

Year 2 Maths

W/c - 13/07/20

Lesson 1: Partitioning - 2 digit numbers

Lesson 2: Partitioning - 3 digit numbers

Lesson 3: 3 and 4 times tables

Lesson 1

Key Learning: to read and partition numbers to 100

Success criteria:

- I can read numbers to 100 correctly
- I can write numbers to 100 correctly
- I can partition a number into different combinations of tens and ones (dienes)
- I can partition a number into different combinations of tens and ones (drawing)

Deepening - I can compare numbers to 100



tens

ones

partitioning

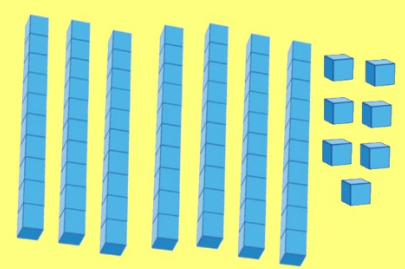
combination



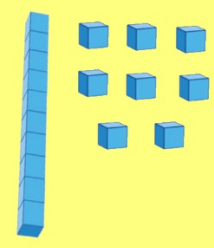
Engage

Match the number to the dienes

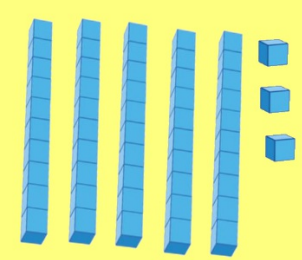
18



53



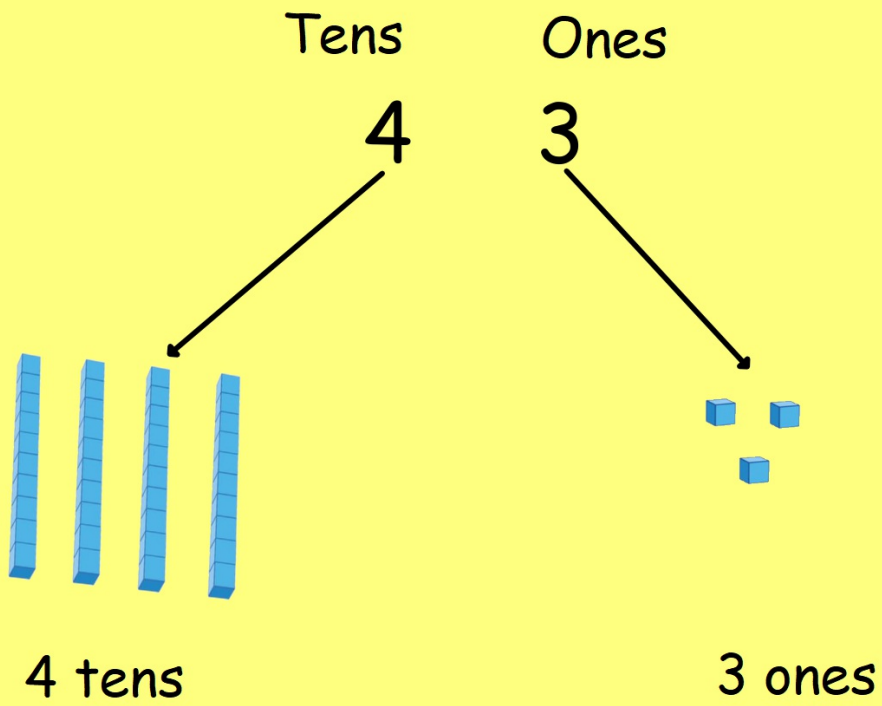
77



Partitioning...

Introduce

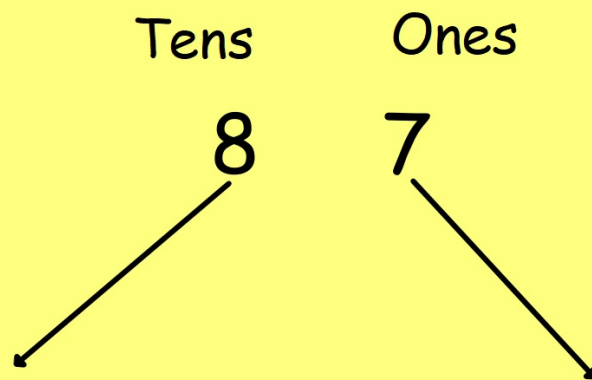
We are splitting the tens and ones.



