



LOGIFACES
METHODOLOGY

Erasmus+

STUDENT
Logifaces

2019-1-HU01-KA201-0612722019-1

609 - Hexagon Count



MATHS / COMBINATORICS

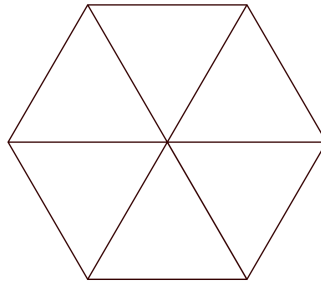
Name:

Date:

Tools: one 9 pcs Set / pair or group

DESCRIPTION

In Levels 1-3 students' task is to leave out the given 3 blocks and arrange the remaining blocks into a hexagon shape (as shown in the diagram) with a continuous surface.



The triples to leave out are:

LEVEL 1 blocks 222, 133, 123 or 222, 133, 132

LEVEL 2 blocks 222, 113, 112 or 222, 123, 132 or 222, 122, 123 or 222, 122, 132

LEVEL 3 blocks 222, 122, 112

An additional question for the Level 1-3 tasks is to find the number of different possibilities to arrange the remaining blocks into hexagons. (Two hexagons are different, if they cannot be moved into each other.)

LEVEL 4 Students' task is to find 6 blocks that form a hexagon shape. How many combinations are there? (Two hexagons are different, if they cannot be moved into each other.)

Which blocks can be left out?

SOLUTION(S)