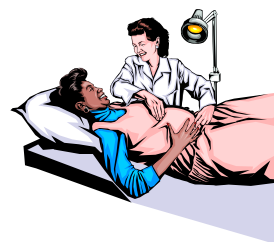


# HEALTH PHYSICS

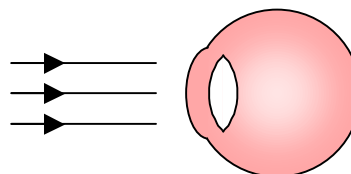
## Homework Exercises

### Homework for Tuesday 7<sup>th</sup> September 2010

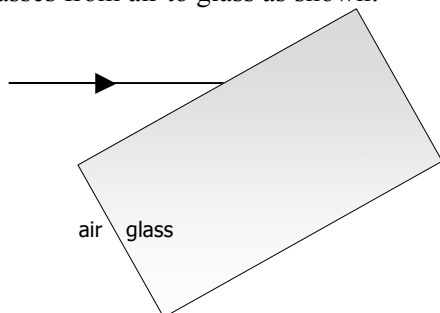
- Name the two liquids most commonly found in liquid-in-glass thermometers.
  - Describe how a liquid-in-glass thermometer works.
- What is normal human body temperature?
  - What would be the most likely effect on your body temperature if you had a fever?
  - What is it called when a person's core body temperature drops far below normal?
- When you are measuring someone's temperature with a clinical thermometer, why do you have to shake the thermometer?
- Sound can be useful in medicine. Doctors often use a device called a stethoscope placed against your chest or back.
  - Which two organs would the doctor be listening to?
  - Give two ways in which the stethoscope helps the doctor hear these sounds.
- Name one use for ultrasound in medicine. The diagram may give you a hint!
  - Explain why ultrasound waves are used for this purpose rather than x-rays.



- Copy and complete the eye diagram to the right to show how a healthy eye would focus the rays of light.



- A ray of light passes from air to glass as shown:



- Copy and complete this diagram to show what happens to the ray in the glass.
- What is this effect called?
- Add the **normal** to the diagram, and label the **angle of incidence** and **angle of refraction**.