Steps to Success

Lockdown	
Date	14.1.21
Subject/s	**Maths**
Learning Objective	To order fractions, decimals and percentages

		SA	TA
Success Criteria	I can change fractions to decimals using division		
	I know percentage means out of 100 and can divide by 100 to turn them into a decimal		
	I can compare decimals by lining up the place value		
Support	Independent Adult Support ( ) Group Work		

Pre-task

What do you already know?

Use <, > or = to complete the statements:

0.23 ◯ 24% ◯ $\frac{1}{4}$

37.6% ◯ $\frac{3}{8}$ ◯ 0.27

Order from smallest to largest:

40%	$\frac{2}{5}$	0.45	$\frac{3}{10}$	54%	0.05

Teacher Led

Ordering Decimals - Recap

It is easier to put decimals in order if we have the same number of digits after the decimal point.

0.12 0.302 0.5 0.06

Step 1	Look at the decimals to find which one has the most number of digits after the decimal point.	0.12	0.302	0.5	0.06
Step 2	Add zeros to the other decimals so that they all have this number of digits after the decimal point.	0.120	0.302	0.500	0.060
Step 3	Put the numbers in order of size.	0.500	0.302	0.120	0.060

87% 0.871 ½ 2/3 0.57

Step 1 – turn all the figures into decimals.

Step 2 – put the decimals in order from smallest to largest.

Step 3 – turn the figures back to their original form.

NOTE: To turn a percentage into a decimal divide by 100 and to turn a fraction into a decimal divide the numerator by the denominator.

0.87 0.871 0.5 0.67 0.57

0.5 0.57 0.67 0.87 0.871

½ 0.57 2/3 87% 0.871

56% ¾ 0.871 23% 6/7

Step 1 – turn all the figures into decimals.

Step 2 – put the decimals in order from smallest to largest.

Step 3 – turn the figures back to their original form.

0.56 0.75 0.871 0.23 0.86

0.23 0.56 0.75 0.86 0.871

23% 56% ¾ 6/7 0.871

Fluency

Activity: Put these numbers into lowest to highest order.

1)	0.22	1/10	0.34	2/3	0.903
2)	1/10	0.507	0.320	7/9	0.12
3)	1/2	45%	0.9	4/10	0.3
4)	0.67	61%	6/10	0.067	0.601
5)	1.45	142%	3/2	107%	1.024
6)	1.92	7/3	193%	1.899	5/2
Challenge 1:	0.003	3/100	0.03%	3/10	0.303%
Challenge 2:	7/4	74%	7.4	4/7	70.4

Answers

Answers (Lowest to Highest)

1)	1/10	0.22	0.34	2/3	0.903
2)	1/10	0.12	0.320	0.507	7/9
3)	0.3	4/10	45%	1/2	0.9
4)	0.067	6/10	0.601	61%	0.67
5)	1.024	107%	142%	1.45	3/2
6)	1.899	1.92	193%	7/3	5/2
Challenge 1:	0.03%	0.303%	0.003	3/100	3/10
Challenge 2:	4/7	74%	7/4	7.4	70.4

Problem Solving and Reasoning

Explain it!

Convince me!

In a Geography test, Sam scored 62% and Hamza scored $\frac{3}{5}$

Who got the highest score?

Explain your answer.

Use it!

Explain it!

In January, Rahima saves $\frac{3}{5}$ of her £20 pocket money.

In February, she saves 0.4 of her £10 pocket money.

In March, she saves 45% of her £40 pocket money.

Which month did she save the most money?

Estimate your answer first using your knowledge of fractions, decimals and percentages.
Explain why you have chosen that month.

Use it!

iends share a pizza. Tyrone eats 35% of the pizza,
ıe eats 0.4 of the pizza, Imran eats 12.5% of the pizza
iver eats 0.125 of the pizza.

Can you write the amount each child eats as a fraction?
Who eats the most? Who eats the least? Is there any left?

Answers

Sam scored more than Hamza because $\frac{3}{5}$ is equivalent to 60%, and 62% is greater.

She saved the most money in March.
Estimates:
Over £10 in January because $\frac{3}{5}$ is more than half.
Under £10 in February because she only had £10 to start with and 0.4 is less than half.
Nearly £20 in March because 45% is close to a half.

Tyrone – 35/100 = 7/20
Jasmine – 0.4 – 4/10 = 8/20
Imran – 12.5/100 = 2.5/20
Oliver – 125/1000 = 2.5/20

Jamine ate the most.
There is no pizza left over.