

Carroll County Public Schools
Expectations For Basic Fact Memorization

Grade 1

- └ By the end of grade 1, students will have memorized all addition facts with addends to 10 and sums to 10.
- └ By the end of grade 1, students will have memorized all subtraction facts with minuends to 5.

Grade 2

- └ By the end of grade 2, students will have memorized all addition facts with addends to 10 and sums to 15.
- └ By the end of grade 2, students will have memorized all subtraction facts with minuends to 10.

Grade 3

- └ By the end of grade 3, students will have memorized all addition facts with addends to 10 and sums to 18.
- └ By the end of grade 3, students will have memorized all subtraction facts with differences to 10, minuends to 18 and subtrahends to 10.
- └ By the end of grade 3, students will have memorized all multiplication facts up to and including the 5s table.

Grade 4

- └ While in grade 4, students are expected to retrieve from memory all addition facts with addends to 10 and sums to 18.
- └ While in grade 4, students are expected to retrieve from memory all subtraction facts with differences to 10, minuends to 18 and subtrahends to 10.
- └ By the end of grade 4, students will have memorized all multiplication facts up to and including the 10s table.
- └ By the end of grade 4, students will have memorized all division facts with divisors to 10 and quotients to 10.

Grade 5

- └ While in grade 5, students are expected to retrieve from memory all addition facts with addends to 10 and sums to 18.
- └ While in grade 5, students are expected to retrieve from memory all subtraction facts with differences to 10, minuends to 18 and subtrahends to 10.
- └ While in grade 5, students are expected to retrieve from memory all multiplication facts up to the 10's table.
- └ While in grade 5, students are expected to retrieve from memory all division facts with divisors to 10 and quotients to 10.

BASIC FACTS
GRADE 1

CCPS Expectation- by the end of grade 1, students will have memorized all addition facts with addends to 10 and sums to 10.

Addition Facts Students Should Memorize While In
Grade 1

0+0	1+1	2+2	3+3	4+4	5+5
0+1	1+2	2+3	3+4	4+5	
0+2	1+3	2+4	3+5	4+6	
0+3	1+4	2+5	3+6		
0+4	1+5	2+6	3+7		
0+5	1+6	2+7			
0+6	1+7	2+8			
0+7	1+8				
0+8	1+9				
0+9					
0+10					

CCPS Expectation- by the end of grade 1, students will have memorized all subtraction facts with minuends to 5.

Subtraction Facts Students Should Memorize While In
Grade 1

5-0	4-0	3-0	2-0	1-0	0-0
5-1	4-1	3-1	2-1	1-1	
5-2	4-2	3-2	2-2		
5-3	4-3	3-3			
5-4	4-4				
5-5					

BASIC FACTS
GRADE 2

CCPS Expectation- by the end of grade 2, students will have memorized all addition facts with addends to 10 and sums to 15.

Addition Facts Students Should Memorize While In
Grade 2

1+10	2+9	3+8	4+7	5+6	6+6	7+7
	2+10	3+9	4+8	5+7	6+7	7+8
		3+10	4+9	5+8	6+8	
			4+10	5+9	6+9	
				5+10		

CCPS Expectation- by the end of grade 2, students will have memorized all subtraction facts with minuends to 10.

Subtraction Facts Students Should Memorize While In
Grade 2

6-0	7-0	8-0	9-0	10-0
6-1	7-1	8-1	9-1	10-1
6-2	7-2	8-2	9-2	10-2
6-3	7-3	8-3	9-3	10-3
6-4	7-4	8-4	9-4	10-4
6-5	7-5	8-5	9-5	10-5
6-6	7-6	8-6	9-6	10-6
	7-7	8-7	9-7	10-7
		8-8	9-8	10-8
			9-9	10-9
				10-10

BASIC FACTS
GRADE 3

CCPS Expectation- by the end of grade 3, students will have memorized all addition facts with addends to 10 and sums to 18.

Addition Facts Students Should Memorize While In Grade 3

10+6	8+8	9+9
10+7	8+9	
10+8		

CCPS Expectation- by the end of grade 3, students will have memorized all subtraction facts with differences to 10, minuends to 18 and subtrahends to 10.

Subtraction Facts Students Should Memorize While in Grade 3

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

CCPS Expectation- by the end of grade 3, students will have memorized all multiplication facts up to and including the 5s table.

Multiplication Facts Students Should Memorize While in Grade 3

0x0	1x0	2x0	3x0	4x0	5x0
0x1	1x1	2x1	3x1	4x1	5x1
0x2	1x2	2x2	3x2	4x2	5x2
0x3	1x3	2x3	3x3	4x3	5x3
0x4	1x4	2x4	3x4	4x4	5x4
0x5	1x5	2x5	3x5	4x5	5x5
0x6	1x6	2x6	3x6	4x6	5x6
0x7	1x7	2x7	3x7	4x7	5x7
0x8	1x8	2x8	3x8	4x8	5x8
0x9	1x9	2x9	3x9	4x9	5x9
0x10	1x10	2x10	3x10	4x10	5x10

BASIC FACTS
GRADE 4

CCPS Expectation- while in grade 4, students are expected to retrieve from memory all addition facts with addends to 10 and sums to 18.

CCPS Expectation- while in grade 4, students are expected to retrieve from memory all subtraction facts with differences to 10, minuends to 18 and subtrahends to 10.

CCPS Expectation- by the end of grade 4, students will have memorized all multiplication facts up to and including the 10s table.

Multiplication Facts Students Should Memorize While In
Grade 4

6x0	7x0	8x0	9x0	10x0
6x1	7x1	8x1	9x1	10x1
6x2	7x2	8x2	9x2	10x2
6x3	7x3	8x3	9x3	10x3
6x4	7x4	8x4	9x4	10x4
6x5	7x5	8x5	9x5	10x5
6x6	7x6	8x6	9x6	10x6
6x7	7x7	8x7	9x7	10x7
6x8	7x8	8x8	9x8	10x8
6x9	7x9	8x9	9x9	10x9
6x10	7x10	8x10	9x10	10x10

CCPS Expectation- by the end of grade 4, students will have memorized all division facts with divisors to 10 and quotients to 10.

Division Facts Students Should Memorize In
Grade 4

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

BASIC FACTS
GRADE 5

CCPS Expectation-while in grade 5, students will be able to retrieve from memory:

- all addition facts with addends to 10 and sums to 18.
- all subtraction facts with differences to 10, minuends to 18 and subtrahends to 10.
- all multiplication facts up to the 10's table.
- all division facts with divisors to 10 and quotients to 10