

FACT FLUENCY
for students
Entering Grades 1 to 4

A GUIDE FOR PARENTS

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What is Fact Fluency?

- Oral and written recall of basic facts for addition and subtraction and/or multiplication and division.
- Each grade level has fact fluency standards based on Massachusetts Common Core State Standards for Math (CCSSM).



Entering **GRADE 1** in the Fall

- Fluently add and subtract within 5*
- Children may use objects, fingers or drawings to help them visualize the important math facts

○ Math Facts:

$$1+1=2$$

$$1+2=3; 2+1=3$$

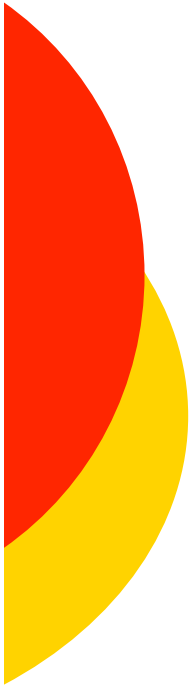
$$1+3=4; 3+1=4$$

$$1+4=5; 4+1=5$$

$$2+2=4$$

$$2+3=5; 3+2=5$$

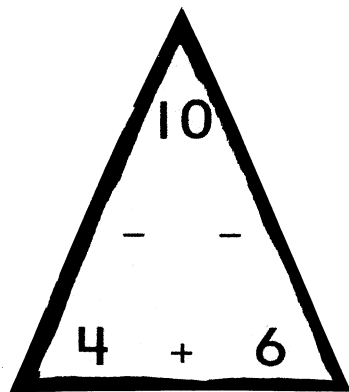
* CCSSM-K.OA.5



Entering **GRADE 2** in the Fall

- Demonstrate fluency with addition and subtraction within 10*
See cells shaded in green to the right
- Know relationship between addition & subtraction

FOR EXAMPLE:



Fact Family

$$4+6=10$$

$$6+4=10$$

$$10-6=4$$

$$10-4=6$$

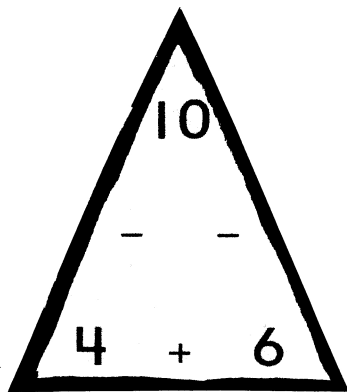
+	1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10	11
2	3	4	5	6	7	8	9	10	11	12
3	4	5	6	7	8	9	10	11	12	13
4	5	6	7	8	9	10	11	12	13	14
5	6	7	8	9	10	11	12	13	14	15
6	7	8	9	10	11	12	13	14	15	16
7	8	9	10	11	12	13	14	15	16	17
8	9	10	11	12	13	14	15	16	17	18
9	10	11	12	13	14	15	16	17	18	19
10	11	12	13	14	15	16	17	18	19	20

* CCSSM-1.OA.6

Entering **GRADE 3** in the Fall

- Demonstrate fluency with addition and subtraction facts within 20*
- Know relationship between addition & subtraction.

FOR EXAMPLE:



Fact Family

$$4+6=10$$

$$6+4=10$$

$$10-6=4$$

$$10-4=6$$

+	1	2	3	4	5	6	7	8	9	10
1	2	3	4	5	6	7	8	9	10	11
2	3	4	5	6	7	8	9	10	11	12
3	4	5	6	7	8	9	10	11	12	13
4	5	6	7	8	9	10	11	12	13	14
5	6	7	8	9	10	11	12	13	14	15
6	7	8	9	10	11	12	13	14	15	16
7	8	9	10	11	12	13	14	15	16	17
8	9	10	11	12	13	14	15	16	17	18
9	10	11	12	13	14	15	16	17	18	19
10	11	12	13	14	15	16	17	18	19	20

* CCSSM-2.OA.2



Entering **GRADE 4** in the Fall

- Demonstrate fluency with multiplication and division facts within 100*
- Know relationship between multiplication & division.

