

Dividing 1 and 2 digits by a hundred

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

| Ones | Tenths | Hundredths |
|----------|--------|------------|
| 00000000 | | |

- b) Complete the division.

$$8 \div 100 = 0.08$$

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

| Ones | Tenths | Hundredths |
|------|--------|------------|
| | | 00000000 |

What do you notice?

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

| Tens | Ones | Tenths | Hundredths |
|----------|------|--------|------------|
| 00000000 | | | |

- b) Complete the division.

$$80 \div 100 = 0.8$$

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

| Tens | Ones | Tenths | Hundredths |
|------|------|--------|------------|
| | | 000000 | 00 |

What do you notice?

- 3 Complete the sentence.

To divide by 100 you move the counters 2 places to the right.

- 4 Complete the calculations.

a) $3 \div 100 = 0.03$

d) $0.6 = 60 \div 100$

b) $90 \div 100 = 0.9$

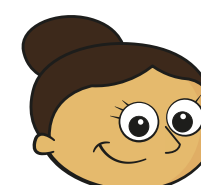
e) $50 \div 100 = 0.5$

c) $0.05 = 5 \div 100$

f) $0.02 = 2 \div 100$

- 5 Dora is working out $48 \div 100$ using a place value chart.

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



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

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

- a) Explain the mistake that Dora has made.

She hasn't moved all of the counters.

- b) Complete the division.

$$48 \div 100 = 0.48$$



- 6 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 $37 \div 100$ using this chart.

Move the counters down 2

Compare answers with a partner.

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

$$92 \div 100 = 0.92$$

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

$$19 \div 100 = 0.19$$

- 7 Complete the calculations.

a) $31 \div 100 = 0.31$

e) $0.29 = 29 \div 100$

b) $60 \div 100 = 0.6$

f) $58 \div 100 = 0.58$

c) $0.85 = 85 \div 100$

g) $0.5 = 50 \div 100$

d) $0.01 = 1 \div 100$

h) $0.3 = 30 \div 100$



- 8 Complete the calculations.

a) $36 \div 10 = 3.6$

b) $91 \div 10 = 9.1$

$$36 \div 100 = 0.36$$

$$91 \div 100 = 0.91$$

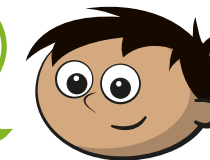
$$36 \div 10 \div 10 = 0.36$$

$$91 \div 10 \div 10 = 0.91$$

What do you notice?

- 9

Dividing by 100
is always the same as
dividing by 10 twice.



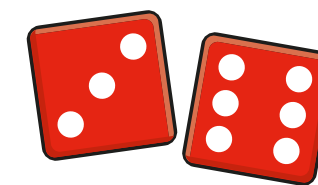
Do you agree with Amir? Yes

Explain your answer.

- 10 Roll two dice to make two 2-digit numbers.

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

Here is an example.



$36 \div 100$ and $63 \div 100$

$$\square \div 100 = \square \text{ and } \square \div 100 = \square$$

$$\square \div 100 = \square \text{ and } \square \div 100 = \square$$

What is the greatest possible answer you can get?

0.66

What is the smallest possible answer?

0.11

Compare answers with a partner.

