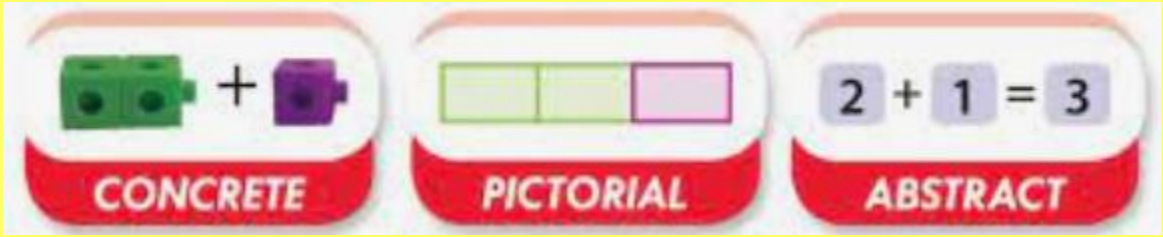
Maths Workshop for Parents

November 2024

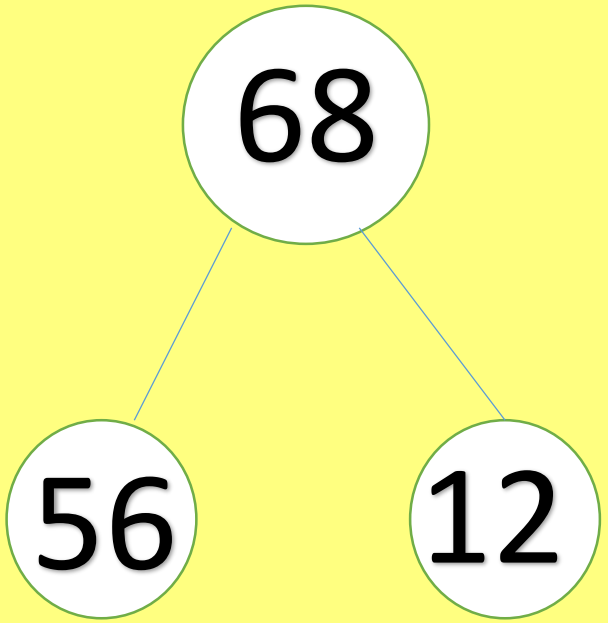
Four Calculations:

