



# MATH MENTORING

Demystifying math

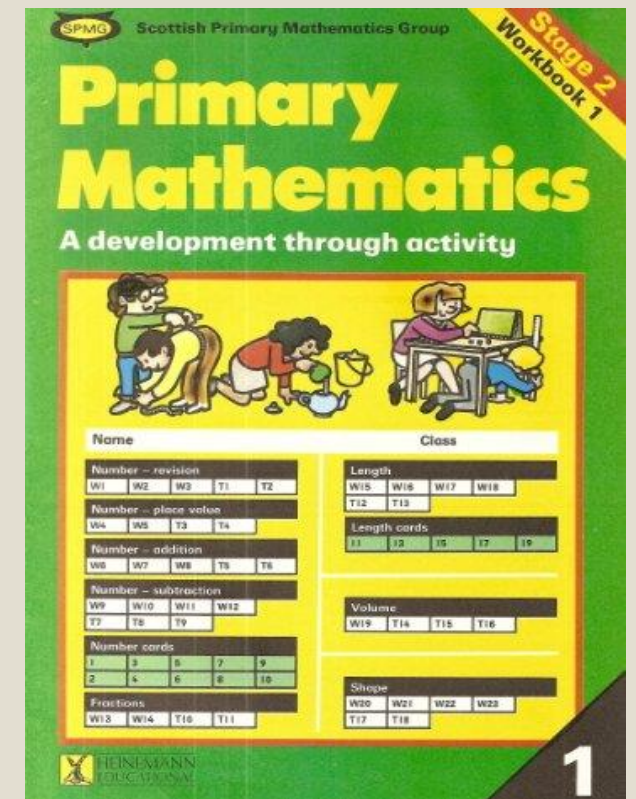
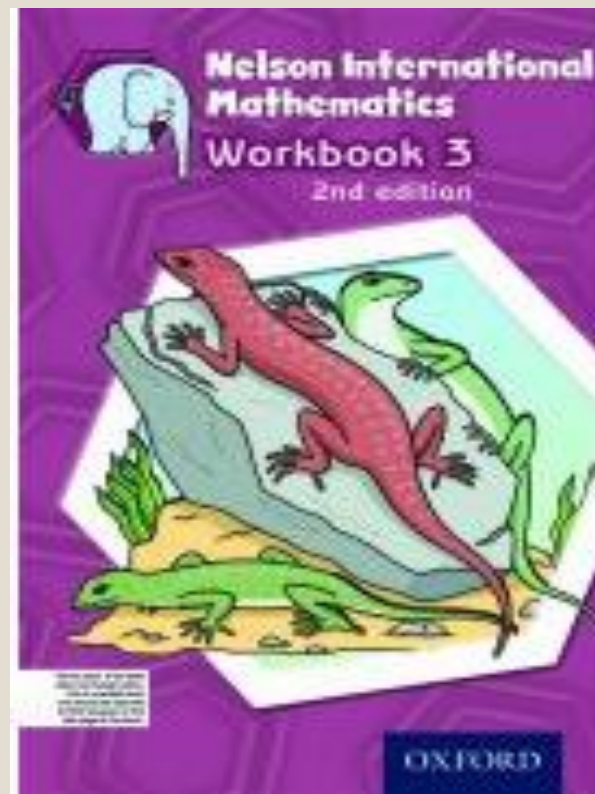
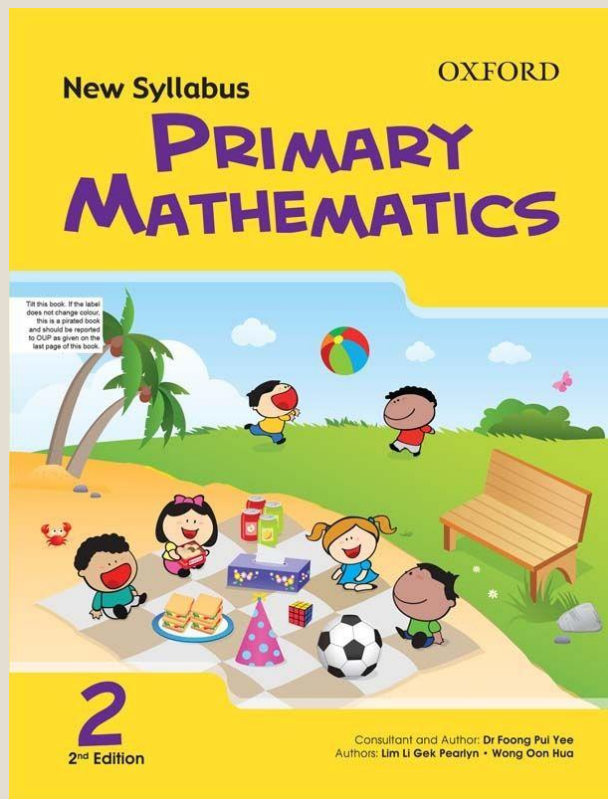
# My Math Journey

