

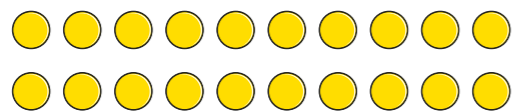


1 Dexter is using arrays to find the factor pairs of 20

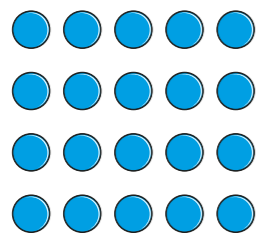
a) Complete the multiplication shown by each array.



$$\square \times \square = 20$$



$$\square \times \square = 20$$



$$\square \times \square = 20$$

Explain why there are no other arrays that can be made using 20 counters.



b) Complete the sentences.

20 has factor pairs.

20 has factors altogether.

c) List all the factors of 20

2 Use counters to make arrays and find the factor pairs for each number.

a) 22 _____

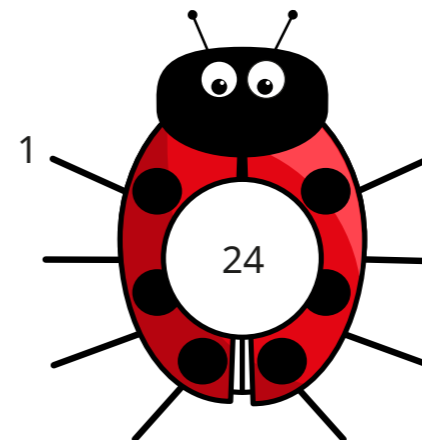
b) 12 _____

c) 35 _____

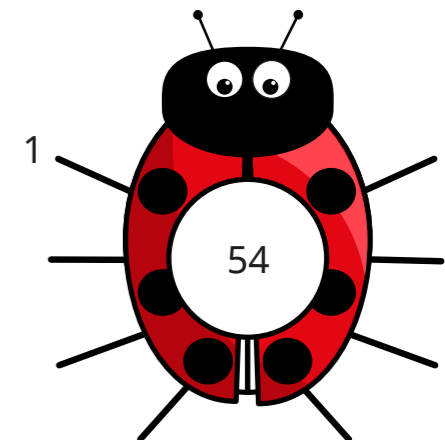
Which of the numbers has the most factor pairs?

3 Complete the factor bugs.

a)



b)



4 a) Draw a factor bug for 32

b) List all the factors of 32



5 Find all the factor pairs of each number.

a) 25 _____

b) 64 _____

c) 36 _____

What do you notice?



6 Are the statements true or false?

a) 10 and 5 are both factors of 15 _____

b) 50 has more factors than 42 _____

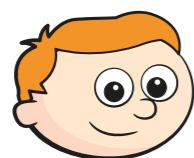
c) 60 has 6 factor pairs. _____

d) All the factors of 21 are odd. _____

Talk about your answers with a partner.



7



The smaller the number, the fewer factor pairs it has.

Use examples to show that Ron is incorrect.

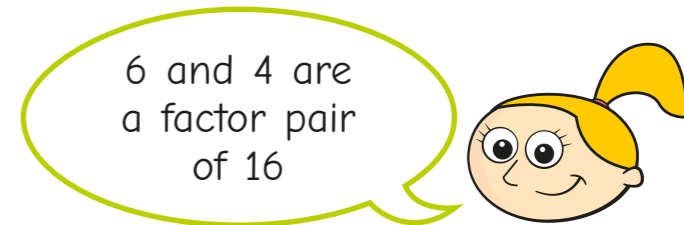
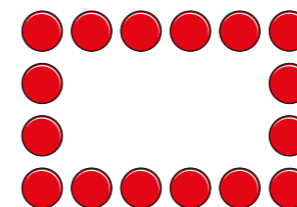
8 Years 3 and 4 are going on a school trip to the beach.

There are 40 children going altogether.

The children need to be in equal groups.

What group sizes are possible?

9 Eva has made an array using 16 counters.



Is Eva correct? _____

Explain your answer.

10

6 is a perfect number because when you add its factors together, apart from itself, they equal 6

What is the next perfect number after 6?
