

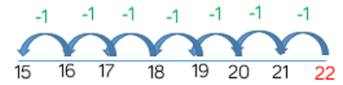


7. Subtracting ones

add and subtract 2-digit numbers and ones using concrete objects, pictorially and mentally

Fluency:

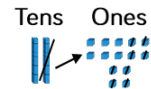
22 - 7 (counting back)



22 - 7 (bridging 10)



24 - 8
(Base Ten)



24 - 8
(Column method)

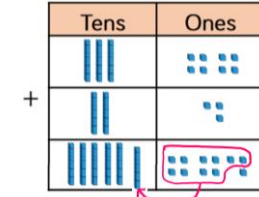
$$\begin{array}{r} 24 \\ - 8 \\ \hline 16 \end{array}$$

8. Adding 2-digit numbers

add and subtract two 2-digit numbers using concrete objects, pictorially and mentally

Fluency:

38 + 23 (Base 10, exchange)



38 + 23 (Column method, exchange)

$$\begin{array}{r} 38 \\ + 23 \\ \hline 61 \end{array}$$

Problem solving:

Write <, > or = to compare the additions.

$$17 + 52 \quad \bigcirc \quad 15 + 54$$

$$31 + 14 \quad \bigcirc \quad 42 + 14$$

$$23 + 45 \quad \bigcirc \quad 13 + 45$$

Reasoning:

What could the missing numbers be?

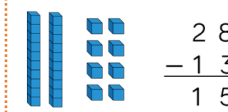
$$\begin{array}{r} 1 \quad \square \\ + 2 \quad \square \\ \hline 4 \quad 2 \\ 1 \end{array}$$

9. Subtracting 2-digit numbers

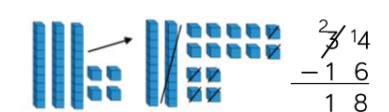
add and subtract 2-digit numbers and tens using concrete objects, pictorially and mentally

Fluency:

Subtract 13 from 28



Take 16 away from 34



Problem solving:

The farmer gives her hen 43 seeds.
The hen eats 28 seeds.
How many are left?



Reasoning:

What could the missing numbers be?

$$\begin{array}{r} 6 \quad \square \\ - 2 \quad \square \\ \hline 4 \quad 2 \end{array}$$

10. Number bonds to 100

solve addition & subtraction problems using concrete objects & pictorial representations, including involving numbers, quantities & measures applying their knowledge of mental and written methods

Fluency:

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

- 40 squares are shaded, how many are not shaded?
- 45 squares are shaded, how many are not shaded?
- 54 squares are shaded, how many are not shaded?

11. Adding three 1-digit numbers

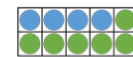
add and subtract 3 1-digit numbers and ones using concrete objects, pictorially and mentally

Fluency:

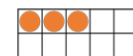
4 + 3 + 6 (using 10 frames)



Can you add the numbers in a different way to find a number bond to 10?



$$4 + 6 = 10$$



$$10 + 3 = 13$$

Problem solving:

Find the totals:

5	4	2	
3	7	8	
5	7	3	

Reasoning:

Sunny says he can make 12 using three 1-digit numbers 5 different ways.

Is he right?
Prove it!



Key Vocabulary

addition vocabulary:

add more	plus and	total altogether	sum
----------	----------	------------------	-----

subtraction vocabulary

subtract fewer	difference take	less minus	take away reduce
----------------	-----------------	------------	------------------

other key vocabulary:

inverse
number bonds
column method
fact family
base ten cubes
place value

The calculation which undoes the other one, e.g. addition and subtraction

A pair of numbers that make a total

Adding and subtracting in columns

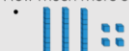
A group of calculations created using the same three numbers

Tens and ones equipment, also known as Dienes, which the place value of a number

A pair of numbers that make a total

Problem solving:

Tommy is making 100 with Base 10
How much more does he need if he has:



5 tens and 3 ones

37

Reasoning:

65 + 35
60 + 40
55 + 45

What comes next?
Continue the sequence.

Add and subtract within 100 by applying related one-digit addition facts