

Archway Cicero Summer Math Challenges

Hello Cicero Families!

We are excited to launch our summer math challenges. There will be two challenge opportunities this summer. Please read on to learn about each one. If you have any questions, please reach out to our Dean of Academics, Mrs. Stefaniak, at tstefaniak@archwaycicero.org.

Math Fluency Drills

Our first summer challenge is focused on practicing math fact fluency and operations-based skills that are appropriate for each rising grade level. The skills contained in each packet are topics that your scholar has already covered in math class at Archway. It is important to practice these skills over the summer so that your scholar has a strong foundation heading into the next school year. Scholars can complete the fluency exercises at their leisure throughout the summer. An additional option is to make copies of the packet and have your scholar time themselves on each worksheet to beat their record throughout the summer! Completed packets — both timed and untimed — will be accepted for a prize upon return to school in August. All scholars received a copy of their appropriate packet during the last week of school. They will also be posted on our school website in June. Scholars should complete the packet for the grade level that they will be starting in August.

Math & Logic Puzzles

Our second summer challenge is full of puzzles and activities that help scholars to practice their math skills and logical reasoning. This challenge may also be turned in for a prize upon our return to school if earnestly completed in its entirety. There will be two options — one packet designed for younger scholars (1-3) and one packet designed for older scholars (3-5). The math & logic puzzle challenges will be posted on the school website in June.

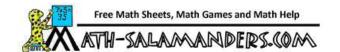
COUNTING BY 1s UP TO 120 SHEET 1



• Fill in the missing numbers.

1)								
	23	24		26		28		
2))							
	45		47		49		51	
3))							
	73	74			77			80
4))							
	18		20			23		
5))							
	29		31		33			36
6))							
	90			93				97
7)								
	101		103	104			107	
8)								
	13	14		16			19	
9)								
	113	114		,	117			120



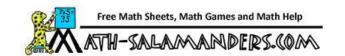


COUNTING BACK BY 1s SHEET 1



Fill in the missing numbers.

1)								
	36	35			32			29
2)	İ							
	70	69		67			64	
3)	1							
	24	23			20		18	
4)								
	100	99			96	95		
5)								
	82	81		79				75
6)								
	64		62	61			58	
7)								
	91		89			86	85	
8)								
	109		107	106				102
9)								
	103	102		100				96





NEWTON'S NUMBER TRACK PUZZLE 1

Each number in the number track is made by adding the previous 2 numbers together.

Example	1	3	4	7	11
			l	l	

The third number is made by adding the first 2 numbers 1+3=4

Fill in the missing numbers in these number tracks.

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



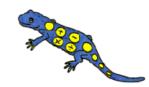
QUADRA'S OPERATION PUZZLE 1

In each box, write down the correct operations: + or - to make the sum correct.

3	+	2	+	1	=	6
3	\bigcirc	2	\bigcirc	1	≡	4
3	\bigcirc	2	\bigcirc	1	=	2
3	\bigcirc	2	\bigcirc	1	≡	0
5	\bigcirc	1	\bigcirc	2	≡	8
5		1	\bigcirc	2	(=)	6

5	1	\bigcirc	2	4
		\bigcirc		





NUMBER BONDS TO 10 SHEET 6

Fill in the missing numbers to make 10.

$$+ 2 = 10$$

Join the bonds

Join up the number bonds that add up to make 10.

3 <	5	
2	3	
7	8	
5	7	

4	0	
1	2	
1 10	9	
8	6	

Circle the bonds

Put a circle around all the pairs of numbers that total 10.

5	_2	3	4	6	1
4	5	7	5	9	2
6	1	9	7	3	4
8	4	5	6	9	1
3	2	5	7	4	8
9	1	3	0	10	2

See if you can find at least 10 pairs!

NUMBER BONDS TO 12 SHEET 1



0

1

3

4

5

6

8

9

10

11

Fill in the missing numbers to make 12.

$$6 + = 12$$

$$5 + = 12$$

Fill in the missing facts

12 is 1 more than 11

12 is ___ more than 10

12 is ___ more than 9

12 is ___ more than 8

12 is ___ more than 7

12 is ___ more than 6

12 is ___ more than 5

12 is ___ more than 4

12 is ___ more than 3

12 is more than 2

12 is ___ more than 1

12 is ___ more than 0

Join up the pairs of numbers that add up to 12

10

6

6

11

1

3

5

7

4

8



NEWTON'S CROSSES PUZZLE 2

1) Write the numbers 3, 4, 5 and 6 in the correct place so that each line of the cross adds up to 11.

3 4 5 6

Total must be 11



2) Write the numbers 1, 2, 4, 5 and 6 in the squares so that each line of the cross adds up to 12.

1 2 4 5 6

Total must be 12



3	

2





QUADRA'S SQUARE PUZZLE 2

1) Write the numbers 1, 2, 4, 6, 7, 8 in the correct place so that each side of the square adds up to 15.

1 2 4 6 7 8

Total must be 15

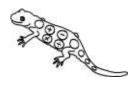


5	
3	

2) Can you write the numbers 1, 2, 4, 6, 7, 8 in the correct place so that each side of the square adds up to 12?

1 2 4 6 7 8

Total must be 12



5	
	3

Name Date

PLACE VALUE RIDDLES 1B



Select the correct answer from a choice of 6 possibilities.

1) I am a two digit number.

I am larger than 30.

I am smaller than 60.

I am even.

Who am I?

26	43	85
19	28	44

2) I am less than 8 tens.

I am more than 5 tens.

I am odd.

If you add my two digits together, you get 10.

Who am I?

25	79	82
73	58	37





Name Date

PLACE VALUE RIDDLES 2A



Select the correct answer from a choice of 8 possibilities.

1) I am a 3-digit number.

My hundreds digit is odd but I am an even number.

I am more than 6 hundreds.

My tens digit is one less than my hundreds digit.

Who am I?

387	765	572	986
874	628	729	1320

2) I am less 5 hundreds.

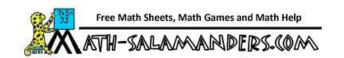
My hundreds digit is even.

My tens digit is in the 3 times table.

I am odd.

Who am I?

 425	719	382	873
463	258	337	236





SALLY'S HEXAGON NUMBER PUZZLE 2



Each hexagon is made by adding up the numbers in the two hexagons below it. Fill in the missing numbers in these puzzles.