As a student  
As a mother

# THE DREADED QUESTION

# Which book to follow?

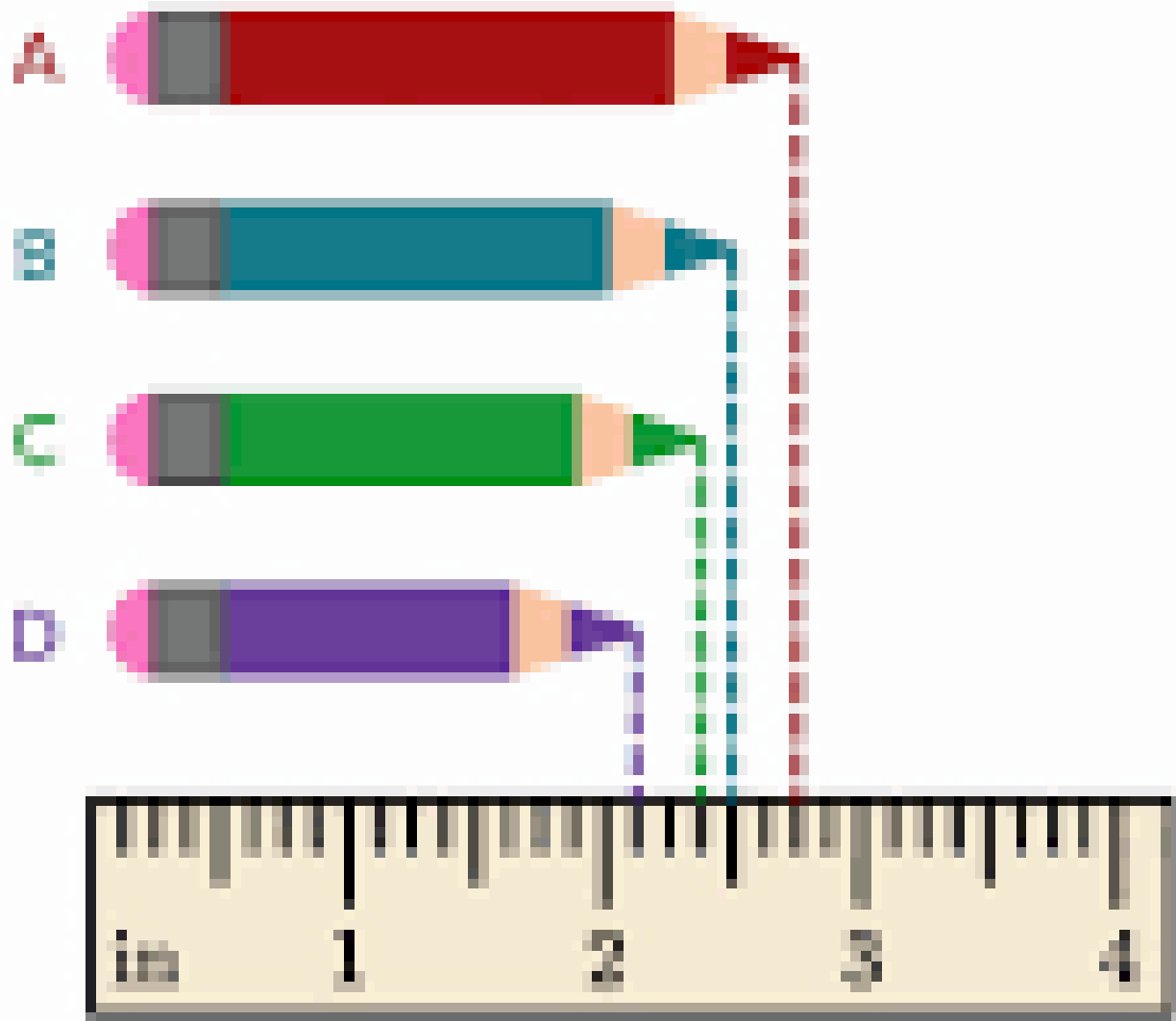
A book is only as good as the teacher teaching it.





