Steps to Success

Lockdown	
Date	18.01.21
Subject/s	**Maths**
Learning Objective	To find percentages of an amount

		SA	TA
Success Criteria	I know the whole is 100%		
	I can use my knowledge of factors to divide both sides 100% = 320 50% = 160		
	I can add together to make the total 100% = 320 10% = 32 1% = 3.2 11% = 35.2		
Support	Independent Adult Support ( ) Group Work		

Pre-Task

What is 50% of 250 =
What is 10% of 130 =
What is 5% of 120 =
What is 25% of 120 =

Fluency

C) 1%, 10%, 50% and 100%

1)	50% of 40 =	2)	1% of 700 =	3)	10% of 140 =
4)	100% of 80 =	5)	10% of 320 =	6)	50% of 160 =
7)	1% of 900 =	8)	50% of 72 =	9)	10% of 900 =
10)	10% of 320 =	11)	1% of 5300 =	12)	100% of 120 =
13)	50% of 240 =	14)	1% of 2700 =	15)	10% of 800 =

50% of 38 = ___ (1)	20% of 100 = ___ (11)	25% of 72 = ___ (21)
50% of 56 = ___ (2)	25% of 16 = ___ (12)	20% of 15 = ___ (22)
50% of 96 = ___ (3)	50% of 50 = ___ (13)	25% of 88 = ___ (23)
25% of 48 = ___ (4)	20% of 40 = ___ (14)	25% of 36 = ___ (24)
50% of 42 = ___ (5)	50% of 84 = ___ (15)	25% of 60 = ___ (25)
50% of 6 = ___ (6)	25% of 68 = ___ (16)	20% of 75 = ___ (26)
50% of 4 = ___ (7)	25% of 28 = ___ (17)	25% of 100 = ___ (27)
20% of 85 = ___ (8)	50% of 98 = ___ (18)	50% of 74 = ___ (28)
50% of 68 = ___ (9)	25% of 92 = ___ (19)	50% of 60 = ___ (29)
20% of 50 = ___ (10)	50% of 58 = ___ (20)	20% of 60 = ___ (30)

Answers

C) 1%, 10%, 50% and 100%

1)	50% of 40 = **20**	2)	1% of 700 = **7**	3)	10% of 140 = **14**
4)	100% of 80 = **80**	5)	10% of 320 = **32**	6)	50% of 160 = **80**
7)	1% of 900 = **9**	8)	50% of 72 = **36**	9)	10% of 900 = **90**
10)	10% of 320 = **32**	11)	1% of 5300 = **53**	12)	100% of 120 = **120**
13)	50% of 240 = **120**	14)	1% of 2700 = **27**	15)	10% of 800 = **80**

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Problem Solving and Reasoning

Explain it!

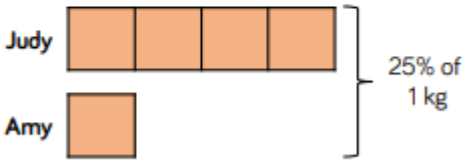
Henry says,

> To find 10% you divide by 10, so to find 50% you divide by 50

Do you agree? Explain why.

Use it!

Amy and Judy shared 25% of a 1 kg bar of chocolate.
Amy ate a quarter of the amount that Jude ate.
How much did they each eat?



How much less did Amy eat than Judy?

Use it!

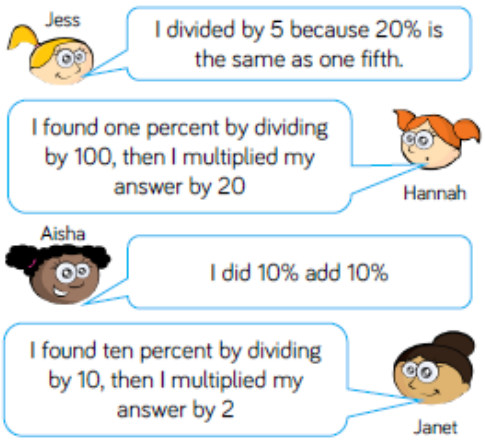
50% of 300	5% of 20	25% of 244
10% of 890	1% of 120,000	50% of 9402
25% of 225,000	10% of 85,610	5% of 600

Using the table above,

a) What's the biggest total you can make using only 3 amounts?
b) What's the smallest total you can make using 3 amounts?
c) Can you make exactly 300? How?

Explain it!

Four children in a class were asked to find 20% of an amount, this is what they did:



Who do you think has the most efficient method? Explain why.
Who do you think will end up getting the answer incorrect?

Answers

Henry is wrong because 50% is equivalent to a half so to find it you divide by 2

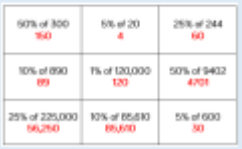
Judy ate 200 g,
Amy ate 50 g

Amy ate 150 g less than Judy

a) Largest: 146,561

b) Smallest: 153

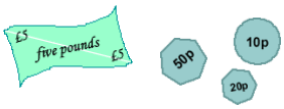
c) 50% of 300 +
1% of 120,000 +
5% of 600 = 300



Children to write which one they think is the most effective answer and explain their reasons.

Further Challenge

1. What is 20% of 30% of 40% of £50?
   Would you rather?

   Would you rather……

2. Have 10% of £5 or 75% of 80p?