

# Light & Radiation Homework Week 3



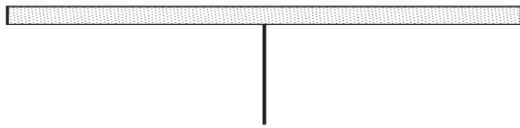
In your jotter write the DATE in the margin.

Now add a TITLE for your homework.

Your title should be the name of the Homework: Light & Radiation Homework Week 3

## Question 1.

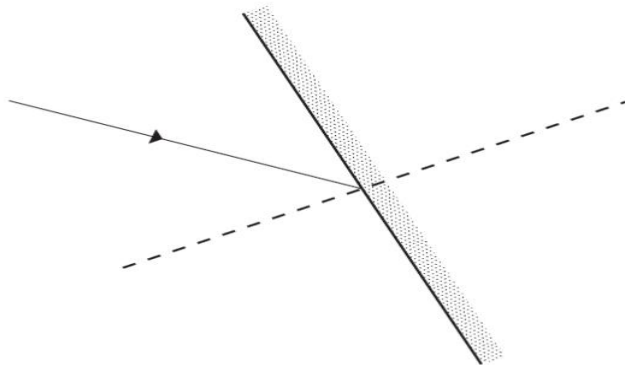
The diagram shows an experiment to investigate the reflection of light.



- Using a ruler, copy the diagram above into your jotter and label the mirror and the normal.
- Draw a light ray reflecting off the mirrored surface.
- On your diagram, mark the angle of incidence and angle of reflection.

## Question 2.

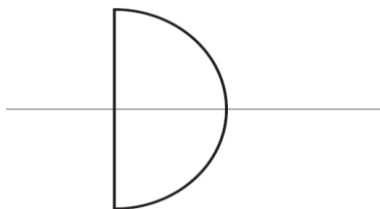
- Copy the diagram below into your jotter and label **the mirror, angle of incidence, angle of reflection** and the **normal**.



- If the angle of incidence is 60 degrees, what is the angle of reflection? Explain your answer.

## Question 3.

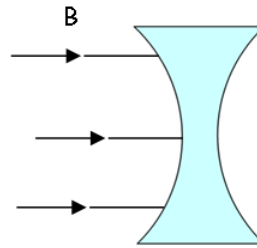
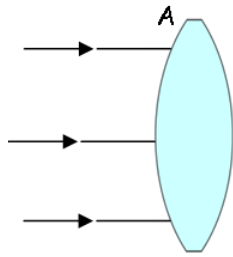
- What name is given to the bending of light as it passes from air into glass?
- In your jotter, copy and complete the diagram below to show this phenomenon.



- What is the relationship between the size of the angle in glass and the size of the angle in air?

### Question 4.

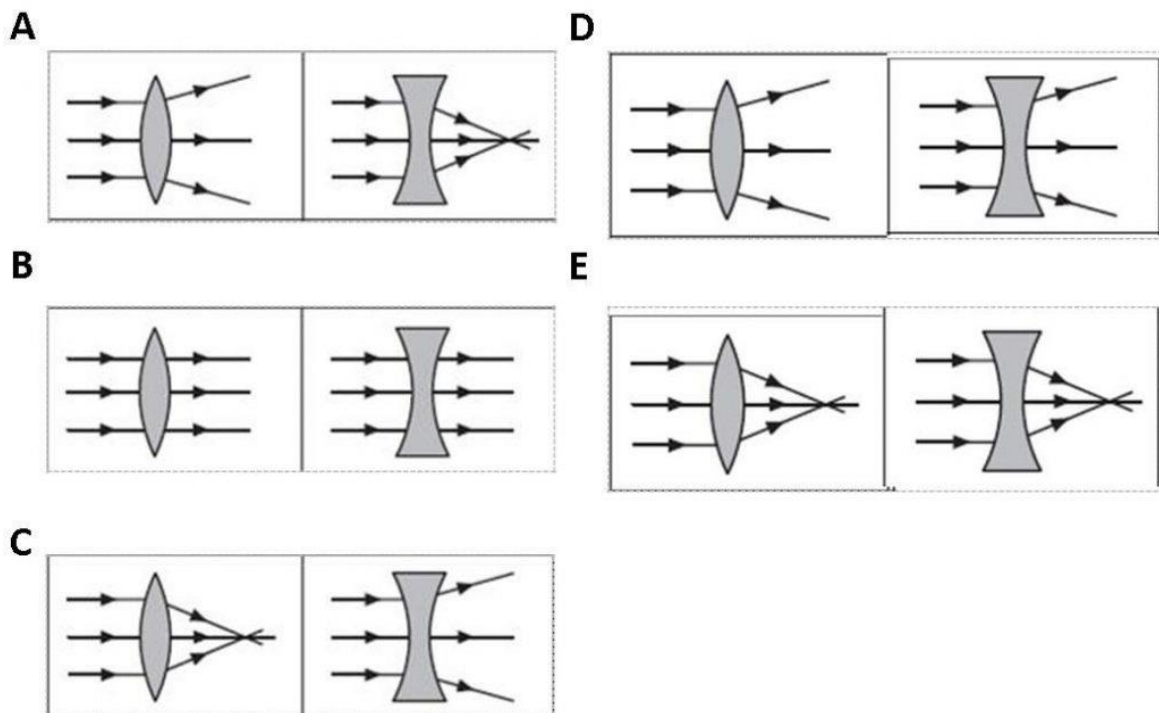
Two lenses are shown in the diagrams below.



- a) Copy the two diagrams into your jotter and complete them to show what happens to the light when it passes through them (make sure you use a ruler).
- b) What name is used to describe each of the two lenses shown above?

### Question 5.

Lenses are used in glasses to correct a person's eyesight. The lenses differ depending on whether a person has difficulty seeing objects close up or seeing distant objects. In the following the two types of lens are shown, which option correctly illustrates how the lenses bend the light?



A marking guide for this Homework is available (password required).