

GCSE Checklist – Waves and their Uses

By the end of this topic (Chapter 6 in the AQA GCSE Physics textbook, pages 253-288), you should be able to do the following things:

	Pages
Understand why objects appear the colour that they do and the effect that coloured filters have on light (triple only)	253-255
Explain how objects can absorb/emit infra red radiation and the effect that this can have on their temperature ; Describe an experiment to investigate emission of IR (required practical 10)	256-259
Explain what is meant by a perfect black body and describe the distribution of wavelengths of EM waves emitted by objects at different temperatures (triple only)	260-261
Describe what is meant by a concave and convex lens and the effect that each has on parallel rays of light (triple only)	266-267
Define the terms principal focus and focal length for a lens (triple only)	266
Be able to construct a ray diagram to show the image formed by a lens (triple only)	270-274
Explain what is meant by a real or virtual image (triple only)	268-269
Describe the image formed by concave and convex lenses for objects at different distances (triple only)	270-274
Be able to calculate the magnification produced by a lens (triple only)	275-276
Describe the properties of sound waves , e.g. longitudinal waves consisting of compressions and rarefactions that need a medium to travel through (triple only)	279
Explain how the human ear detects sound waves and the range of human hearing (triple only)	280
Describe the nature and uses of ultrasound (triple only)	282-284
Understand what is meant by seismic waves and how they can give us information about the structure of the Earth (triple only)	285-286