



Using Telescopes homework



The answers to most of these questions should be in your Science jotter. If not, you will need to research to find the answers, including the final question.

Level 3

1. State the purpose of a telescope.
2. State the seven types of waves that a telescope can be used to detect.
3. Some telescopes use mirrors.

Draw a diagram to show how a mirror can be used to reflect light. Label the angles of incidence and reflection.

Level 4

4. Explain why telescopes that detect radio waves are much larger in size than telescopes that detect visible light.
5. Telescopes use lenses to focus the light. This involves refraction of light.
 - (a) State what is meant by refraction of light.
 - (b) Copy the diagram shown and complete it to show the path of the ray of light in the glass. Label the angles of incidence and refraction.
6. Telescopes in space are called satellites.
 - (a) State an advantage of using a telescope in space and not on Earth.
 - (b) A student states 'A satellite with a greater orbital height will have a shorter orbital period'. Explain why the student is incorrect.
7. You may have learned about the ALMA telescope on the Science centre trip. Provide information on at least three observations it has made. State what was observed and explain why it is important. State the source of your information and why it should be trusted.

