

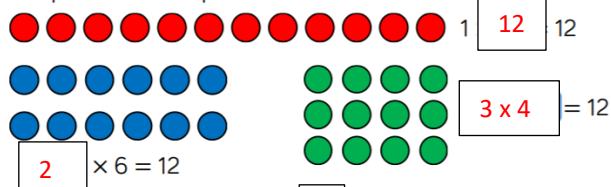
Year Four 1/6/20 Answers

Maths

We are continuing with our work on multiplication. Today I would like you to complete some work on factors. Remember factors are whole numbers which when multiplied together, make a product (answer). The best way to find factors are to work systematically and start with $1 \times ?$. See the additional resource for more help on factors.

Fluency

Complete the factor pairs for 12



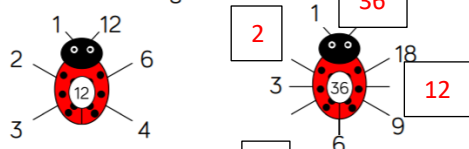
12 has 3 factor pairs. 12 has 6 factors altogether.

Use counters to create arrays for 24

How many factor pairs can you find?

Here is an example of a factor bug for 12

Complete the factor bug for 36



Are all the factors in pairs?

Draw your own factor bugs for 16, 48, 56 and 35

16 – 1×16 , 2×8 , 4
48 – 1×48 , 2×24 , 3×16 , 4×12 , 6×8

56 – 1×56 , 2×28 , 4×14 , 7×8
35 – 1×35 , 5×7

Reasoning

Tommy says



The greater the number, the more factors it will have.

Is Tommy correct?

Use arrays to explain your answer.

Mastery

Some numbers are equal to the sum of all their factors (not including the number itself). e.g. 6 has 4 factors, 1, 2, 3 and 6. Add up all the factors not including 6 itself. $1 + 2 + 3 = 6$. 6 is equal to the sum of its factors (not including the number itself).

How many other numbers can you find that are equal to the sum of their factors? Which numbers are less than the sum of their factors? Which numbers are greater than the sum of their factors? Maybe use a table to sort your answers (less than/more than/equal to).

Possible answers $28 = 1 + 2 + 4 + 7 + 14$. 28 is equal to the sum of its factors. $12 < 1 + 2 + 3 + 4 + 6$. 12 is less than the sum of its factors. $8 > 1 + 2 + 4$. 8 is greater than the sum of its factors.

Tommy is incorrect. Children explain by showing an example of two numbers where the greater number has less factors. For example, 15 has 4 factors 1, 3, 5 and 15. 17 has 2 factors 1 and 17.

English

Hopefully you found a lot of these features by comparing the two texts and seeing what was the same. Here are the features of Greek myths.

There is a hero in the story (Perseus and Theseus are the heroes)

There is a monster (Medusa, the minotaur)

The hero has to face a test (kill Medusa, escape the labyrinth)

The hero has help (the wise king gave Perseus his sandals, Ariadne gave Theseus the string)

There are often kings and queens in the story who need a task to be done (there is a king in both stories)

The hero has to go on a quest (a journey to reach something)

The action moves quickly

There are good and evil characters

How many did you find?

Foundation Subject – D&T

I hope you enjoyed eating your Greek food!