Partitioning...

Introduce

Draw the tens and ones.



Consider and
Practise

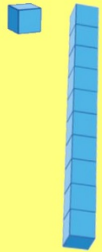
Choose a number from 0 to 100, write it in the box and then draw the tens and ones.

Practise

What equation goes with the partitioning of 37?

37

$$30 + 7$$



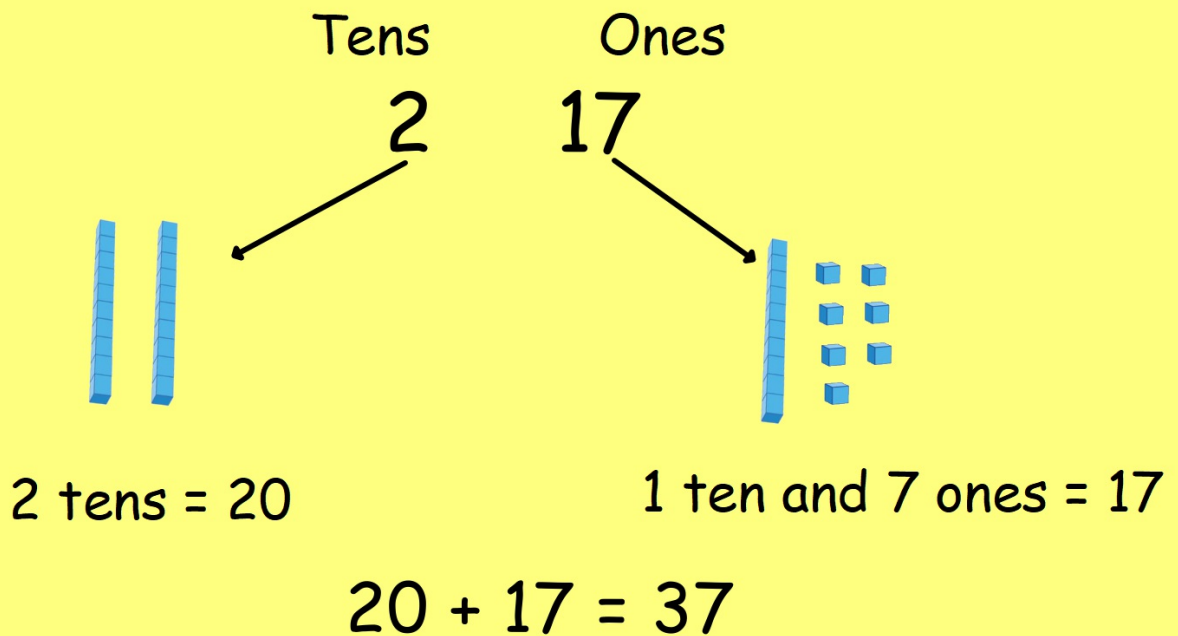
Drag or draw dienes here:

A large, empty rounded rectangle with a purple border, intended for students to draw or drag dienes (base ten blocks) to represent the partitioning of the number 37.

How else could you partition these numbers?

Partitioning...

We can partition numbers in different ways.



Can you think of another way to partition this number?

Independent
task

For each number, partition in into 3 different combinations of tens and ones.

Independent
task

Draw the dienes to make the number first, then draw the tens and ones again to help you create your different combinations.

Write each number into your book, and draw each combination and equation to match it below.

Example:

43

|||| ... $40 + 3$

|| || ... $20 + 23$

| ||| ... $10 + 33$

32

54

96

77

81

Compare these numbers using $<$ $=$ or $>$

5 tens and 2 ones

47

12 ones

1 ten and 2 ones

Now it's your turn...

Answer it: You have 0-9 number cards
Using each card once, make:

Going Deeper

- Largest even number
- Largest odd number
- Smallest odd number
- Largest multiple of 5
- Number closest to 50.

Largest even number	
Largest odd number	
Smallest odd number	
largest multiple of 5	
Number closest to 50	

Compare these numbers using $=$ $<$ or $>$.

