Grades 5-8 (S), 9-12 (S)

Duration: 15-20 min

Tools: one Logifaces Set / class

Group work

Keywords: Logical thinking, Geometry

# 110 - Twenty Questions Sketch





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# **DESCRIPTION**

The teacher chooses a Logifaces piece and shows it to one student only. The other students can guess according to the rules of the game "twenty questions" (Hungarian name of this game is "barchoba"): they ask yes/no questions from the student who is hiding the block. The students draw the piece when they have enough information from the answers to do so. The teacher checks the drawings.

When all / most of the students have a correct drawing, they can see the piece.

### **SOLUTIONS / EXAMPLES**

This is a warm-up exercise before knowing anything about the Logifaces game. Before trying the game with a Logifaces piece, it is recommended to try it first with a more familiar polyhedron, like a hexahedron.

We recommend first choosing the piece 111, 222 or 333 and then the piece 133, 122, 112 or 113. Pieces 111, 222 and 333 are known by the students as triangular prisms.

Finally, the piece 123 can also be chosen.

# PRIOR KNOWLEDGE

Parts and properties of polyhedra.

# **RECOMMENDATIONS / COMMENTS**

The goal of the exercise is to practise the correct terminology related to polyhedra.

Other possible versions of the game:

- The one student cannot see, just touch the chosen piece.
- The other students have to select the piece from the Logifaces set instead of drawing it.
- The other students have to select the piece from the Logifaces set but instead of seeing the pieces, they are only allowed to touch them (e.g. selecting from a dark box).