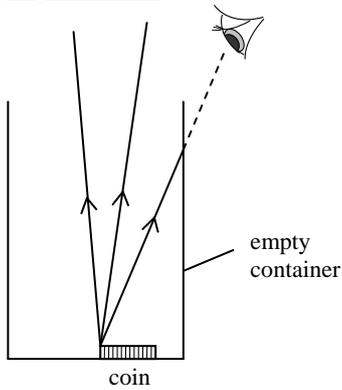
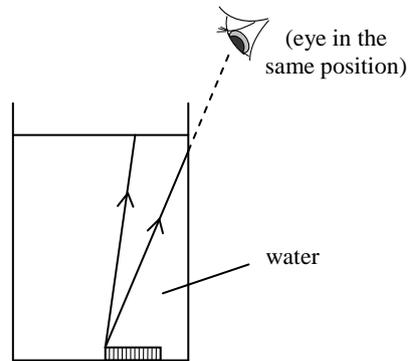


Experiment 3 (Archimedes 287-212 BC)

Observation: the coin is not

Interpretation: the light rays reflected by the coin



Observation: As water is poured in the container, the coin becomes

Interpretation: the light rays reflected by the coin undergo

3.3. Case of the prism

- a. Why is the emerging beam bent? (give the name of the phenomenon and explain why and where it occurs).
- b. The deviation of a ray of light depends on the refractive index n of the glass prism. According to the table below, is the refractive index of the glass prism the same for all wavelengths?

Colour	Wavelength λ	Refractive index
Blue	434 nm	$n_{\text{glass}} = 1.528$
Yellow	550 nm	$n_{\text{glass}} = 1.517$
Red	700 nm	$n_{\text{glass}} = 1.510$

- c. Explain why white light is dispersed by a prism.

4. Conclusion

When white light is passed through a **PRISM**, it is split up into its component
 The band of colours observed is called
 and the spreading effect is called **DISPERSION**.

As white light enters the prism, it undergoes an abrupt change of direction called
 White light is a mixture of an number of which the prism separates out because the deviation for each is different because the of glass depends on