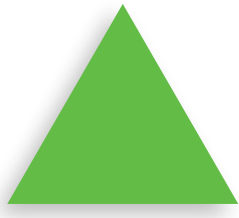
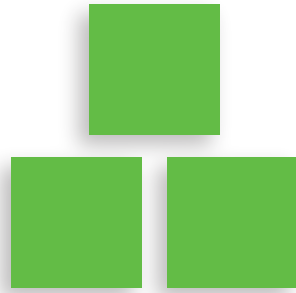


Brain Teasers



Cut an equilateral triangle into:

- ▲ Three equal triangles
- ▲ Four equal triangles
- ▲ Six equal triangles
- ▲ Eight equal triangles
- ▲ Twelve equal triangles



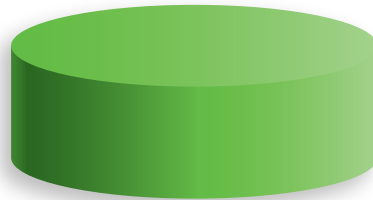
Cut three equal squares into parts that can be assembled to yield another (bigger) square.



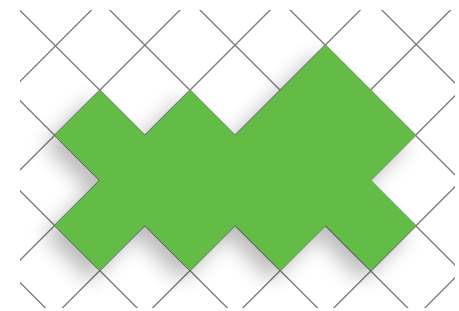
Cut a cross into parts that can be assembled to yield a square.



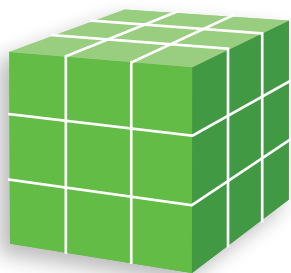
Make one square from four triangles and the small square.



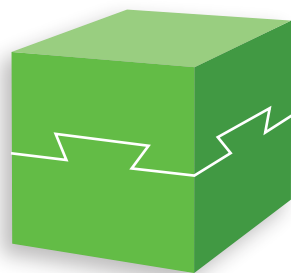
Cut the cake into 8 equal pieces with three straight knife cuts.



Cut the shape above into two equal parts (not necessarily by a straight cut.)



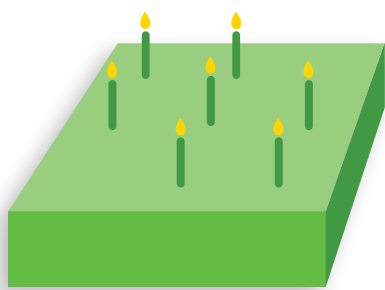
It is easy to cut a cube into 27 smaller cubes using 6 straight cuts. Suppose you are allowed to rearrange the pieces before each subsequent cut. Can you cut the cube into 27 smaller cubes in less than 6 cuts?



Two pieces of wood are connected to form a cube using dovetail-type joints. We tried to pull it apart vertically, to the left, or to the right, but without success. Can you separate the pieces? Can you determine the shape of the pieces?



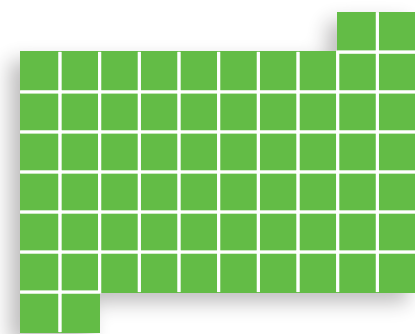
Cut a horseshoe into six pieces using two straight cuts (without rearranging the pieces). Can you cut with two straight cuts it so that each piece has exactly one hole in it?



On his 7th birthday, Alex invited six friends. Help Alex to cut his birthday cake with three straight cuts into 7 pieces, so that every piece has a candle on it.



Measure exactly 6 litres of water using the jars provided, and an unlimited supply of water.



Use one (not necessarily straight) cut to cut the piece of wood into two parts that can be glued together to make a chess board.