Answers and mark guide

Q	Answer	Working	Marks
1	**16**	Add all the numbers.	2
2	**11 cm³**	Each cube is 1 cm³.	2
3	**3**	Largest number in the plan.	1
4	**10**	Count the non-zero entries.	2
5	**4 cm²**	One square for every non-zero entry.	2
6	**1, 3, 2, 1**	For each column take the tallest stack.	3
7	**3, 2**	For each row take the tallest stack.	3
8	**7 cm²**	Add the front elevation heights.	3
9	**5 cm²**	Add the side elevation heights.	3
10	**12**	One more cube.	2
11	**88 cm³**	11 × 8	3
12	**40 cm²**	Count every exposed face.	5
13	**9**	Cuboid volume minus the cubes already used.	4
14	**33.3%**	Cubes used ÷ cuboid volume	5
15	**34 cm²**	Total exposed faces	5
16	**A cuboid 3 by 2 by 2, volume 12**	The three views are all rectangles.	5
17	**A square-based pyramid, volume 80/3 cm³**	⅓ × 16 × 5	5
18	**A sphere**	Looks like a circle from every side.	3
19	**A cylinder of radius 3 cm: 283 cm³**	π × 3² × 10	5
20	**60 cm³**	4 × 5 × 3	4

My score: _____ / 67 Questions 1–15 = 45 marks (Foundation focus)