

Manipulatives: Not Just for Elementary

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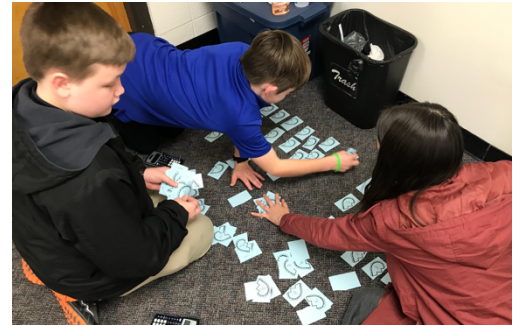
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What are manipulatives?

Hands-on math manipulatives are physical objects that students can touch, move, and interact with to help them understand mathematical concepts.

Why use manipulatives at all?

- Increase student engagement, enhance understanding of abstract concepts, and develop critical thinking and problem-solving skills.
- Help students to bridge the gap between concrete objects and abstract mathematical symbols and concepts.



What are manipulatives?

- *“Tell me and I forget. Teach me and I may remember. Involve me and I learn.”*
- *“I hear and I forget. I see and I remember. I do and I understand.”*
- *“If a child can’t learn the way we teach, maybe we should teach the way they learn.”*

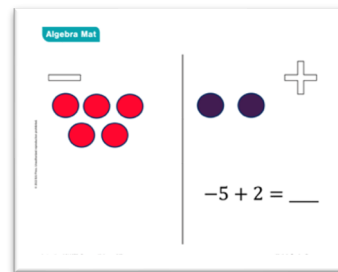
But what about our secondary math classes?

- How can we incorporate hands-on materials in secondary math?
- Why should we?

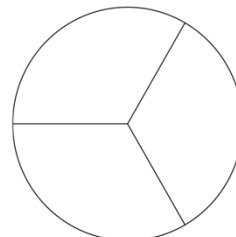
Manipulatives can make learning math more fun and enjoyable, which can lead to a more positive attitude towards mathematics.

Ideas!

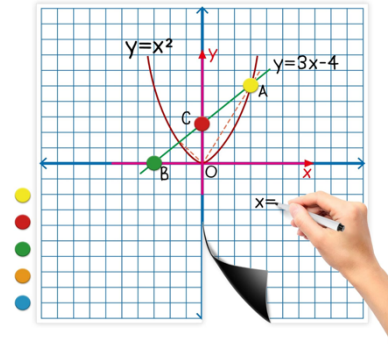
Integers



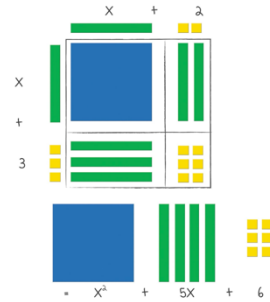
Fractions



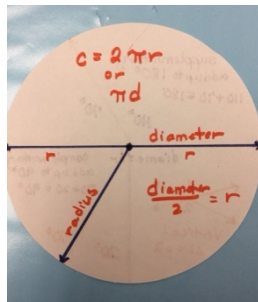
Graphing



Algebra Equations



Circles



Volume



QR Code for links to manipulatives

