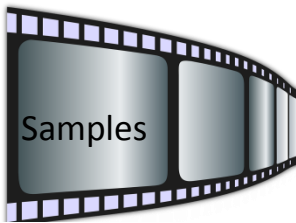


Use of Manipulatives



The use of manipulatives is an instructional strategy that helps make mathematics concepts tangible and visual.

A manipulative is any object that can be manipulated by students and teachers in order to convey an idea or model an abstract concept in mathematics.

"Concepts should be introduced using manipulatives and be developed concretely, pictorially and symbolically." [Source](#)

"While children can remember, for short periods of time, information taught through books and lectures, deep understanding and the ability to apply learning to new situations requires conceptual understanding that is grounded in direct experience with concrete objects."

4-page document: [What teach mathematics with manipulatives](#)

Students are introduced to mathematical concepts concretely, often while the teacher is also demonstrating it pictorially. Students then make connections to the symbolic concept. Students move between the Concrete, Pictorial and Symbolic stages often and throughout their learning as it is rarely a linear progression.

From the TeacherVision Website: [Using manipulatives](#)

Video: [Leprechaun Traps](#) – Addition to 100 [Start at 4:52]
[Various Videos](#) Introducing various concepts using manipulative: Division, Subtraction, Multiplication, Decimals, etc.

Articles:

Nrich: [Manipulatives in the Primary Classroom](#)

Hand 2 Mind: [Why Teach Mathematics with Manipulatives?](#)

CITEd: [Learning Mathematics with Virtual Manipulatives](#)

Education.com: [How Children Learn Mathematics](#)

Hand 2 Mind: [Glossary of Hands-On Manipulatives](#)

LD Online: [The Use of Manipulatives in Mathematics Instruction](#)

Pour une liste de 84 objets de manipulation et la façon de les utiliser:

<http://www.cpfpp.ab.ca/core/dictionary>