addition +
subtraction -
multiplication x
division ÷



Addition

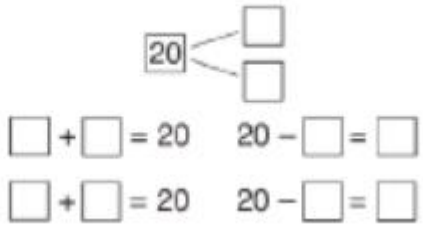
$56 + 12 =$

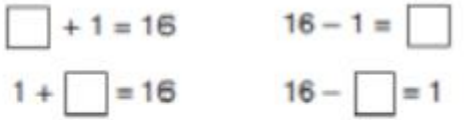


Use known number facts

Part part whole

Children explore ways of making numbers within 20



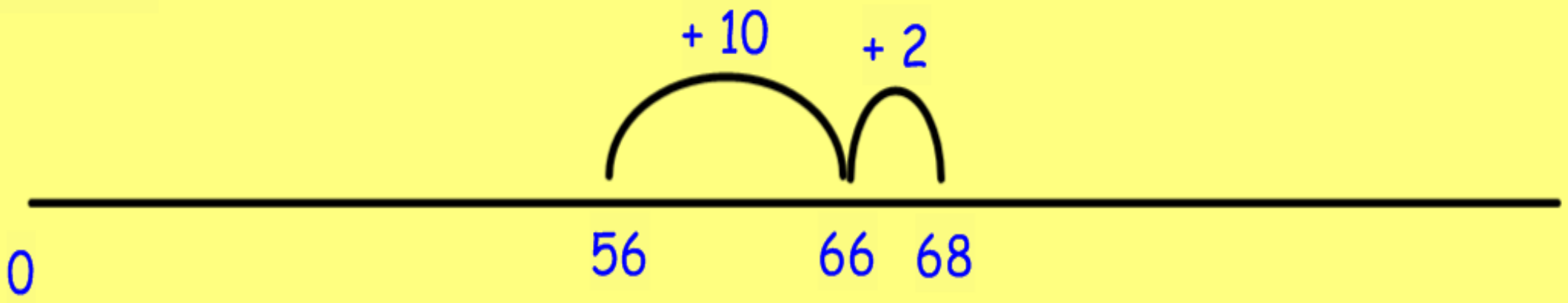


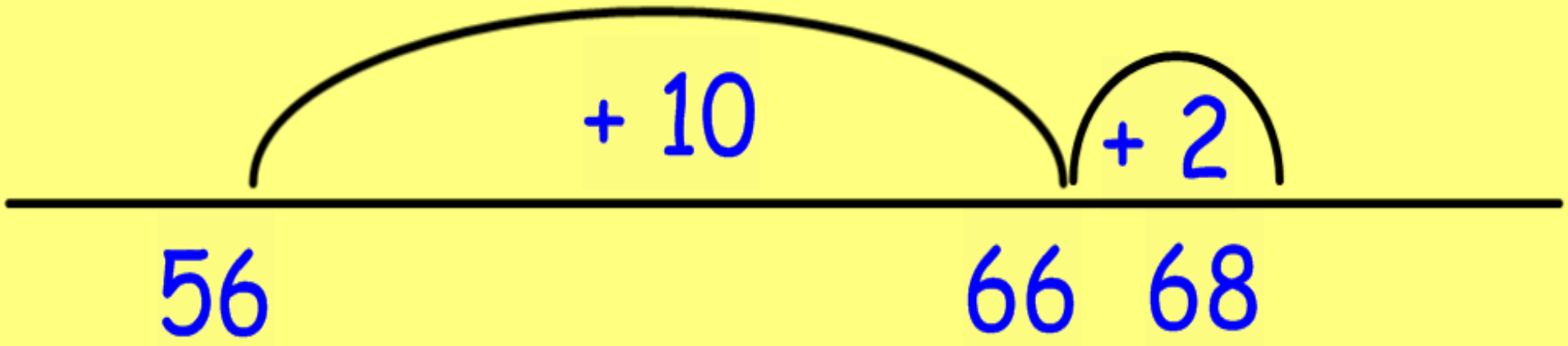
Addition

56 + 12 =

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

56 + 12 =





Have a go!

16 + 16 =

167 + 34 =

Something more familiar?

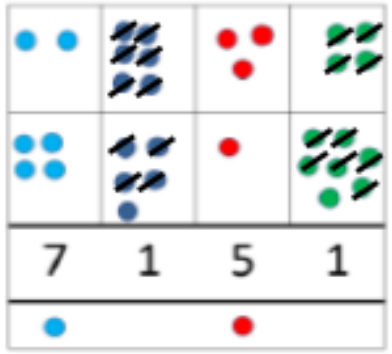
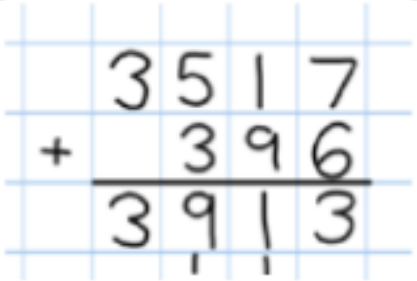
$$\begin{array}{r} 368 \\ +493 \\ \hline \end{array}$$

```
  3 6 8
+4 9 3
-------
    1 1
1 5 0
7 0 0
-------
8 6 1
```

ones

tens

hundreds

Objective & Strategy	Concrete	Pictorial	Abstract
Y4—add numbers with up to 4 digits	~~Children continue to use dienes or pv~~ counters to add, exchanging ten ones for a ten and ten tens for a hundred and ten hundreds for a thousand. 	 Draw representations using pv grid.	 Continue from previous work to carry hundreds as well as tens. Relate to money and measures.

