

## Mrs. Brophy shares... What's happening in Math

Below are different math concepts being practiced at each grade level and strategies to help!

**Kindergarten:** Kindergarteners are working on different counting strategies to help them solve addition and subtraction problem situations. Strategies that they are exploring are using objects, fingers, sounds/actions, and drawings. For example to add  $5+4$  children many use counters or cubes to show a group of 5 and a group of 4. They may use their fingers to show 5 fingers on one hand and four fingers on the other hands to add  $5+4$ . They may jump 5 times and then jump another 4 more times. Lastly, then can draw a picture than represents  $5+4$ .

Below are some web links to continue exploring counting strategies at home.

Addition With Manipulatives: <http://www.abcya.com/addition.htm>

Glencoe Virtual Manipulatives:

[http://www.glencoe.com/sites/common\\_assets/mathematics/ebook\\_assets/vmf/VMF-Interface.html](http://www.glencoe.com/sites/common_assets/mathematics/ebook_assets/vmf/VMF-Interface.html)

Something's Missing:

<http://teams.lacoe.edu/documentation/classrooms/linda/number/activities/hunt/hunt.html>

Rabbit Takeaway:

<http://teams.lacoe.edu/documentation/classrooms/linda/number/activities/hunt/hunt.html>

**First Grade:** First Graders are working on adding and subtracting double digit and single digit numbers using their place value strategies. We are practicing on how to compose or make a ten to help us count more quickly.

The image displays four examples of student work on a blue background:

- Top Left:** A box containing the equation  $75 + 7 = 82$ . Below it are several vertical lines representing a number line or counting strategy. A bracket groups the first seven lines, with the equation  $5 + 7 = 12$  written below. An arrow points from this group to the number 75 in a larger equation below, which has a 7 written below it and an arrow pointing to the 82.
- Top Right:** A box showing a vertical addition problem:  $\begin{array}{r} 26 \\ + 8 \\ \hline 34 \end{array}$ . To the right are three vertical bars representing ten blocks. An arrow points from these bars to the 34 in the sum.
- Bottom Left:** A box with the equation  $23 + 8$ . Below it is the equation  $3 - 2 = 1$ . Below that is the equation  $8 + 2 = 10 + 20 = 30 + 1$ . Below that is the number 31.
- Bottom Right:** A box with the equation  $26 - 2$ . To its right is a vertical addition problem:  $\begin{array}{r} 24 \\ + 10 \\ \hline 34 \end{array}$ .

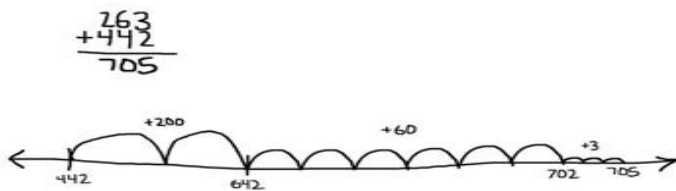
**Second Grade:** Second Graders are adding (composing) and subtracting (decomposing) two and three digit numbers using our written methods.

**Strategies for Composing a Hundred**

Base Ten Model



Number Line



Hundreds Chart

$132 + 49 = 181$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

Break-Apart

$268 + 441 = 709$

$8 + 1 = 9$

$60 + 40 = 100$

$200 + 400 = 600$

**Third Grade:** Third Graders are working on using our addition, subtraction, multiplication, and division strategies to solve multi-step word problems. It is a goal that all of our Third Graders will know all their addition, subtraction, multiplication, and division basic facts. Please continue to practice your basic fact every night at home!

Below are two websites that can help with your basic facts and solving word problems!

More Help with Word Problems: Mr. Nussbaum Multi-Operational Word Problems: [http://mrnussbaum.com/grade\\_3\\_standardswordproblemstep/](http://mrnussbaum.com/grade_3_standardswordproblemstep/)

More Help With Basic Facts: Learn Alberta Under the Sea: <http://www.learnalberta.ca/content/me3us/flash/>

**Fourth Grade:** Fourth Graders are using what they know about fractions in order to read, write, and represent decimals in order to solve addition equations involving decimals. Students are also modeling their addition of decimals with decimal squares.

This is an example of a decimal square used to solve  $0.3 + 0.03$ .

Tenths and Hundredths

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Tenths and Hundredths

A.  **$0.3 + 0.03 = 0.33$**

B.  $\frac{3}{10} + \frac{3}{100} = \frac{33}{100}$

C.  $\frac{30}{100} + \frac{3}{100} = \frac{33}{100}$

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## Multiplying Decimals

**Fifth Grade:** Fifth Graders are multiplying and dividing decimals using decimal arrays.

### Dividing decimals:

Example:

$$37 \div 0.1 = 370$$

Think of the equation like this,

$$37 = 37.0 \text{ or } 370 \text{ tenths}$$

How many equal shares of 1 tenth are in 370 tenths? 370 equal shares. 370 is your answer.

Another example:

$$10.4 \div 0.4 = 26$$

Think of the equation as 104 tenths divided by 4 tenths.

How many equal groups of 4 tenths can be divided into 104 tenths. The answer is 26.

Sample  
Decimal Arrays

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