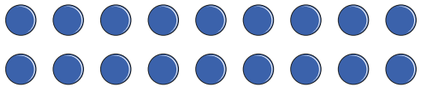
Factor pairs

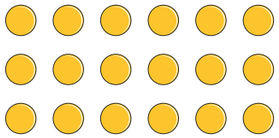
1 Alex is making arrays using counters.

a) What calculation is represented in each array?

□ × □ = 18



□ × □ = 18



□ × □ = 18

b) Use your answers from part a) to help you write all the factors of 18

_____

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

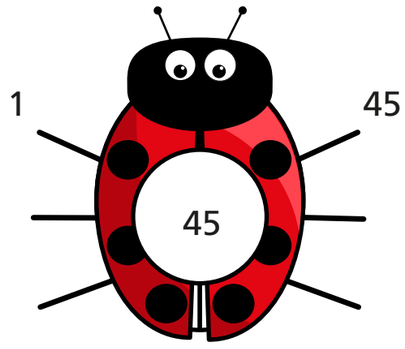
a) 12 _____

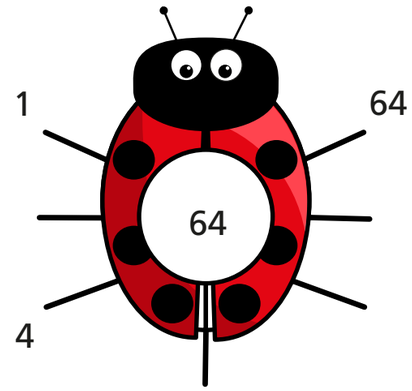
b) 15 _____

c) 24 _____

Which of the numbers has the most factor pairs? _____

3 Complete the factor bugs for 45 and 64





4 Find all the factor pairs for the number 72

The factor pairs of 72 are _____

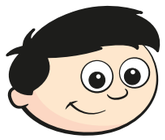
_____

5 Are these statements true or false?

	True	False
8 and 2 are both factors of 10	☐	☐
5 and 50 are both factors of 50	☐	☐
25 has only three factors.	☐	☐
All the factors of 15 are odd.	☐	☐

Talk about your answers with a partner.

6

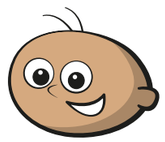


The bigger the number the more factor pairs it has.

Use examples to show that Dexter is wrong.

7 Tommy is finding factors of 12 and 18

12 and 18 have the same number of factor pairs.



a) Is Tommy correct? _____

Explain your answer.

b) Find two other numbers with the same number of factor pairs.

8 Class 4B is having a sports day.

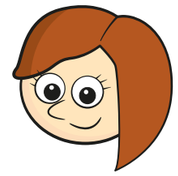
There are 36 children in the class.

The children need to be in equal groups.

What group sizes are possible?

9 Rosie is investigating factor pairs.

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?