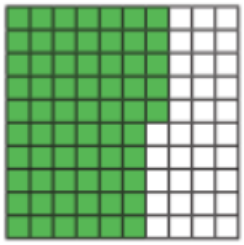
Monday 15th May 2023—sheet 1

MPI: Understanding that per cent (%) means part per hundred

Q1. What does per cent mean?

- out of 10
- out of 100
- out of 1000

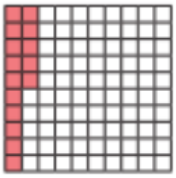
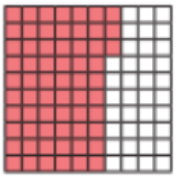
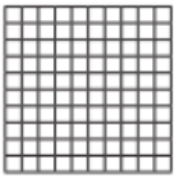
Q2.



There are ☐ parts out of a hundred shaded.

This is ☐ %.

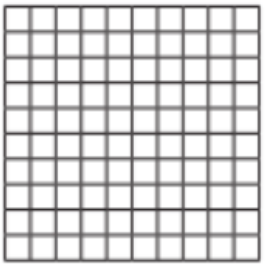
Q3. Complete the table.

Hundred square	Percentage
	
	
	82%

Q5.

Shade 15% of the hundred square red.

Shade 32% of the hundred square blue.

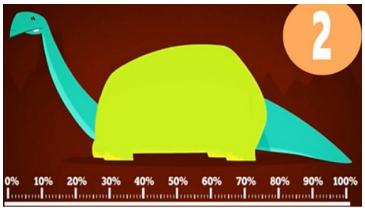


What percentage of the hundred square is **not** shaded? ☐ %

Monday 15th May 2023—sheet 2

MPI: Understanding that per cent (%) means part per hundred

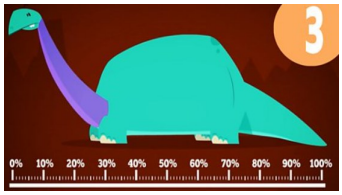
Q1.



If the dinosaur's tummy represents 65% of his body, what percentage makes up the rest?

- 35%
- 45%
- 65%

Q2.



If the dinosaur's neck represents 30% of his body, what percentage makes up the rest?

- 60%
- 70%
- 50%

Q3. Olivia has a bag of sweets. She eats 45% of them. What percentage of sweets is left? _____

Show your working: _____

Q4. Edward completes 20% of his homework before dinner.

After dinner he completes another 55%.

How much homework does he have left to do? _____

Show your workings_____

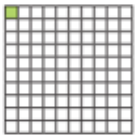
_____

Tuesday 16th May 2023—Sheet 1

MPI: Understanding equivalent fractions, decimals and percentages

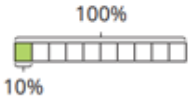
Use this information to help you answer Q1.

The hundred square has 1 part shaded. This is 1%.



- The bar model has been split into 10 equal parts and 1 part is shaded.

This is 10%:



Q1.

Has 6% or 60% of this bar model been shaded in?

Explain your answer

_____

_____

_____

Q2. Complete the table:

Quarters	Hundredths	Decimal
$\frac{1}{4}$	$\frac{\square}{100}$	
$\frac{\square}{4}$	$\frac{50}{100}$	
		0.75

Q3. Write <, > or = to complete the statements.

a) 50% ◯ $\frac{5}{100}$

b) 25% ◯ $\frac{50}{100}$

c) 14% ◯ $\frac{41}{100}$

d) $\frac{40}{100}$ ◯ 40%

e) $\frac{70}{100}$ ◯ 7%

f) 82% ◯ $\frac{82}{100}$

Q4. Write the values in ascending order

a) 33% $\frac{30}{100}$ 3% $\frac{13}{100}$

_____

b) 99% $\frac{91}{100}$ 9% $\frac{9}{10}$

_____

Q5. Write < or > to complete the statements.