4 tens and 17 ones 6 tens

8 tens and 11 ones 7 tens and 7 ones

3 tens 2 tens and 10 ones

Lesson 2

Key Learning: read and write 3 digit numbers

Success Criteria:

- I can use dienes to partition a 3 digit number
- I can write the 100s, 10s and 1s for a 3 digit number

Deepening - describe a 2 digit/3 digit number using place value facts



partitioning

hundreds

tens

ones

digits

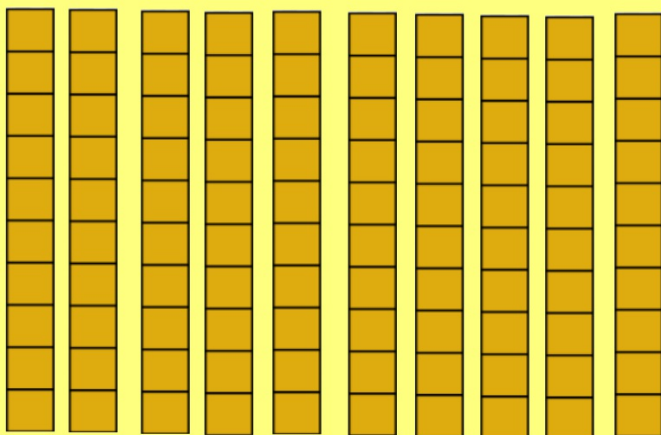


Introduce

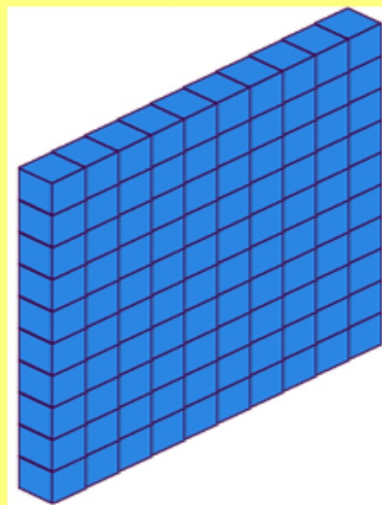
What is this number?

100

What does it look like?



=



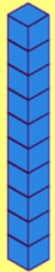
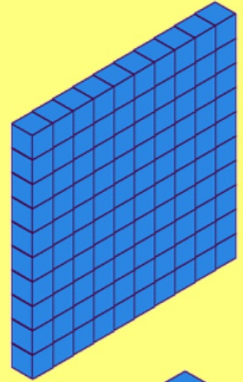
10 tens

Can you make this number?

Introduce

Remember to start with the hundreds, then tens and then the ones.

142



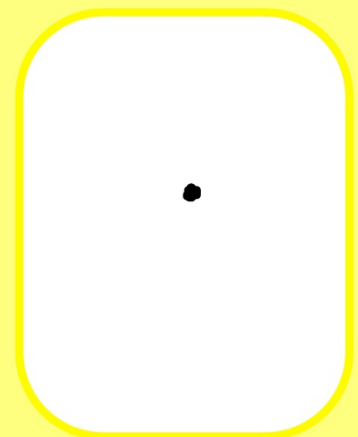
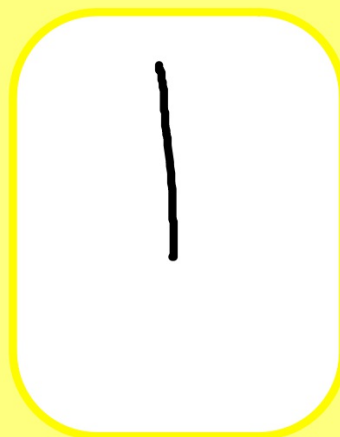
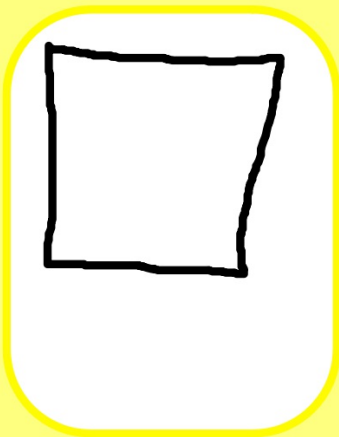
To draw the dienes for a hundred we draw a square.

Introduce

Hundreds

Tens

Ones



What's my number?

111

Let's partition this number together!

