Class 3 Home Learning, week beginning 4th May 2020

# Maths - Year 4

## Week 2, Lesson 5

## Divide 1 or 2-digits by 100

Please watch the video before choosing your challenge.

Why not have a go at the reasoning and problem solving too?

w/b 4.5.20 Class 3's Home Learning, Maths (Y4)

Can I divide by 100? Challenge 1

These pages do not need to be printed out. Please write the short date you do the work and the above question in your maths book, underlining them with a ruler. Remember to write the question number too!

Questions 1-5 mentioned in the video are questions 1-5 in Challenge 1.

1) Please draw the place value charts in your maths book.

a) Draw counters to show 8 on the place value chart.

| Ones | Tenths | Hundredths |
|---|---|---|
| | | |

b) Complete the division.

8 ÷ 100 = ☐

c) Draw counters to show your answer on the place value chart.

| Ones | Tenths | Hundredths |
|---|---|---|
| | | |

2) Please draw the place value charts in your maths book.

a) Draw counters to show 80 on the place value chart.

| Tens | Ones | Tenths | Hundredths |
|---|---|---|---|
| | | | |

b) Complete the division.

80 ÷ 100 = ☐

c) Draw counters to show your answer on the place value chart.

| Tens | Ones | Tenths | Hundredths |
|---|---|---|---|
| | | | |

3) Copy and complete.

To divide by 100 you move the counters ☐ places to the _____

4) Copy and complete.

a) 3 ÷ 100 = ☐

b) 90 ÷ 100 = ☐

c) ☐ = 5 ÷ 100

d) ☐ = 60 ÷ 100

e) ☐ ÷ 100 = 0.5

f) 0.02 = ☐ ÷ 100

5) Dora is working out 48 ÷ 100 using a place value chart.

| Tens | Ones | Tenths | Hundredths |
|---|---|---|---|
| ●●●● | ●●●● ●●●● | | |

To divide by 100 you move two places to the right, so 48 ÷ 100 is 40.08

| Tens | Ones | Tenths | Hundredths |
|---|---|---|---|
| ●●●● | | | ●●●● ●●●● |

a) Explain the mistake that Dora has made.

_____

_____

b) Complete the division.

48 ÷ 100 = ☐

Answers for all of the above questions can be found on the White Rose Home Learning website.

w/b 4.5.20 Class 3's Home Learning, Maths (Y4)

Can I divide by 100? Challenge 2

These pages do not need to be printed out. Please write the short date you do the work and the above question in your maths book, underlining them with a ruler. Remember to write the question number too!

Questions 1-5 mentioned in the video are questions 1-5 in Challenge 1.

Questions 6-10 mentioned in the video are question 1-5 in this challenge.

1)

This Gattegno chart shows the number 37

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 |
| 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 | 0.09 |

**a)** Explain how you would work out 37 ÷ 100 using this chart.

_____

_____

Compare answers with a partner.

**b)** Use the Gattegno chart to complete the division.

92 ÷ 100 = ☐

**c)** Use the Gattegno chart to complete the division.

19 ÷ 100 = ☐

2) Copy and complete. Remember how many spaces to the right each digit would need to move on a place value chart.

**a)** 31 ÷ 100 = ☐

**b)** 60 ÷ 100 = ☐

**c)** ☐ = 85 ÷ 100

**d)** 0.01 = ☐ ÷ 100

**e)** ☐ = 29 ÷ 100

**f)** ☐ ÷ 100 = 0.58

**g)** 0.5 = ☐ ÷ 100

**h)** 0.3 = 30 ÷ ☐

3) Copy and complete.

a) 36 ÷ 10 = ☐

36 ÷ 100 = ☐

36 ÷ 10 ÷ 10 = ☐

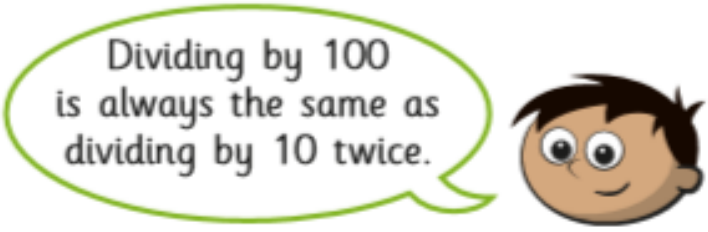
b) 91 ÷ 10 = ☐

91 ÷ 100 = ☐

91 ÷ 10 ÷ 10 = ☐

What do you notice?

