

Question number	Answer	Notes	Marks
5 (a)	Kalpana (no mark) ANY TWO – Density compares masses to volumes / reference to equation; So as mass increases, volume increases; In proportion;	If Christine is chosen, score = 0 for part (a)	2
(b) (i)	A / clearly identified;  smallest scale divisions / measures to 0.2 (ml);	ALLOW 'the one measuring in ml' (identifies A in picture)  MUST have chosen A DO NOT ALLOW 'it measures in ml'	1  1
(ii)	any ONE suitable, e.g. incorrect scale / calibration; misreading scale / parallax /not at eye level; meniscus makes it difficult to read; might not be level / flat; reading may be between divisions;	DO NOT ALLOW 'hard to measure'	1

Question Number	Answer	Notes	Marks
5	(c) (i)	density = mass / volume;	1
	(ii)	substitution into correct equation:	1
		evaluation:	1
		unit:	1
		e.g. 54/23 2.3 g/cm <sup>3</sup>	VALUE MUST be 2 s.f. to be given evaluation mark 2300 if unit is kg/m <sup>3</sup>
	(d) (i)	compare with / look it up in; a book / data table / internet;	1
			1
		(ii)	any ONE suitable, e.g. (many) rock types with similar / same values;
		uncertainty in value / inaccurate measurements; data tables incomplete;	
		IGNORE human error ALLOW 'rock may not be pure'	
		Total	12

ALLOW standard symbols (ALLOW d for density)  
  
VALUE MUST be 2 s.f. to be given evaluation mark  
2300 if unit is kg/m<sup>3</sup>  
  
IGNORE human error  
ALLOW 'rock may not be pure'