a) 0.24 ◯ 42%

b) 0.58 ◯ 51%

c) 0.2 ◯ 20%

d) 60% ◯ 0.06

e) 100% ◯ 0.1

f) 0.01 ◯ 10%

Q6. Write the values in descending order

13%	0.03	30%	0.33	0.31

_____

_

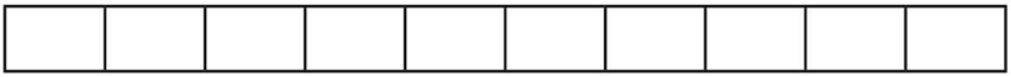
87%	0.78	0.8	77%	70%

_____

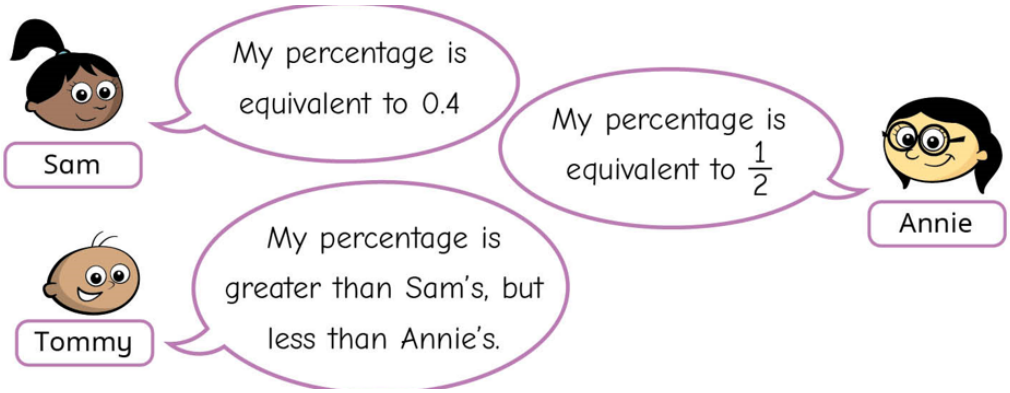
Tuesday 16th May 2023—Sheet 2

MPI: Understanding equivalent fractions, decimals and percentages

Q1. Shade 85% of the bar model.



Q2. Sam, Annie and Tommy are thinking of different percentages.



A) What percentage could Tommy be thinking of? _____%

B) Tommy's percentage is a multiple of 7. What two percentages could he be thinking of? _____% or _____%

Q3. Dora is doing a school survey.

She compares how many children wear glasses in Class 4 and Class 5

- $\frac{1}{5}$ of the children in Class 4 wear glasses.
- 25% of the children in Class 5 wear glasses.
- Both classes have the same number of children.

Do more children wear glasses in class 4 or class 5? _____

Explain your answer: _____

Q4.

There are 30 children in Class 5

- $\frac{2}{5}$ have brown hair.
- 50% have blonde hair.

How many children have neither blonde nor brown hair?

Show workings.

_____

_____

Wednesday 17th May 2023—Sheet 1

MPI: Using percentages of equivalent fractions and decimals to solve problems.

Q1.

Dexter has £1 to spend.

He buys some stickers.

What percentage of his money did Dexter spend?

Q2.

Passengers are boarding a plane.

The plane has 100 seats.

a) 10% of the seats are already full.

How many passengers are already on the plane? ☐

b) 15% of the seats have not been booked.

How many seats have been booked? ☐

c) How many passengers still need to board the plane? ☐

Q3.

Aisha and Brett have been selling tickets for the school play.

There are 100 tickets.

- On Monday they sold 34% of the tickets.
- On Tuesday they sold 42 tickets.
- By the end of Wednesday, 95% of the tickets had been sold.

How many tickets did they sell on Wednesday?

Q4.

James and Luke go shopping. They each have £300.

James spends 1/3 of his money. Luke spends 30% of his money.

A) Who spends more money? _____

B) How much money does James have left? _____

C) How much money does Luke have left? _____