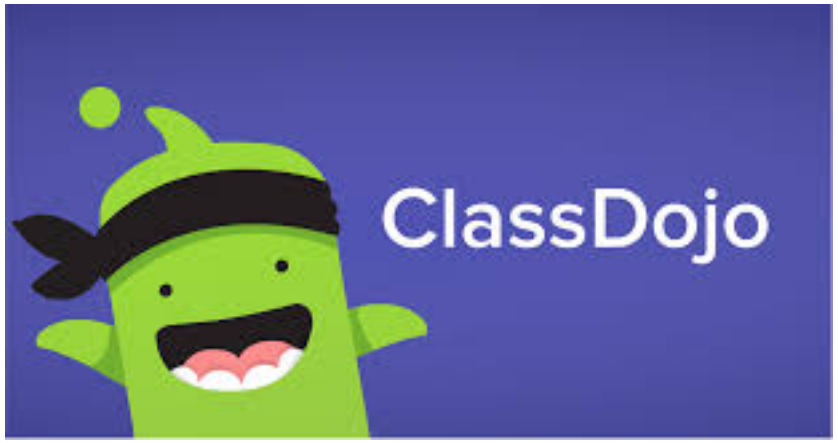
Year 3
Maths Lesson

13.1.21

Home Learning Powerpoint – If you have any problems, just send us a Dojo message.

On this maths powerpoint:

- 1 warm up activity
- 1 maths lesson



Remember – you can get Dojos for posting pictures of your work on Class Dojo!

Warm Up Activity

Practise the 3 and 6 x tables.

Easier

1. __ x 3 = 6
2. __ x 3 = 15
3. __ x 3 = 21
4. __ x 3 = 12
5. __ x 3 = 27
6. __ x 3 = 33
7. __ x 3 = 18
8. __ x 3 = 30
9. __ x 3 = 24
10. __ x 3 = 9

Harder

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

Answers on the next page – no peeking!

Warm Up Activity

Answers!

Easier

1. 2 x 3 = 6
2. 5 x 3 = 15
3. 7 x 3 = 21
4. 4 x 3 = 12
5. 9 x 3 = 27
6. 11 x 3 = 33
7. 6 x 3 = 18
8. 10 x 3 = 30
9. 8 x 3 = 24
10. 3 x 3 = 9

Harder

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

Now mark your work.

How did you do?

Maths Lesson

Write out your objective and date in your exercise book.

13.1.21

Objective: Can I multiply and divide any number by 10?

Objective: : Multiply and divide by 10.

Draw a place value grid like this on paper/your whiteboard.

100s	10s	1s
	3	0

Show 30 on the grid.

3 in the 10s column and 0 in the 1s.

What is 30 × 10?
Show the answer on your grid.

Objective: : Multiply and divide by 10.

Draw a place value grid like this on paper/your whiteboard.

100s	10s	1s
	3	0

Show 30 on the grid.

3 in the 10s column and 0 in the 1s.

What is 30 × 10?
Show the answer on your grid.

Answer:

100s	10s	1s
3	0	0

Objective: : Multiply and divide by 10.

Draw a place value grid like this on paper/your whiteboard.

100s	10s	1s
	3	0

Show 30 on the grid.

3 in the 10s column and 0 in the 1s.

What is 30 × 10?
Show the answer on your grid.

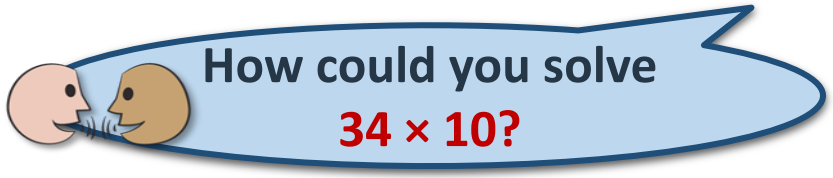
Answer:

100s	10s	1s
3	0	0

What has happened to the digits?

Why do we need an extra 0 digit?

Objective: Multiply and divide by 10.



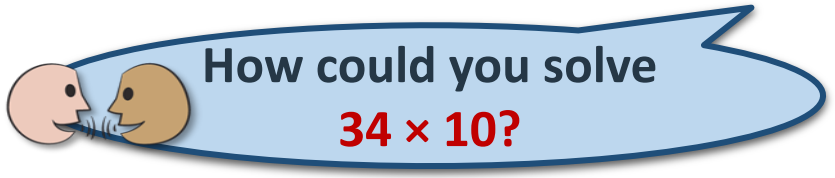
100s	10s	1s
	3	4

Put 34 on the grid…

….. And multiply by 10.