3

Three

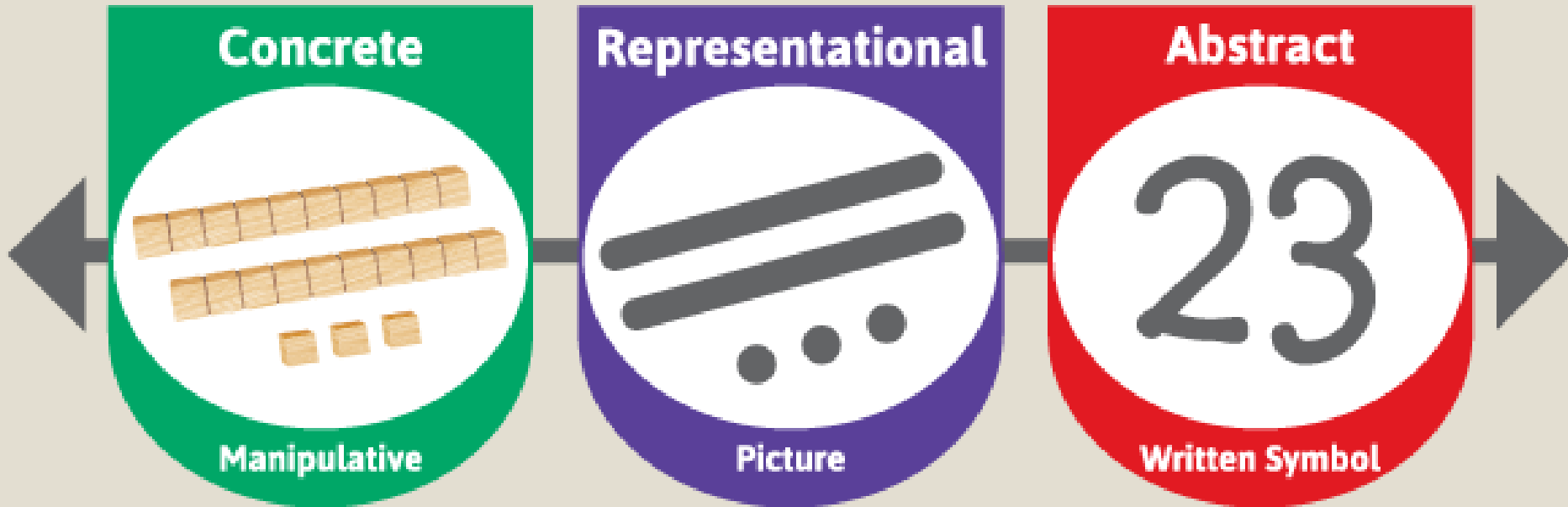






# The CRA Model for Math

## CRA Instruction Model

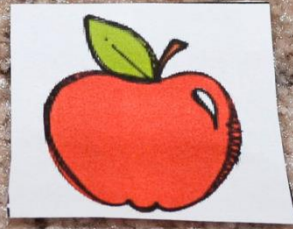




1

Start with 3  
red apples.  
Add 2 green  
apples.

What is the sum?



