

Tommy is making cubes using multilink.
He has 64 multilink cubes altogether.

How many different sized cubes could he make?

He says,



If I use all of my multilink to make 8 larger cubes, then each of these will be 2 by 2 by 2.

How many other combinations can Tommy make where he uses all the cubes?

Tommy could make:

- $1 \times 1 \times 1$
- $2 \times 2 \times 2$
- $3 \times 3 \times 3$
- $4 \times 4 \times 4$

Possible answers:

64 cubes that are $1 \times 1 \times 1$

2 cubes that are $3 \times 3 \times 3$; 1 cube that is $2 \times 2 \times 2$; 2 cubes that are $1 \times 1 \times 1$