



11. Rahid has a large number of cubic building blocks. Each block has sides of length 4 cm, 6 cm or 10 cm. Rahid makes little towers built from three blocks stacked on top of each other. How many different heights of tower can he make?

- A 6 B 8 C 9 D 12 E 27



11. C There are several different ways to count systematically the number of towers that Rahid can build. Here is one way.

	All blocks the same size			Exactly two blocks the same size						All blocks of different sizes
	10	6	4	4	6	4	10	6	10	4
	10	6	4	10	10	6	6	4	4	6
	10	6	4	10	10	6	6	4	4	10
Total height	30	18	12	24	26	16	22	14	18	20

So there are nine different heights of tower (as the height of 18cm can be made from $6 + 6 + 6$ or $10 + 4 + 4$).