# Concrete Math

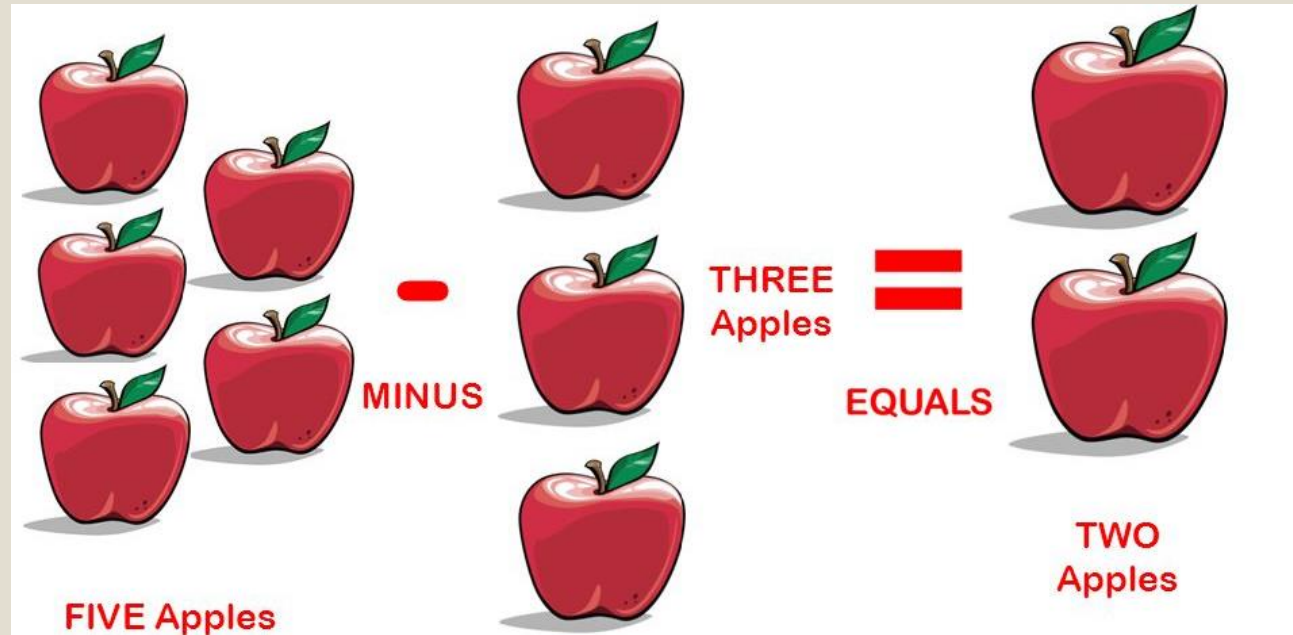


$$2 + 2 + 4$$



$$5 + 2 = 7$$

# Representational Math



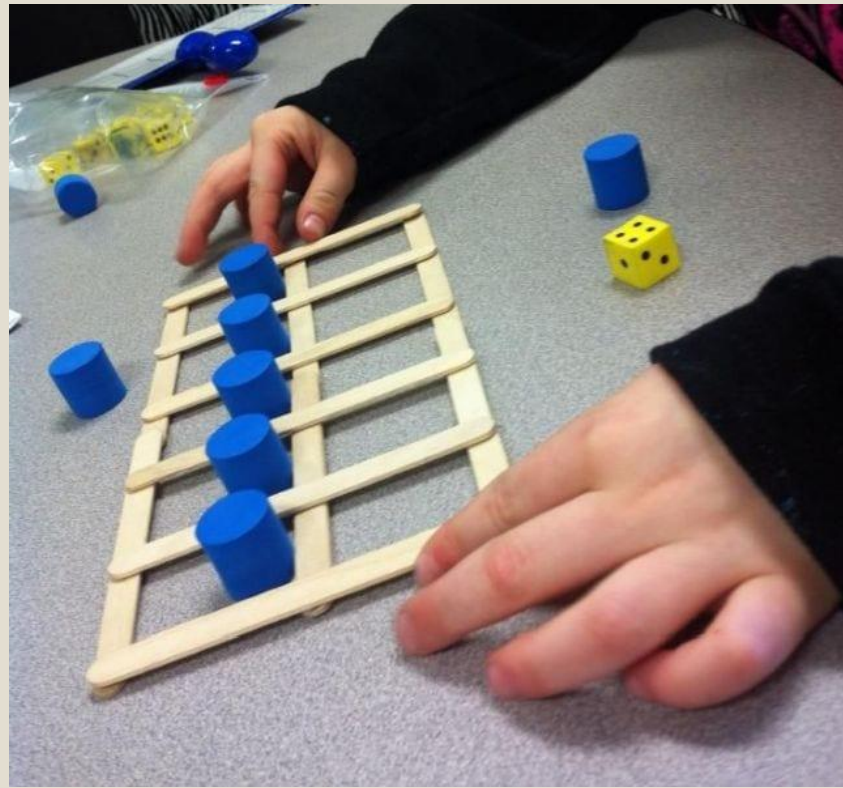
# Abstract Math

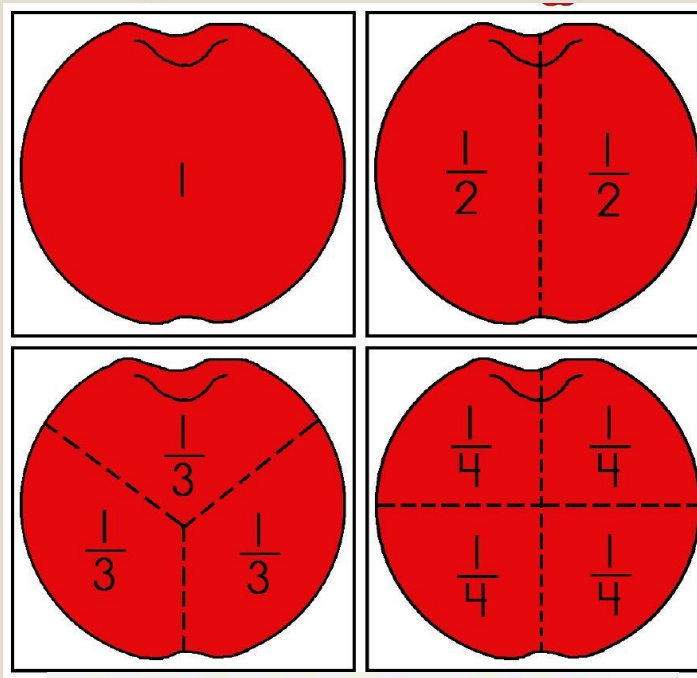
$$5 - 3 = 2$$

$$5 + 2 = 7$$



# Tens and Beyond Tens





$$\frac{1}{2} + \frac{1}{2} = 1$$

$$\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$$

$$\frac{1}{5} + \frac{1}{3} = \frac{8}{15}$$

$$\frac{8}{15} > \frac{1}{2}$$



Teach ----- in a fun way  
Teach ----- to grade --

Google™ Is Your Best Friend ...