FOR EXAMPLE:

Fact Family

$$4 \times 6 = 24$$

$$6 \times 4 = 24$$

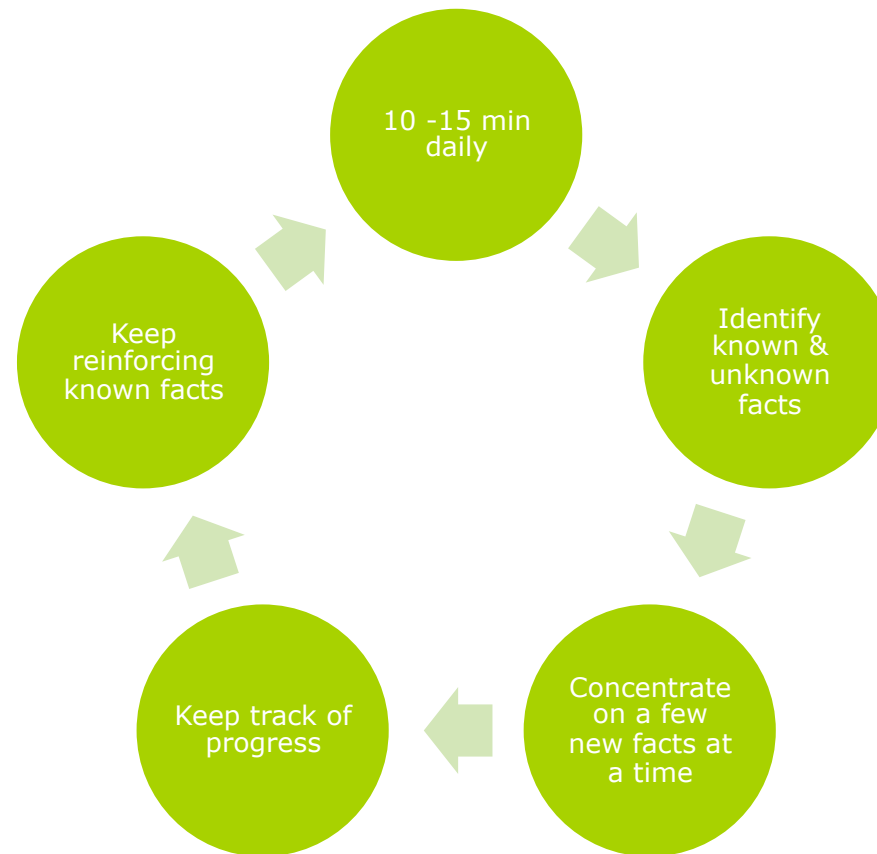
$$24 \div 4 = 6$$

$$24 \div 6 = 4$$

X	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

* CCSSM-3.OA.7

Fact Fluency Practice Strategies





Practice Makes Permanent!

Choose the best way for your child to practice.

- With an online resource such as <http://www.xtramath.com>
This site is already bookmarked on the CPS website under the STUDENTS tab.
- With flash cards or the addition or multiplication tables shown on slides 4, 5, and 6
- With games



Easy Card Game for Fluency Practice

- Children who are beginning to add or multiply can play the following card game:
 - Deal the deck equally among all players. Each player turns over two cards and adds (or multiplies) the two cards and announces the answer.
 - The player with the largest answer wins all cards played.
 - In the event of a tie, players will draw two more cards and the player with the highest result wins all cards played.
 - The winner is the player with the most cards when all cards have been played.



Math is everywhere

- Discuss how and where you use math
- Encourage your child to compute, measure, estimate, follow directions, build models, etc.
- Involve children in cooking, shopping, planning trips, etc.
- Do math puzzles such as Sudoku and Kenken
- Play games that require logic, reasoning, and strategy
- Discuss statistical information (sports data is a good source)
- Encourage your child to explain his/her thinking for solving a problem