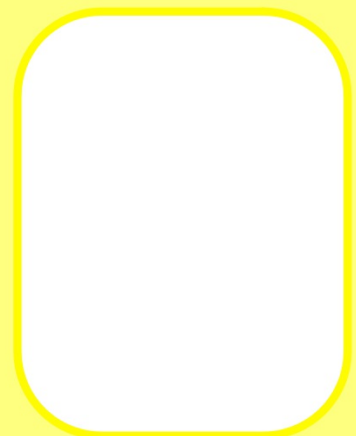
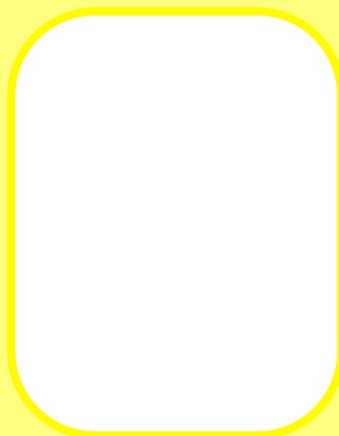
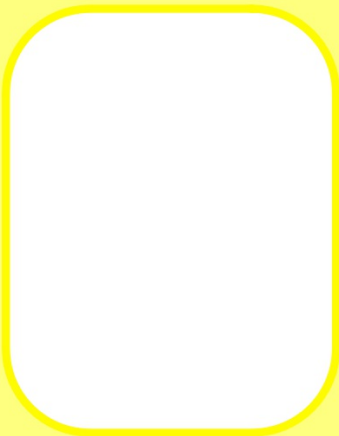
Introduce

124

Hundreds

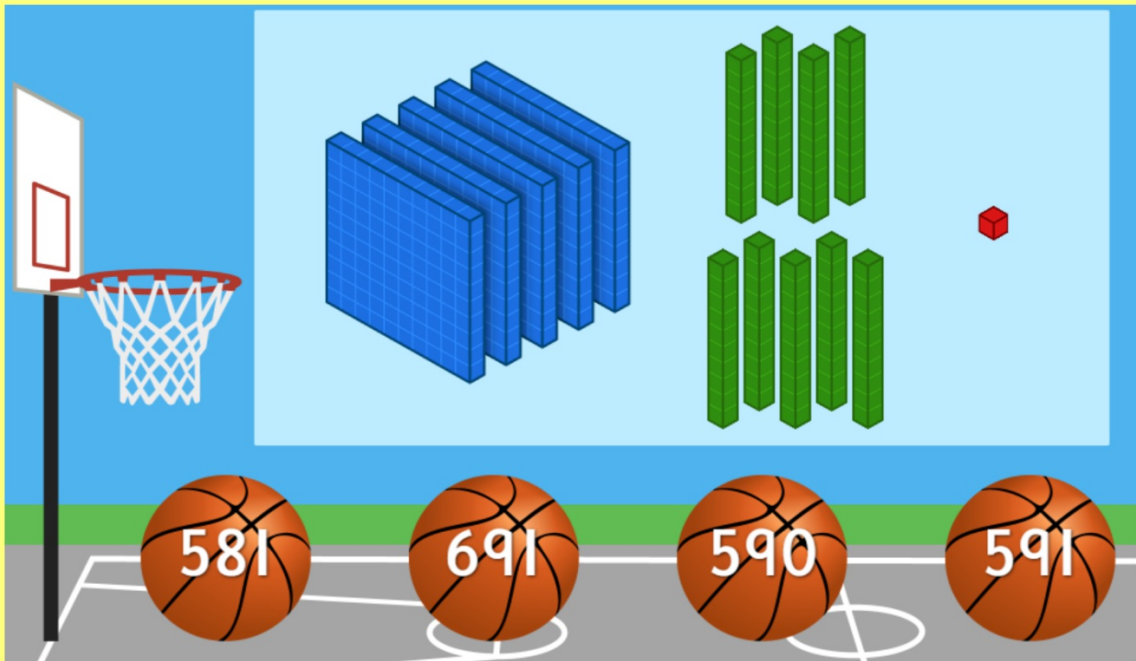
Tens

Ones



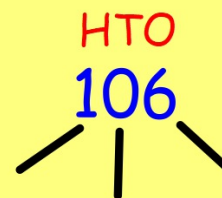
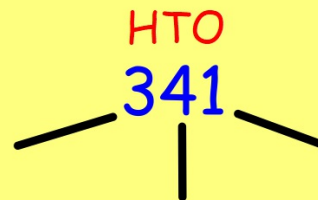
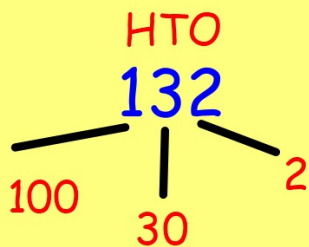
Let's play a game...