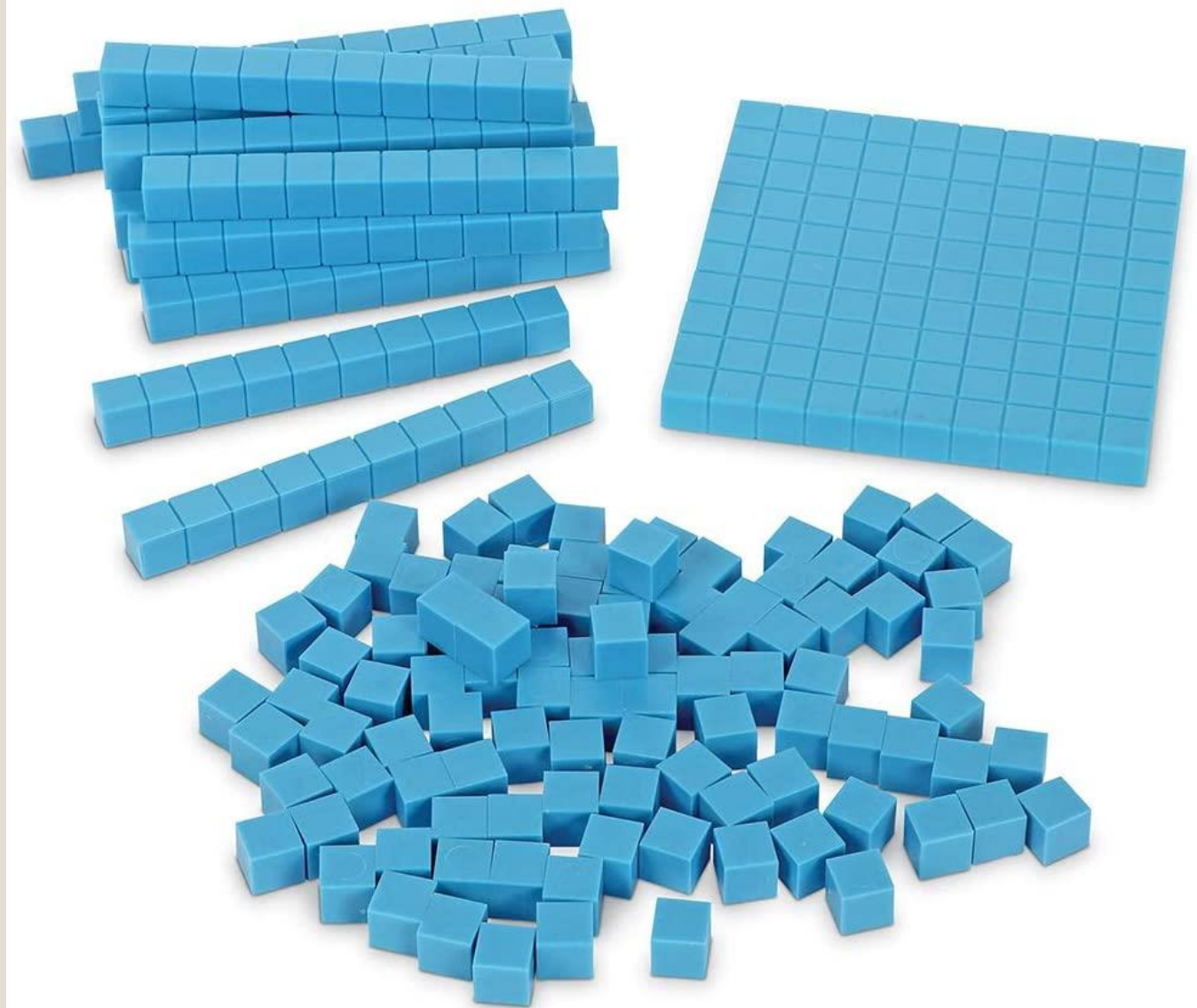
# Manipulatives



# Base ten blocks

DIY

Lego  
Free printables





# Place value disks

1

10

100

1,000

10,000

DIY

Bottles caps, spray paint,  
markers



# Learning clock

DIY

Any old wall clock





# Fraction circles

DIY

Foamic sheets  
Cardboard  
Play-doh