4) Please explain your answer in writing.




Do you agree with Amir? _____

5) If you do not have dice, why not write the digits 1-6 on separate pieces of paper and choose at random, twice?

Roll two dice to make two 2-digit numbers.

Divide your numbers by 100. Record your answer. Roll again.

Here is an example.

36 ÷ 100 and 63 ÷ 100

☐ ÷ 100 = ☐ and ☐ ÷ 100 = ☐

☐ ÷ 100 = ☐ and ☐ ÷ 100 = ☐

What is the greatest possible answer you can get? ☐

What is the smallest possible answer? ☐

Answers for all of the above questions can be found on the White Rose Home Learning website.

w/b 4.5.20 Class 3's Home Learning, Maths (Y4)

Can I divide by 100?

## Reasoning and problem solving

These pages do not need to be printed out. Please write the short date you do the work and the above question in your maths book, underlining them with a ruler. Remember to write the question number too!

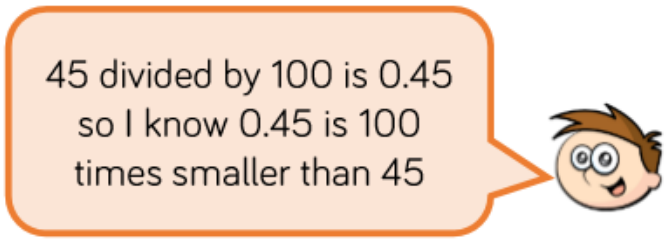
1) Describe the pattern.

$$7{,}000 \div 100 = 70$$
$$700 \div 100 = 7$$
$$70 \div 100 = 0.7$$
$$7 \div 100 = 0.07$$

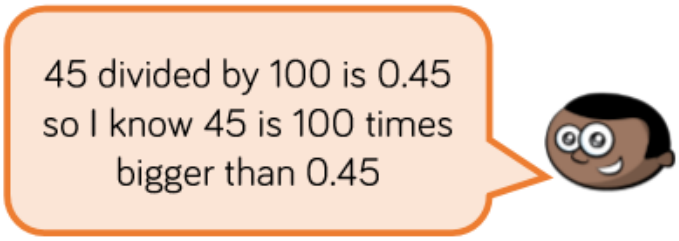
Can you complete the pattern starting with 5,300 divided by 100?

2) Hint: drawing a place value chart may help!

Teddy says,




Mo says,




Who is correct?
Explain your answer.

Answers are on the next page.

# Divide 1 or 2-digits by 100

## Reasoning and Problem Solving

Describe the pattern.

$$7{,}000 \div 100 = 70$$
$$700 \div 100 = 7$$
$$70 \div 100 = 0.7$$
$$7 \div 100 = 0.07$$

Can you complete the pattern starting with 5,300 divided by 100?

Children will describe the pattern they see e.g. 7,000 is 10 times bigger than 700, therefore the answer has to be 10 times bigger as the divisor has remained the same.

For 5,300:
$5{,}300 \div 100 = 53$
$530 \div 100 = 5.3$
$53 \div 100 = 0.53$
$5.3 \div 100 = 0.053$

Teddy says,

45 divided by 100 is 0.45 so I know 0.45 is 100 times smaller than 45

Mo says,

45 divided by 100 is 0.45 so I know 45 is 100 times bigger than 0.45

Who is correct?
Explain your answer.

Teddy and Mo are both correct. Children may use a place value chart to help them explain their answer.