Consider and Practise



<https://www.topmarks.co.uk/learning-to-count/place-value-basketball>

Write the partitions for these numbers
into your book/ paper.



If you have time choose your own 3 digit number and write the partitions.

193

has hundreds tens and ones.



is between and

is 10 more than

is 10 less than

Lesson 3

Key Learning: to know the 3 and 4 times tables

Success criteria:

- I can recall the 2x, 5x and 10x tables
- I can find the answers to the 3x and 4x tables
- I can solve multiplication word problems and reasoning activities



times tables

multiplication

word problems



Recall the 2, 5 and 10 times tables.

Engage

Circle the multiples of 2, 5 and 10. (Some may need to be circled more than once!)

Engage

Multiples of 2 in red

Multiples of 5 in blue

Multiples of 10 in purple

15

4

25

60

18

30

10

26

32

Where do I start when finding multiples?

At 0!

If I want to find the multiples of 2, I count 2 squares and stop.



A 10x10 grid titled "Hundreds Board" containing numbers from 1 to 100. A hand-drawn bracket is positioned above the first two columns, with the number "1" above the first column and "2" above the second column.


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

$$1 \times 2 = 2$$

Introduce

Then I start on 2 and count 2 squares.

1 2



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

$1 \times 2 = 2$

$2 \times 2 = 4$

Practise
and
consider

Today we are going to practise the 3x and 4x tables.

Colour in the multiples of 3 and 4 in two different colours.
Then write the equations in your book/ paper.

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

$1 \times 3 = 3$

$2 \times 3 = 6$

$3 \times 3 =$

$4 \times 3 =$

$5 \times 3 =$

$6 \times 3 =$

$7 \times 3 =$

$8 \times 3 =$

$9 \times 3 =$

$10 \times 3 =$

$11 \times 3 =$

$12 \times 3 =$

$1 \times 4 = 4$

$2 \times 4 = 8$

$3 \times 4 =$

$4 \times 4 =$

$5 \times 4 =$

$6 \times 4 =$

$7 \times 4 =$

$8 \times 4 =$

$9 \times 4 =$

$10 \times 4 =$

$11 \times 4 =$

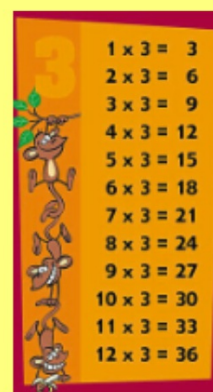
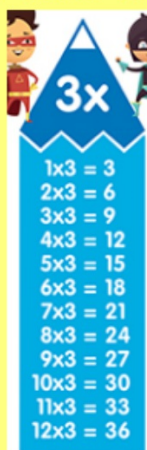
$12 \times 4 =$

Create your own 3 and 4 times tables poster.

Use your hundred square to help you find the correct multiples.

You can use different colours to make it stand out!


Here are some examples:



You could stick it on your wall to practise for when you move into year 3!


Look at the answers for the 2x and 4x tables.

Going Deeper



1	x	2	=	2
2	x	2	=	4
3	x	2	=	6
4	x	2	=	8
5	x	2	=	10
6	x	2	=	12
7	x	2	=	14
8	x	2	=	16
9	x	2	=	18
10	x	2	=	20
11	x	2	=	22
12	x	2	=	24