# Cuisenaire rods

DIY

Wood rods  
spray paints



# Algebra tiles

DIY

Cardboard





# Virtual Math Manipulatives

TOY THEATER



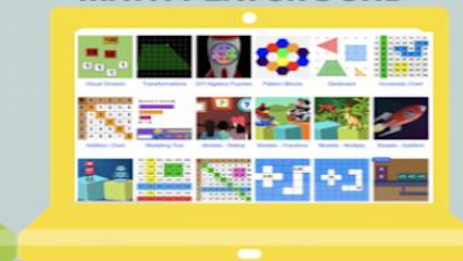
MATH LEARNING CENTER



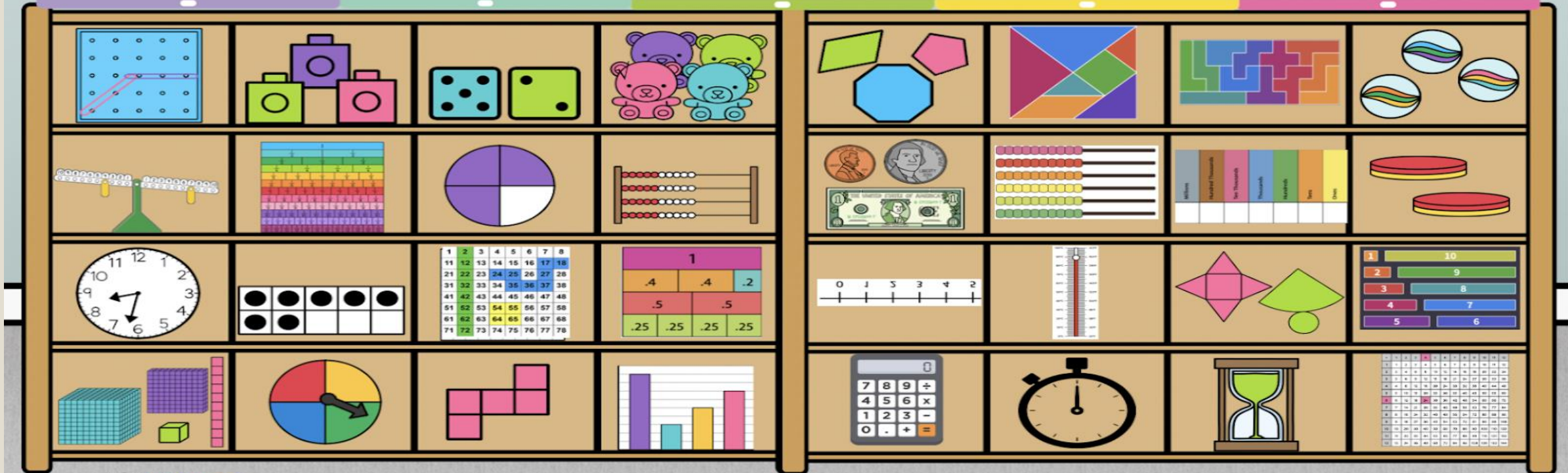
MATHIGON'S POLYPAD



MATH PLAYGROUND



DIDAX



Take help from

Dua

External praise