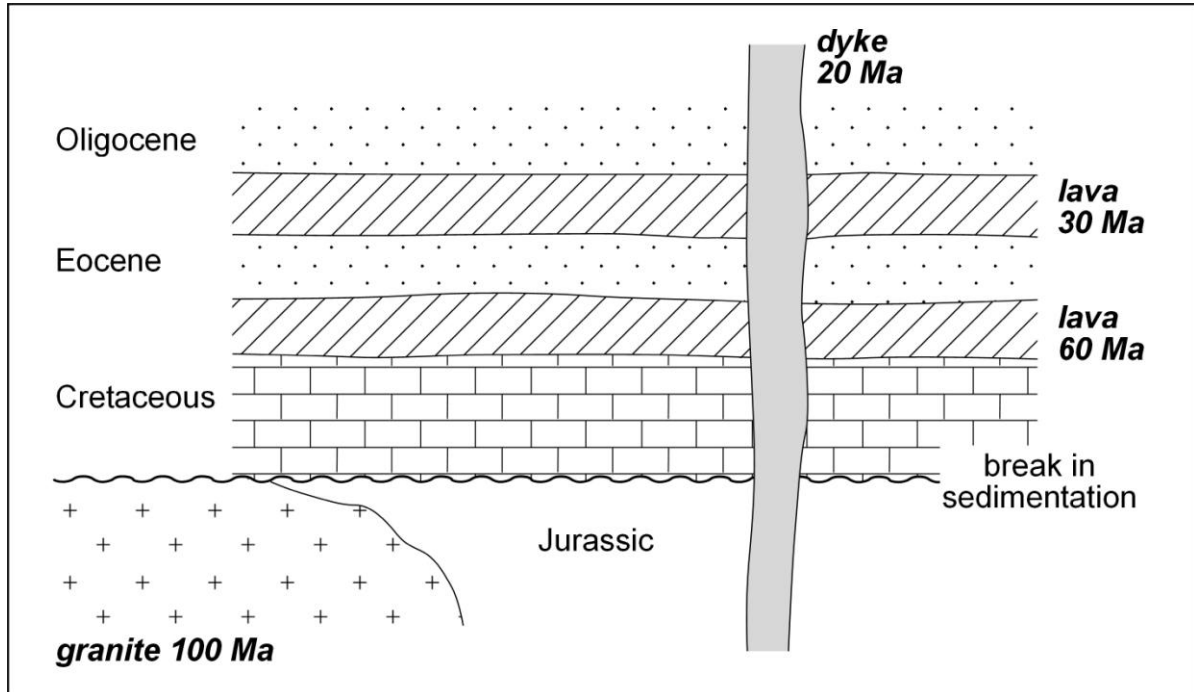


Geological Mapping Exercise 1 - Answers

The diagram shows a geological section in a quarry. The age of the igneous rocks is given in millions of years (Ma).



1. Work out the minimum and maximum age for each of the following rock strata.

	Minimum	Maximum
a) Oligocene	20	30
b) Eocene	30	60
c) Cretaceous	60	100
d) Jurassic	If Granite intruded Jurassic then Jurassic sediments must be older than 100Ma If Jurassic sediments were deposited against the granite then the Jurassic must be younger than the granite (max 100 Ma)	

2. Which **Laws** of Geology did you use to work out your answers?

Law of Superposition – In a sequence of undisturbed sedimentary rocks the youngest layers are always above the oldest.

Principle of Cross Cutting Relationships – Any igneous rock that cuts through strata must be younger than the strata.