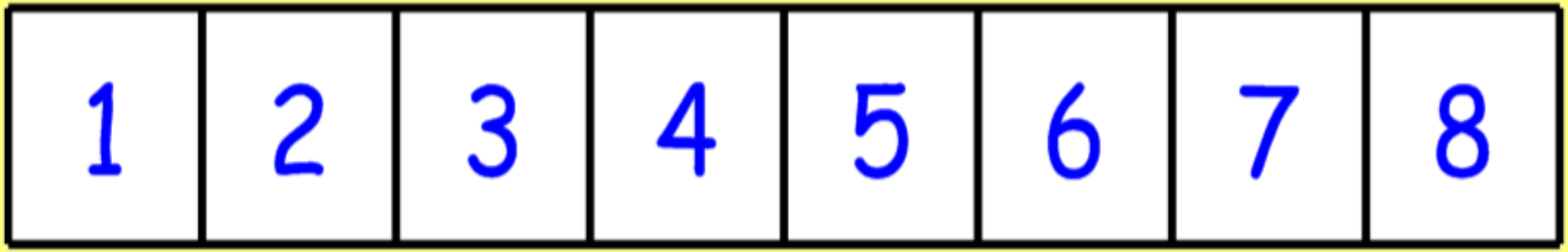
Y4-6

AT-E

AD

Subtraction (Take away)

8 - 4 =



Subtraction (finding the difference)

35 - 12 =

Subtraction (finding the difference)

Using a number line

35 - 12 =

Always check subtraction by using the inverse operation.

$35 - 12 = 23$

$23 + 12 = 35$

Have a go!

45 - 34 =

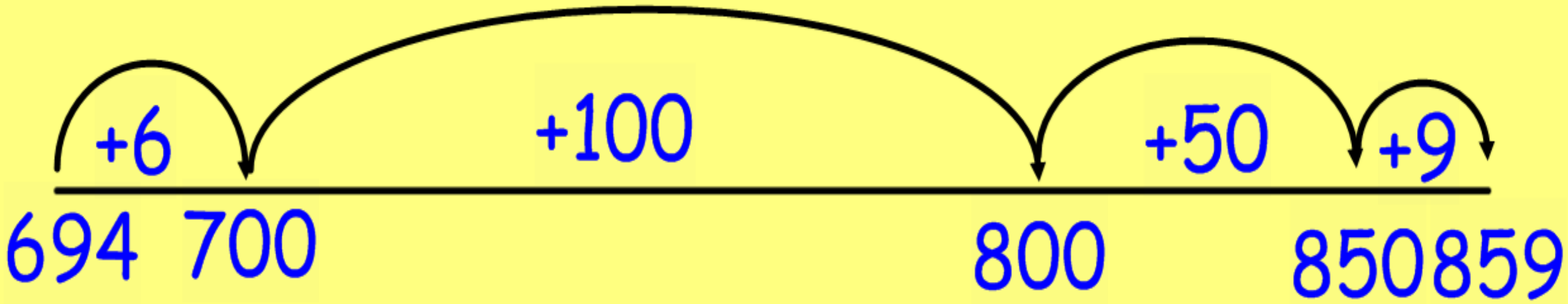
126 - 75 =

Number sentences are less useful as partitioning generally cannot be used.

In the example 73 - 26 = it is possible to start with 70 - 20 but 3-6 is less useful!

