ASSIGNMENTS BY SKILL LEVEL

LEVEL 1:

Count Multiples of 1s and 10s to a Thousand and back.

Counting Groups of objects in Easy and then Hard modes.

Count To/From and Name Numbers up to a Thousand.

Multiples of 5s with Halves and Doubles Assignments.

Multiples of 9s and 11s with Add and Subtract to 100 using intervals of 9, 10, 11, Timed.

LEVEL 2:

Multiples of 2, 4, 8 then 3, 6, 12 and 7. Use the Multiples Table simultaneously with the Unit Operations tool from the Arithmetic Section when learning each digit's multiples.

Add and Subtract to / from100 using intervals of 6 - 14, Timed.

Make Target Sums between 10 and 20 as needed.

LEVEL 3:

Determine Mean Median and Mode from sets of 10 digits, a help graphic defines the terms in the Counting Groups Section.

From the Numeration Section, Count To/From Any Number to a Billion, Forward and Backward.

Name Numbers to a Billion using a wordbook, with examples.

Round Numbers to nearest Ten, Hundred and Thousand, with interactive examples detailing the steps.

LEVEL 6:

Scientific Notation Operation Add Subtract Multiply and Divide with interactive examples describing What Scientific Notation is, Why we need it and How to perform Operations.

www.abc123math.com / Program Materials / Section Overviews / Counting



A Multiples Table highlights Multiples of Digits 1 through 12 up to 120. This reference may be used in Levels 1 & 2, when students are working the Base-10 Counting & Unit Oper Learning Points

Multiples Table										
	01	s O	10s (⊃5s	⊙9s	⊙11s	(02s	04s	08s
		03	s O	6s ())12s 07s			OPr		
	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
	0.1	02	03	9.4	95	96	97	9.8	99	100

COUNTING GROUPS

Dots and Digits where in Dots mode students highlight an exact number of Dots and in Digits mode they realize benefits counting by Groups of 10s instead of 1s.

Group Similar Shapes requires sorting 10 shapes into 3 basic groups and then 20 Shapes into 4 Groups including an Others group.

Doubles and Halves presents a number less than 500, requiring no carry 10's, in Easy Mode.

Counting money presents up to 3 or up to 9 units of: Dollar Quarter Dime Nickel Penny, Students total amounts and enter answer with dollar sign and 2 Decimals

Mean Median Mode presents sets of 10 digits. Simple graphics define the terms and show how to calculate them.

Sums between 10 and 20 presents a 6x6 Matrix of Digits. Select a Target sum and click combinations of digits to make the sums.

ADD SUBTRACT TO 100, TIMED

The Add and Subtract to 100 tool helps students improve their base10 acumen by adding up to and over the next group of 10.

The Intervals shown here are 9 10 or 11 and adding 10 is just moving up 1 row. In this mode add and subtract may be thought of as counting up or down 1 row and over 1 column. In hard mode the interval is 6-14 requiring base10 strategies to get faster and not rely on any finger counting. The tool is timed and intended to be used regulaurly as students improve skills and get faster in all 4 operating modes.



Instructors may set up an external reward perhaps placing a chart in the classroom showing fastest times with a reward offered to the most improved and absolute fastest students.

1 mk10 Help Sco	ore 2021	-06-15 •	09:17 Mr	G			⊗this ⊗all
New Num	bers	Sh You	now Groups Made u made 0 groups				
	Ad	id nu	mbers	s to n	nake '	10	
	6	7	9	1	2	6	
	2	8	9	9	5	8	
	1	3	з	9	2	6	
	8	5	9	1	1	8	
	8	9	1	2	4	1	
	5	9	2	8	4	6	

Students may use <u>Make Sums</u> tool from Counting Groups to practice and learn adding single digits up to and then over the next group of Ten.

Practice with different Target Sums between 10 and 20.

NUMERATION SECTION FEATURES 4 TOOLS

Counting to / from Any Number forward and backwards, to a thousand, million and billion. Students learn to work from right to left starting with the least significant digit first.

Name Numbers to a Thousand Million and Billion has a How to Name Tutorial, explaining the 3-digit name combined with a Period of Ten Name. The Online Tool generates random numbers and offers a word bank to build the Name by clicking on each word in the work bank as shown.

Rounding Numbers features a tool generating 5 numbers up to ten thousand asking for each to be rounded to the nearest ten, hundred and thousand. A Tutorial begins with an example explaining the Place to Round and Significance of the Digit to the Right of Place. There are 3 examples to easily animate in a class and individual worksheets may be printed for each student.

Scientific Notation Has Examples explaining WHAT the notation is, WHY we need it and How-to perform Add, Subtract, Multiply, and Divide operations. There are two Worksheets that may be printed for each student. The online tool generates two numbers each with one decimal, and not more than four powers of ten apart. The numbers are presented in Add, Subtract, Multiply, and Divide operations requiring answers rounded to two decimal places.