GCSE Checklist – Wave Properties.

By the end of this topic (Chapter 6 in the AQA GCSE Physics textbook, pages 224-252), you should be able to do the following things:

		Page(s)
Define the basic features of waves, including **wavelength**, **frequency**, **amplitude** and **period**; use the equation: **f = 1/T**		226-227
Explain the difference between **transverse** and **longitudinal** waves		224-225
Know and be able to use the equation that links **wave speed**, **frequency** and **wavelength**, i.e. **$v = f\lambda$**		228-229
Describe an experiment to determine the speed of waves **(required practical 8)**		229-231
Describe how waves may be **absorbed**, **reflected** or **transmitted** when reaching a boundary between two materials		232
Explain how **refraction** can occur when waves pass from one medium into another in which the wave speed is different		232-234
Describe key ideas about **reflection** of waves, including the **law of reflection** and the definitions of **specular** and **diffuse** reflection **(triple only)**		235-236
Describe experiments that can be carried out to investigate **reflection (triple only)** and **refraction (required practical 9)**		237-238
Name the different types of **electromagnetic (EM) waves** that make up the **electromagnetic spectrum** and state a typical **wavelength** for each		242-244
Explain how EM waves can be produced by **changes** in **atoms**		244
Describe some typical **uses** that can be made of each type of EM wave		245-250
Explain the **dangers** of different types of EM wave		251-252
Investigate how the amount of **infrared radiation** absorbed or radiated by a surface depends on the nature of that surface **(required practical 10)**		257-258