Numberlines make the calculation easier.

$$\begin{array}{r} 859 \\ -694 \\ \hline \end{array}$$

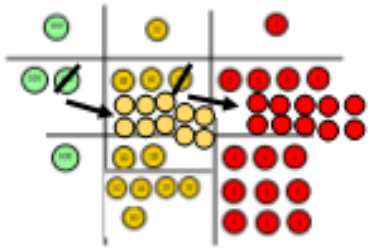
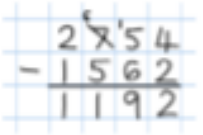


Using addition for subtraction

$$
\begin{array}{r}
859 \\
-694 \\
\hline
\end{array}
$$

6	700
100	800
50	850
9	859
165	

Y4-6 SUBTR

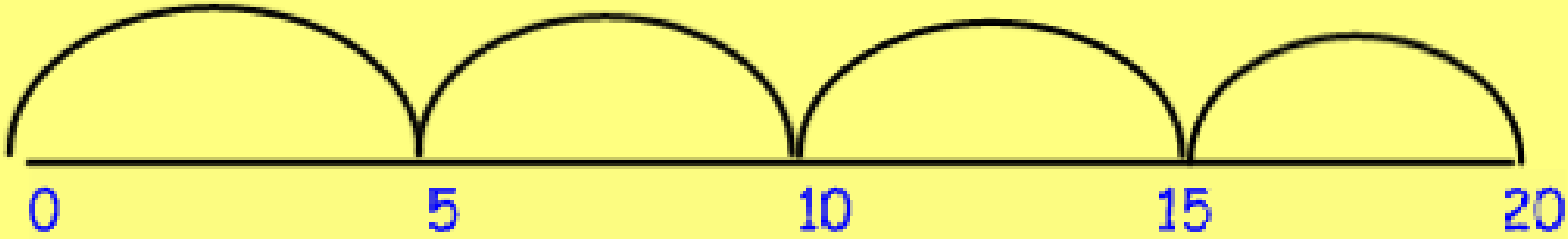
Objective & Strategy	Concrete	Pictorial	Abstract
Subtracting tens and ones Year 4 subtract with up to 4 digits. *Introduce decimal subtraction through context of money*	234 - 179  Model process of exchange using Numicon, base ten and then move to PV counters.	Children to draw place value counters to show their exchange.	Begin with expanded versions 100 130 14 ~~200~~ ~~30~~ 4 100 70 9 0 50 5  Use language of 'exchange' rather than borrow.

