Question number	Answer	Notes	Marks
8 (a)	any FIVE from: MP1 use a balance (to measure the mass); MP2 mention a displacement method; MP3 measure the mass first; MP4 (because) a wet rock weighs more; MP5 use of eureka/displacement can or measuring cylinder; MP6 mention of eye-level or parallax avoidance; MP7 **make sure** rock completely submerged; MP8 make sure no water splashes out/put rock in gently;	ignore • geometry equations • use of a ruler to measure rock • density = mass / volume Can be implied from order of response. explicit mention only	5
(b) (i)	density = mass / volume;	accept correct rearrangements accept symbols i.e. rho, m/M, v/V	1
(ii)	substitution; evaluation; answer to 2 sf; e.g. density = 32/12 density = 2.66… g/cm^3 density = 2.7 g/cm^3 to 2 sf	 2 sf marked independently	3
(iii)	quartz; as the density of rock X is the same as the density of quartz;		2

Total for Question 8 = 11 marks