**Worksheet 6 Investigating mirrors**

1. Position a mirror on the indicated line (held vertically) and two drinking straws in such a way that light passing through one straw (straw A) is reflected from the mirror and can be seen through the second straw (straw B). Mark in the positions of each straw on the diagram and the direction light travels through the straws to your eye. You should do this for three different orientations of straw A.

**Mirror**

2. Suppose the mirror is rotated by 45 degrees as below. If straw A is positioned on the dotted line, where should straw B be placed?

**Straw A**

3. A submarine captain uses a periscope to see what is on the surface of the water. The arrows indicate the direction light must travel through the periscope to reach his eyes. How would you position mirrors to achieve this?