Multiplication

4 x 5 =

4 lots of 5

ooooo ooooo ooooo ooooo



4 x 16 =

x	10	6
4		

4 x 16 =

x	10	6
4	40	24

24 x 31 =

x	20	4
30	600	120
1	20	4

$5 \times 18 =$

$43 \times 29 =$

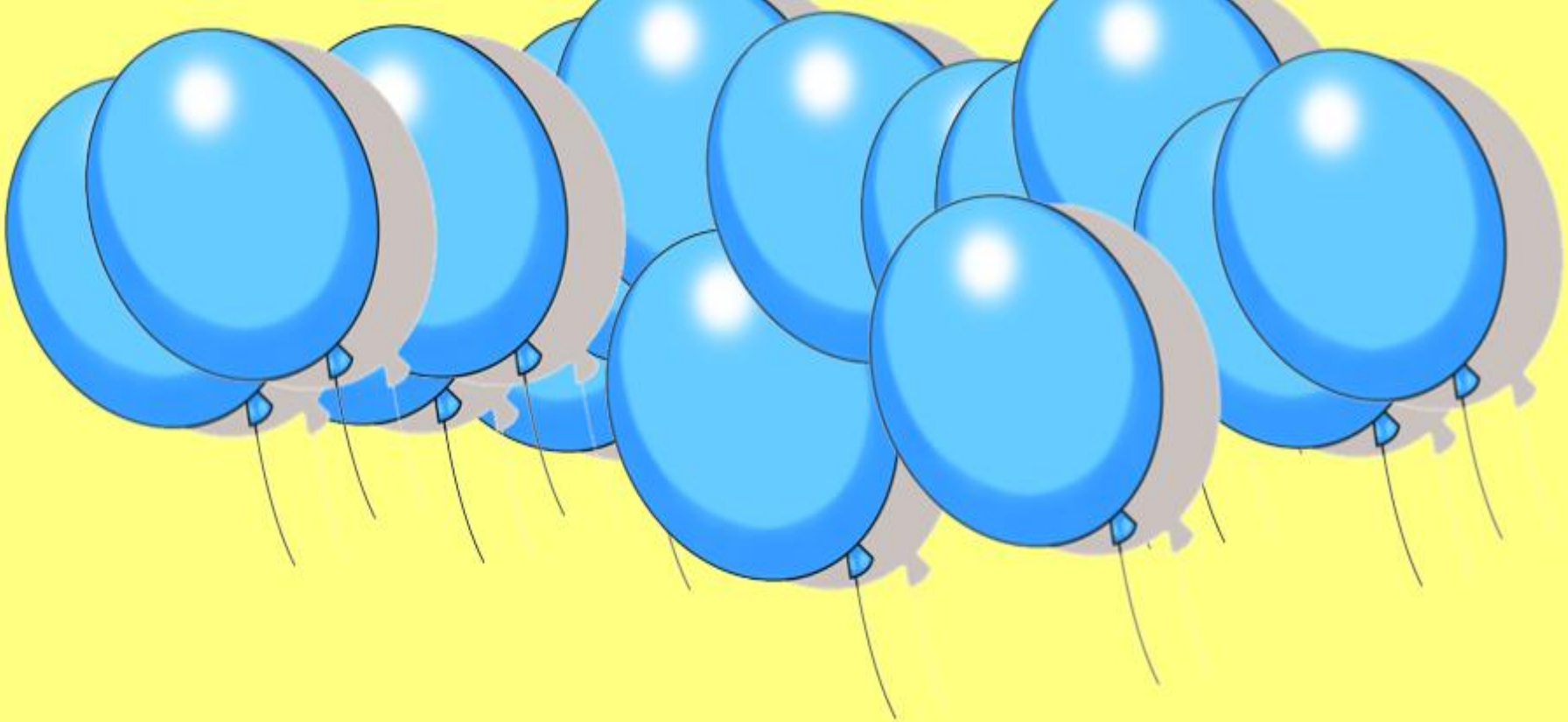
This can be extended to larger numbers and decimals.

