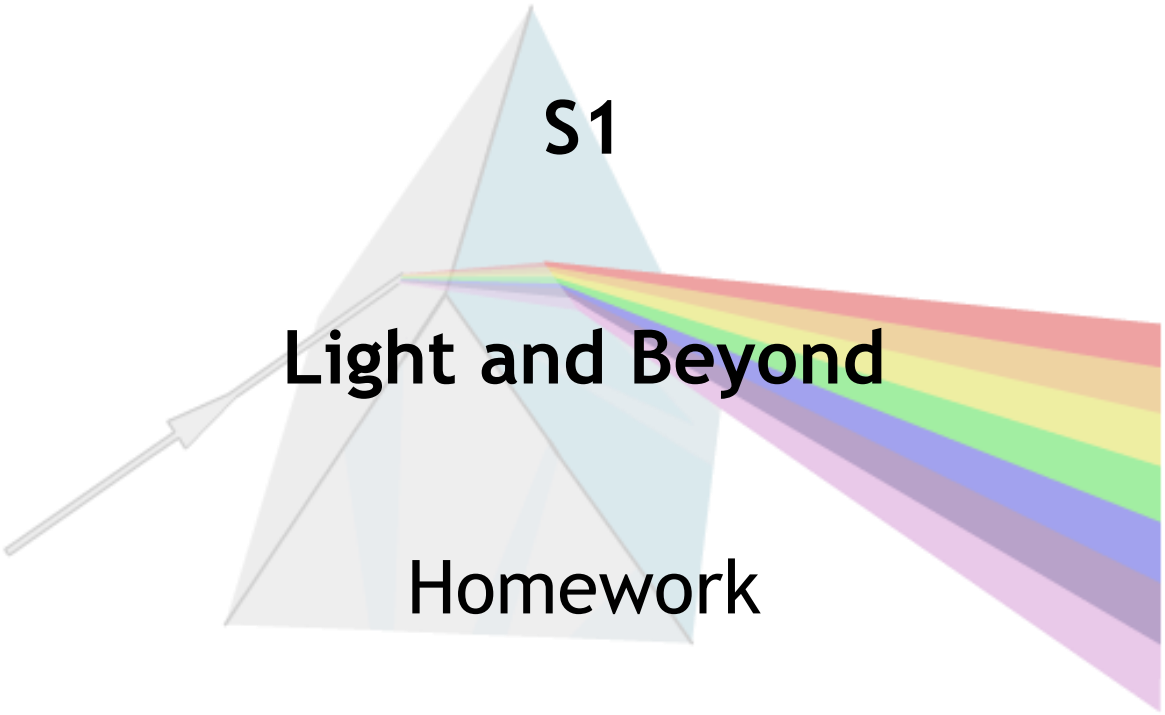
S1



Light and Beyond

Homework

Homework	When to complete
1	End of lesson 2
2	End of lesson 5
3	End of lesson 7

PROGRESS LOG – Light and Beyond

Homework	Due Date	What did I do well?	What do I need to improve upon?	Have I corrected my mistakes?	Parent signature
1. Light and Reflection					
2. Lenses and Refraction					
3. The Spectrum					

End of Unit Assessment percentage:

Where are my 'learning gaps'?

How will I 'fill' them?

Light and Reflection

Homework 1

1. Describe how light travels and a way to show this with an experiment you have seen.

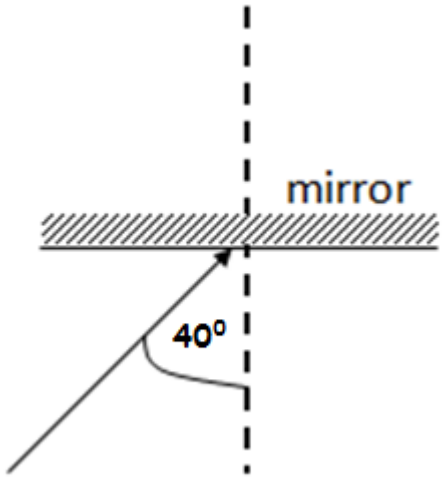
   _____

   _____

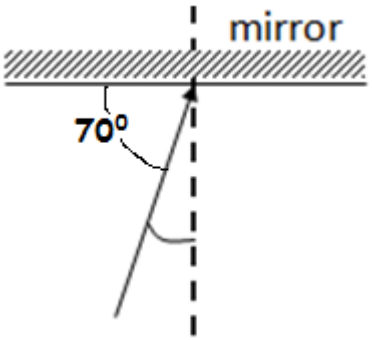
   _____

2. Complete the diagrams, adding labels for:
   - the normal
   - the incident ray
   - the angle of incidence
   - the reflected ray
   - the angle of reflection

