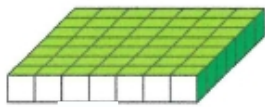


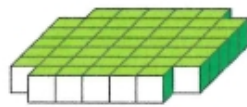
Série Arc-en-ciel – Géométrie

LES ASSEMBLAGES

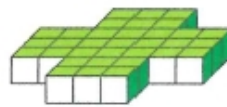
On dispose de quatre types de pièces qui sont toutes fabriquées en collant des petits cubes.



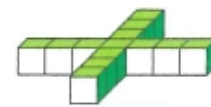
1



2

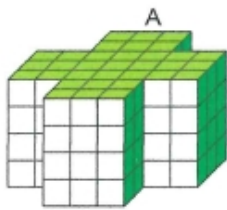


3

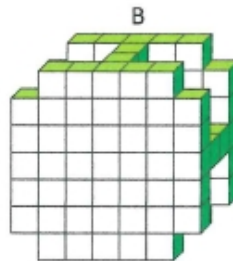


4

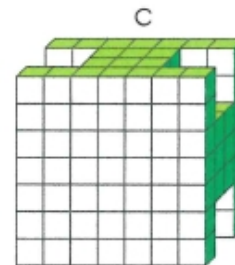
Les solides ci-dessous s'obtiennent en assemblant les pièces précédentes.



A



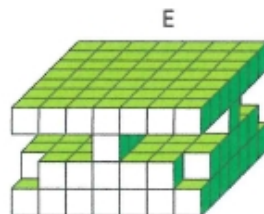
B



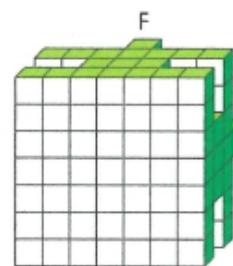
C



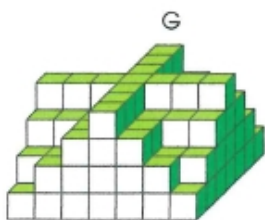
D



E



F



G



H

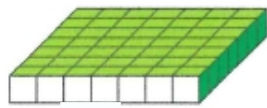
De combien de petits cubes est constitué chacun de ces huit solides ?

Source :

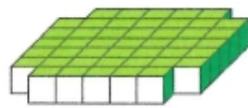
Solution

Série Arc-en-ciel – Géométrie

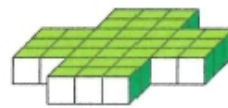
LES ASSEMBLAGES



1
49 cubes



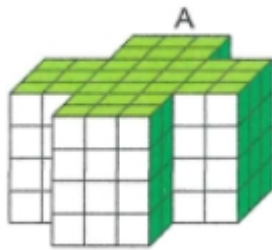
2
45 cubes



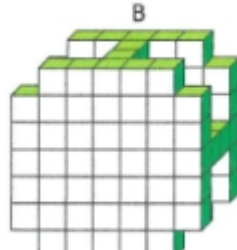
3
33 cubes



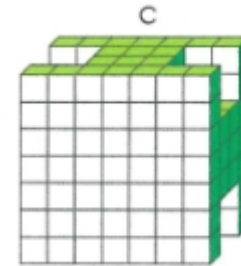
4
13 cubes



4 x la pièce 3
 $4 \times 33 = 132$
132 cubes



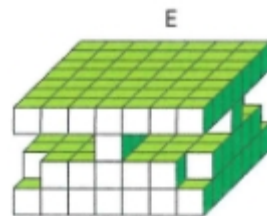
2 x la pièce 2 et
2 x la pièce 4
 $(2 \times 45) + (2 \times 13) = 116$
116 cubes



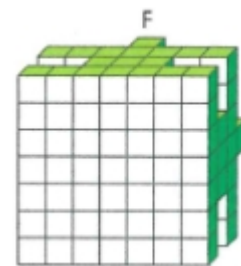
2 x la pièce 1 et
2 x la pièce 3
 $(2 \times 49) + (2 \times 33) = 164$
164 cubes



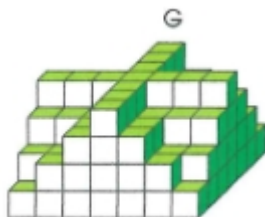
2 x la pièce 1 et
2 x la pièce 4
 $(2 \times 49) + (2 \times 13) = 124$
124 cubes



2 x la pièce 1,
1 x la pièce 2 et
1 x la pièce 4
 $(2 \times 49) + 45 + 13 = 156$
156 cubes



2 x la pièce 1,
1 x la pièce 3 et
1 x la pièce 4
 $(2 \times 49) + 33 + 13 = 144$
144 cubes



1 x la pièce 1, 1 x la pièce 2
1 x la pièce 3 et 1 x la pièce 4
 $49 + 45 + 33 + 13 = 140$
140 cubes



2 x la pièce 2 et 2 x la pièce 3
 $(2 \times 45) + (2 \times 33) = 156$
156 cubes