Year 1 Maths Mastery PowerPoint - Answers

These mastery activities are intended to be open ended so that the children can explore their understanding of addition and subtraction. The answers provided are just some examples of what the children may find.

How many different ways can you find to make a total of 20?

There are many number facts that children could use for this guestion. Below is just a selection.

20	+	Λ	_	20
~~		v	_	~~

$$19 + 1 = 20$$

$$18 + 2 = 20$$

$$17 + 3 = 20$$

$$16 + 4 = 20$$

$$13 + 7 = 20$$

$$12 + 8 = 20$$

$$11 + 9 = 20$$

$$10 + 10 = 20$$

$$30 - 10 = 20$$

$$90 - 70 = 20$$

$$100 - 80 = 20$$

$$27 - 7 = 20$$

$$24 - 4 = 20$$

$$23 - 3 = 20$$

$$22 - 2 = 20$$

$$21 - 1 = 20$$

$$40 - 20 = 20$$

$$50 - 30 = 20$$

$$60 - 40 = 20$$

$$26 - 6 = 20$$

$$25 - 5 = 20$$

Off on a trip

I have £20. I would like to go on two journeys. Where could I visit? How much would it cost altogether to visit both places?

London + Glasgow = £14 + £5 = £19

London + Dublin = £14 + £6 = £20

Birmingham + Glasgow = £11 + £5 = £16

Birmingham + Edinburgh = £11 + £9 = £20

Birmingham + Dublin = £11 + £6 = £17

Glasgow + Edinburgh = £5 + £9 = £14

Glasgow + Dublin = £5 + £6 = £11

Glasgow + Cardiff = £5 + £15 = £20

Edinburgh + Dublin = £9 + £6 = £15





Riddle me this

I'm thinking of a number.

If add 7, the answer is 20.

What number was I thinking of?

How do you know? Explain your answer.

$$13 + 7 = 20$$

Children to make a riddle for a friend.

Zorg the alien!

'If I start at number 3 and keep adding 2, I will eventually get to 20.' Is he right?

No he is incorrect. Example: 3, 5, 7, 9, 11, 13, 15, 17, 19, 21

'If I add two odd numbers together, it will always make 10.' Is he right?

No.
$$3 + 3 = 6$$
, $1 + 5 = 6$

Missing Numbers

10 = 4 + 6

12 + 8 = 20

7 + 3 = 10

? + ? = 20 - this question has several options - 10 + 10 = 20, 19 + 1 = 20, 18 + 2 = 20, 17 + 3 = 20, 16 + 4 = 20, 15 + 5 = 20

3 + ? + ? = 10 - this question has several options - 3 + 1 + 6 = 10, 3 + 2 + 5 = 10, 3 + 3 + 4 = 10, 3 + 4 + 3 = 10, 3 + 5 + 2 = 10, 3 + 6 + 1 = 10, 3 + 7 + 0 = 10

20 = ? + ? + 11 - this question has several options - 20 = 1 + 8 + 11, 20 = 2 + 7 + 11, 20 = 3 + 6 + 11, 20 = 4 + 5 + 11

Super Squares!

5	7	8
1	11	8
14	2	4

Explain your reasoning!

Mart the alien says,

'If I know that 14 + 6 = 20, then I know how to quickly work out 20 - 6.'

How does Mart the alien know the answer? Explain your reasoning!

Children can explain that addition is the inverse of subtraction and vice versa. So 14 + 6 = 20 and 6 + 14 = 20 and 20 - 6 = 14 and 20 - 14 = 6

Using objects

Imogen and Bartek are using cubes to help their counting. They're working out the answer to 13 + 7. Who has the correct answer? Explain your answer

They both have the correct answer. Imogen has 20 cubes in a pile and Bartek has organised his cubes into 2 rods of 10.