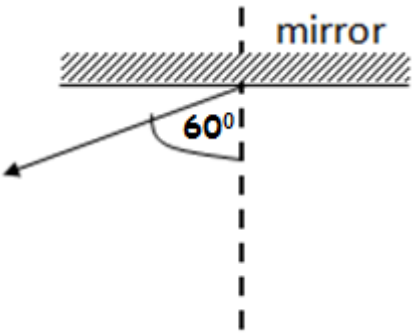
a)



b)



c)



3. Circle the words in the table below that apply to REFLECTIVE materials.

Rough	Matt
Give blurry images	Shiny
Smooth	Give clear images
Dark colours	Pale colours

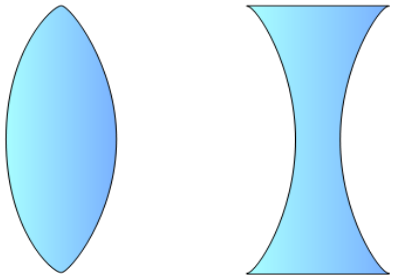
4. Complete the definition for the Law of Reflection:

The angle of incidence (i) is _____ to the angle of reflection (r).

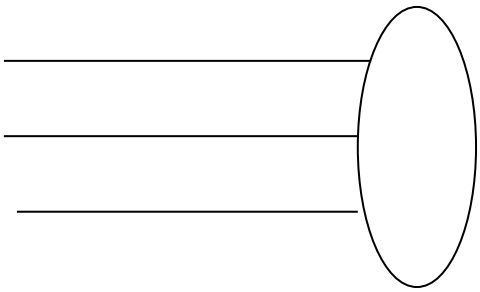
Lenses and Refraction

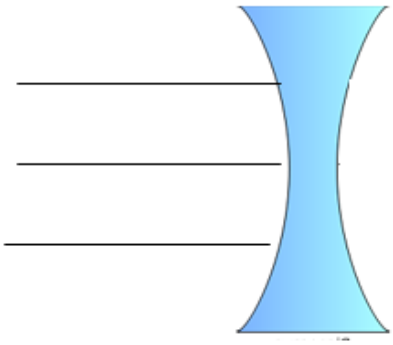
Homework 2

1a) Label the two types of lens shown below.



b) Complete the diagram to show what happens to the rays of light as they pass through each type of lens:





2a) What is meant when we say a person is long sighted?

