

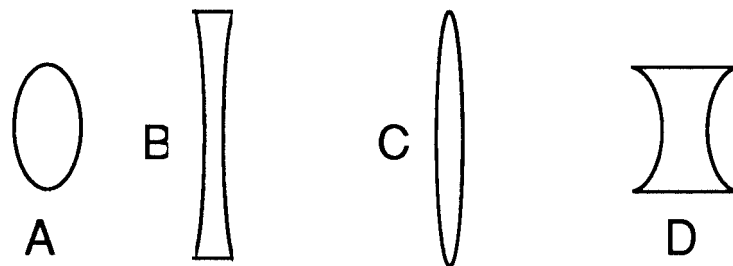
Homework 29a/2 Refraction .

1. Use the words in the HELP-BOX to copy and complete the paragraph below.

direction	light	deep
refraction		rays

When a ray of travels from one medium to another it may change speed and The bending of light is called Lenses work by refracting of light. You may have noticed some effects caused by the refraction of light, such as a swimming pool looking shallower than it really is.

2. Four lenses are shown in the diagram.



- (i) Which lenses are **convex**?
(ii) Which lenses are **concave**?
(iii) Which lenses would help **converge** rays of light?
(iv) Which lenses would help **diverge** rays of light?
(v) Which lenses could be used to magnify?
(vi) Which one gives the greatest magnification?
3. Explain with the aid of ray diagrams why a swimming pool looks shallower than it really is.
4. Try this and try to explain it. Place a coin at the bottom of a cup. Look in the cup from the side so that you are just unable to see the coin. Do not move. Ask someone to slowly fill the cup with water. Now can you see the coin?