Answer on the next slide…

Objective: Multiply and divide by 10.



Put 34 on the grid…

What has happened to the digits?

The 3 and 4 have each moved one place value column to the left….

Answer

100s	10s	1s
3	4	0

Answer

….. And multiply by 10.

…. and a 0 is put in the 1s column as a placeholder.

Objective: : Multiply and divide by 10.

Now try **42 × 10** and **25 × 10.**

Let's check those…

100s	10s	1s
	4	2

100s	10s	1s
	2	5

Answers on the next slide…

Objective: : Multiply and divide by 10.

Now try 42 × 10 and 25 × 10.

Let's check those…

100s	10s	1s
4	2	0

Answers

100s	10s	1s
2	5	0

The 10s and 1s have each moved one place to the left….

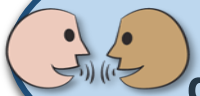
…. don't forget to put a 0 in the 1s as a placeholder.

Objective: : Multiply and divide by 10.

Now Try Division!

Now put 270 on the grid.

100s	10s	1s
2	7	0



When we multiplied by 10 the digits moved to the left, what do you think will happen when we divide by 10?

Let's see.

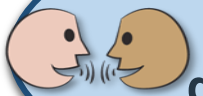
Answers on the next slide…

Objective: : Multiply and divide by 10.

Now Try Division!

Now put 270 on the grid.

100s	10s	1s
	2	7



When we multiplied by 10 the digits moved to the left, what do you think will happen when we divide by 10?

Let's see.

The 2 and 7 have each moved one place to the right….

…. and we don't need the final 0.

Objective: : Multiply and divide by 10.

Now try **450 ÷ 10** and **320 ÷ 10.**

Let's check those…

100s	10s	1s
4	5	0

100s	10s	1s
3	2	0

Answers on the next slide…

Objective: : Multiply and divide by 10.

Now try 450 ÷ 10 and 320 ÷ 10.

Let's check those…

100s	10s	1s
	4	5

100s	10s	1s
	3	2

The 100s and 10s digits move one place to the right….

…. and we don't need the final 0.

Task 1

Multiply each number by 10. Write the calculation in your book and the answer.

Easier	Harder
1. 9 x 10 =	1. 165 x 10 =
2. 17 x 10 =	2. 163 x 10 =
3. 22 x 10 =	3. 232 x 10 =
4. 36 x 10 =	4. 354 x 10 =
5. 26 x 10 =	5. 383 x 10 =
6. 37 x 10 =	6. 4123 x 10 =
7. 48 x 10 =	7. 5142 x 10 =
8. 73 x 10 =	8. 2115 x 10 =

To multiply by 10 move each digit one decimal place to left and add zero as a place saver when needed.

Task 2

Divide each number by 10. Write the calculation in your book and the answer.

Easier	Harder
1. 90 ÷ 10 =	1. 630 ÷ 10 =
2. 70 ÷ 10 =	2. 320 ÷ 10 =
3. 30 ÷ 10 =	3. 540 ÷ 10 =
4. 10 ÷ 10 =	4. 830 ÷ 10 =
5. 60 ÷ 10 =	5. 170 ÷ 10 =
6. 20 ÷ 10 =	6. 140 ÷ 10 =
7. 80 ÷ 10 =	7. 350 ÷ 10
8. 40 ÷ 10 =	8. 950 ÷ 10 =

To divide by 10 move each digit one decimal place to right.

Challenge

Challenge Task 3

Multiplying by and dividing by 10

Sheet 2

Multiply the green numbers by 10 and divide the purple numbers by 10.

Set 1

16, 43, 27, 98, 40, 81, 72, 34, 69, 155

130, 460, 880, 690, 910, 350, 740, 220, 570, 900

Set 2

516, 403, 62, 999, 700, 88, 127, 45, 610, 355

830, 4260, 3890, 990, 8010, 550, 7120, 140, 2070, 1000

Challenge

Each week Harry gets £2 spending money. He spends 50p on sticker cards each week and saves the rest of the money.
How much money will Harry have saved after 10 weeks?
Now try making up another word problem that uses either x 10 or ÷ 10.

How did you do?

Don’t forget to post your work on Class Dojo!