_____

_____

_____

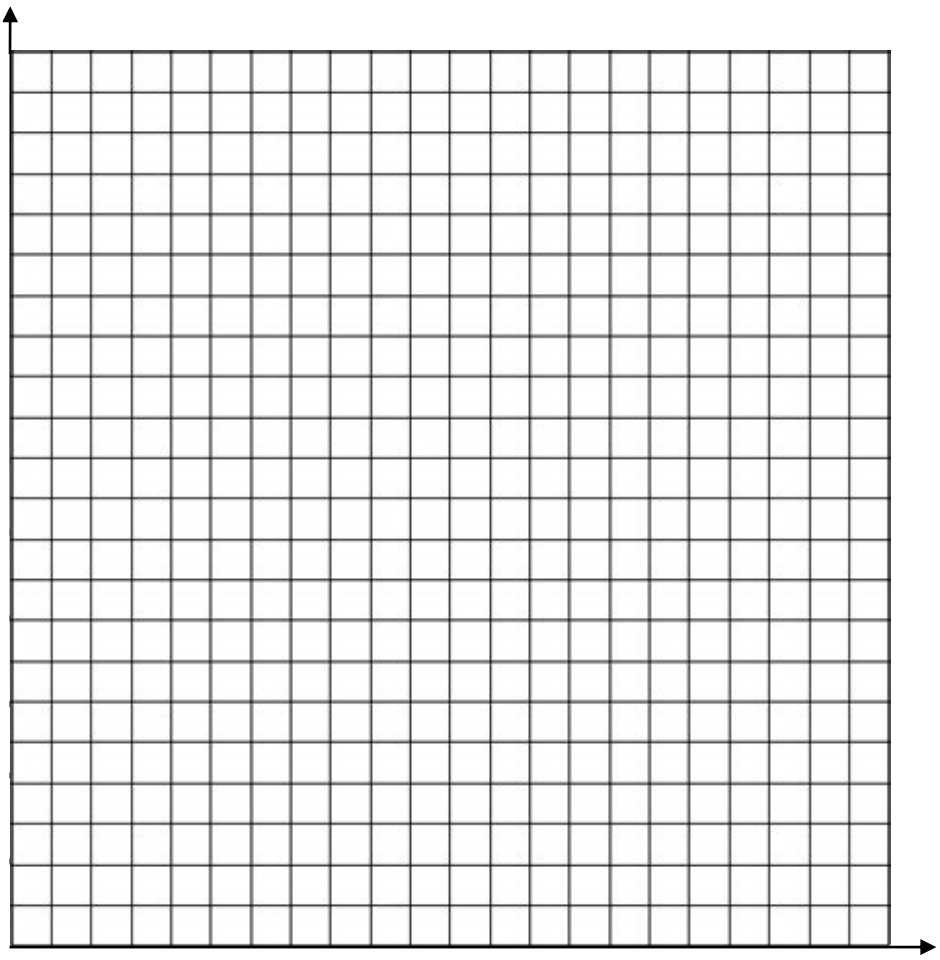
2b) What kind of lens would you use to correct long sight?

_____

3. The table below shows the percentage of people starting to develop cataracts by age in a particular town.

Age (years)	**Percentage of age range with cataracts (%)**
40	5
50	9
60	15
70	30
80	60

Draw a line graph to show this information.



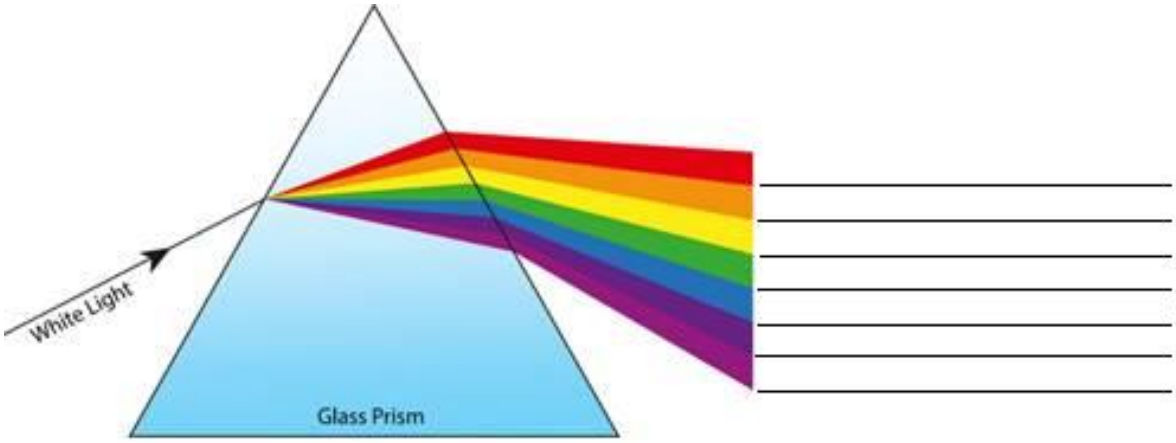
The Spectrum

Homework 3

1a) White light is a mixture of all the colours of the rainbow. What causes these colours to separate out when white light is passed through a prism?

_____

1b) Label the colours in the diagram below, from the colour bent the least to the colour bent the most as it passes through the prism.



2. Complete the table:

Wave	**Use**
Radio	
	Cooking and mobile signals
Infra red	
Visible light	To see objects
	Treat skin conditions
X-rays	
	Sterilising and treating cancer

3. Label the chart below, then match the items in the picture to the Electromagnetic spectrum.