Activity village
.co.uk
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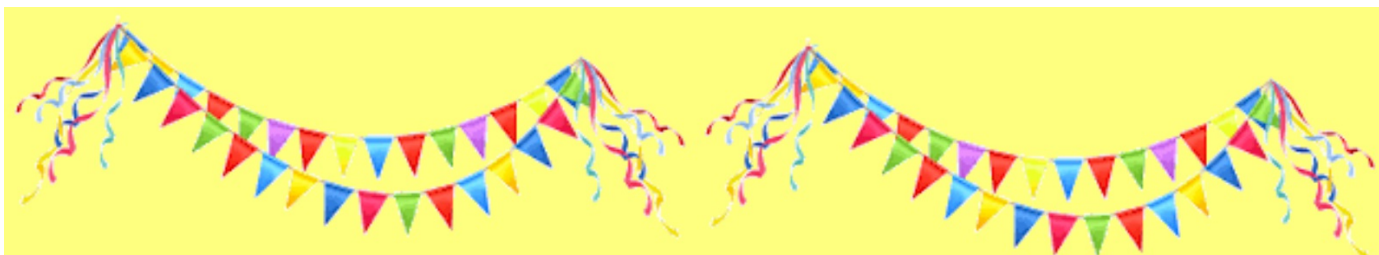


1	x	4	=	4
2	x	4	=	8
3	x	4	=	12
4	x	4	=	16
5	x	4	=	20
6	x	4	=	24
7	x	4	=	28
8	x	4	=	32
9	x	4	=	36
10	x	4	=	40
11	x	4	=	44
12	x	4	=	48

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What pattern do you spot?

<div data-bbox="304 824 395 880" data-label="Image"> </div> <p data-bbox="300 898 448 927">True or False?</p> <p data-bbox="300 945 419 974">$3 \times 10 = 13$</p> <p data-bbox="300 992 405 1021">$5 \times 4 = 20$</p> <p data-bbox="300 1039 405 1068">$3 \times 8 = 28$</p> <p data-bbox="300 1086 405 1115">$7 \times 4 = 11$</p>	<p data-bbox="820 819 1310 891">Sam buys 3 packets of biscuits and there are 6 biscuits in each packet. Sarah buys 4 packets of biscuits and there are 5 in each packet.</p> <p data-bbox="820 909 1059 938">Who has bought more biscuits?</p> <p data-bbox="820 956 975 983">Show your working.</p> <div data-bbox="799 1070 906 1144" data-label="Image"> </div> <div data-bbox="1102 1066 1347 1126" data-label="Form"> <input type="text"/> </div>										
<div data-bbox="264 1167 347 1218" data-label="Image"> </div> <p data-bbox="360 1162 770 1236">Look at the first 6 equations for the 2x and 4x tables. What pattern do you spot? Can you think of any other times tables that might follow this pattern?</p> <table data-bbox="360 1252 596 1361"> <tr> <td>$1 \times 2 = 2$</td> <td>$1 \times 4 = 4$</td> </tr> <tr> <td>$2 \times 2 = 4$</td> <td>$2 \times 4 = 8$</td> </tr> <tr> <td>$3 \times 2 = 6$</td> <td>$3 \times 4 = 12$</td> </tr> <tr> <td>$4 \times 2 = 8$</td> <td>$4 \times 4 = 16$</td> </tr> <tr> <td>$5 \times 2 = 10$</td> <td>$5 \times 4 = 20$</td> </tr> </table>	$1 \times 2 = 2$	$1 \times 4 = 4$	$2 \times 2 = 4$	$2 \times 4 = 8$	$3 \times 2 = 6$	$3 \times 4 = 12$	$4 \times 2 = 8$	$4 \times 4 = 16$	$5 \times 2 = 10$	$5 \times 4 = 20$	<p data-bbox="810 1171 1326 1223">Write this repeated addition equation as a multiplication equation, then find the answer.</p> <p data-bbox="810 1238 1315 1265"><i>Example:</i> $3 + 3 + 3 + 4 + 4 = 3 \times 3 + 4 \times 2 = 9 + 8 = 17$</p> <p data-bbox="810 1310 1139 1339">$4 + 4 + 4 + 3 + 3 + 3 + 3 =$</p> <div data-bbox="810 1442 943 1509" data-label="Image"> </div>
$1 \times 2 = 2$	$1 \times 4 = 4$										
$2 \times 2 = 4$	$2 \times 4 = 8$										
$3 \times 2 = 6$	$3 \times 4 = 12$										
$4 \times 2 = 8$	$4 \times 4 = 16$										
$5 \times 2 = 10$	$5 \times 4 = 20$										



Well done everyone and good
luck in year 3!