53.5 x 17 =

x	50	3	0.5
10	500	30	5
7	350	21	3.5

= 850 =51 =8.5

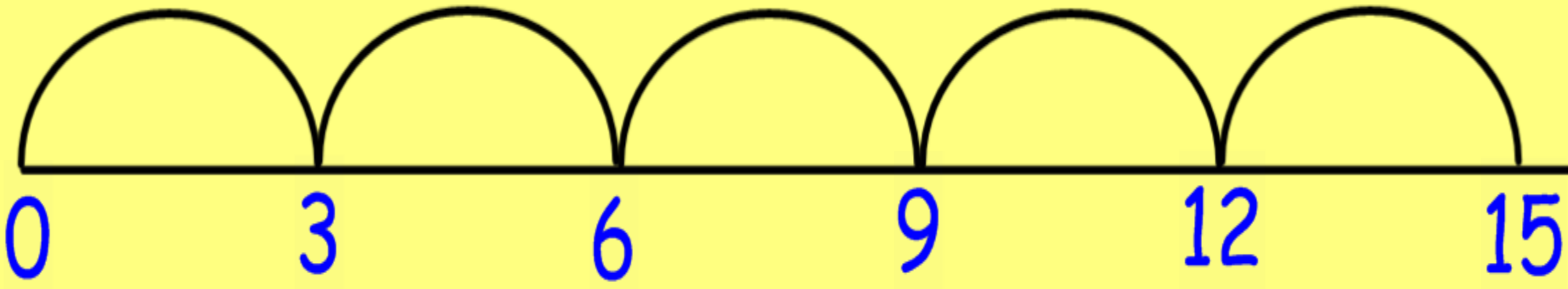
Division



$15 \div 3 =$

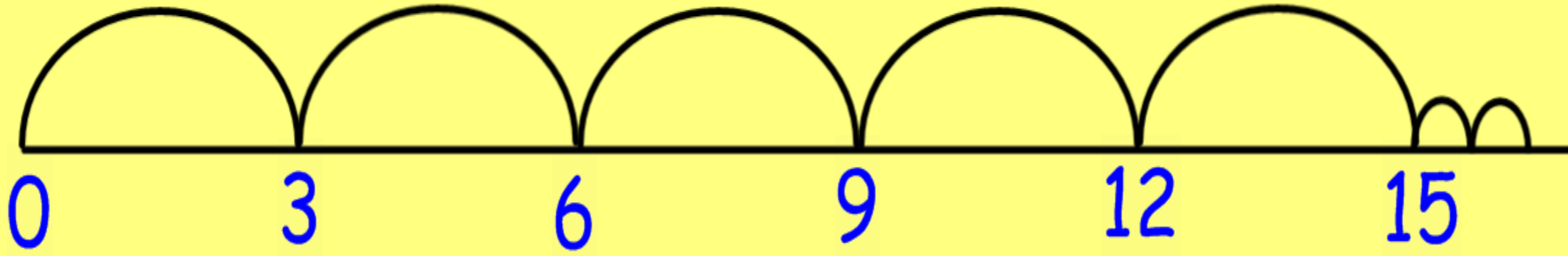
Use the inverse operation to check your answer.

15 : 3 =



Division with remainders

17 ÷ 3 =



$65 \div 5 =$

$110 \div 11 =$

Chunking Method for Division

147

÷ 5

50 = 10 x 5

97

50 = 10 x 5

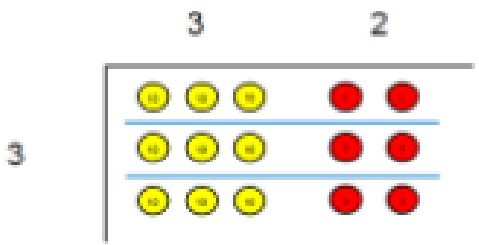
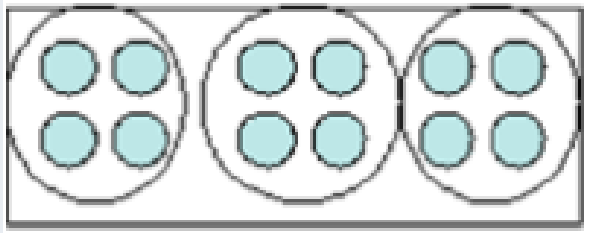
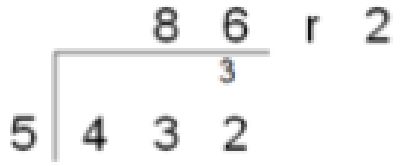
47

45 = 9 x 5

2

= 29 r 2

Y4-6 DIVIDE

Objective & Strategy	Concrete	Pictorial	Abstract
Divide at least 3 digit numbers by 1 digit. Short Division	96 ÷ 3 Tens Units 3 2 3  Use place value counters to divide using the bus stop method alongside 	Students can continue to use drawn diagrams with dots or circles to help them divide numbers into equal groups. 	Begin with divisions that divide equally with no remainder.  Children can write out multiple lists to support Move onto divisions with a remainder. 


Hit the Button
Square Numbers
Halves
Division Facts
Number Bonds
Doubles
Times Tables
Topmarks

Learning Zone

Today

Hard work really does pay off, Eleanor. You've reached the green zone. Keep it up!

Add Assignment

What is Times Tables Rock Stars?