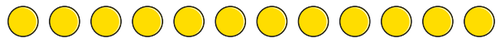
Factor pairs

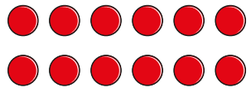
White Rose MATHS

1 Dexter is using arrays to find factor pairs of 12

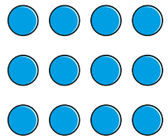
a) Complete the multiplication shown by each array.



☐ × ☐ = 12



☐ × ☐ = 12



☐ × ☐ = 12

b) Complete the sentences.

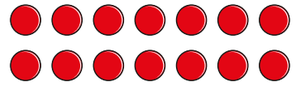
12 has ☐ factor pairs.

12 has ☐ factors altogether.

c) List all the factors of 12

2 Sam is using arrays to find factor pairs of 14

a) Write a multiplication sentence to match each array.



b) Explain why there are no other arrays that can be made using 14 counters.

c) Complete the sentences.

14 has ☐ factor pairs.

14 has ☐ factors altogether.

3 **a)** Use counters to make arrays and find the factor pairs of 20

b) Complete the sentences.

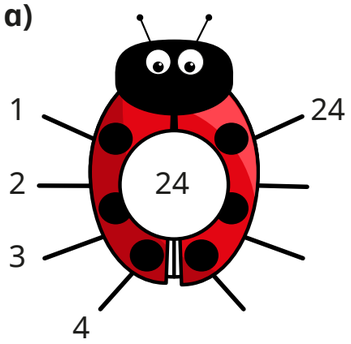
20 has ☐ factor pairs.

20 has ☐ factors altogether.

c) List all the factors of 20

4 Complete the factor bugs and the sentences.

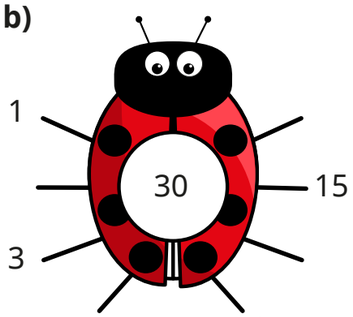
a)



24 has ☐ factor pairs.

24 has ☐ factors.

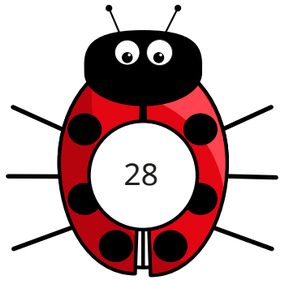
b)



30 has ☐ factor pairs.

30 has ☐ factors.

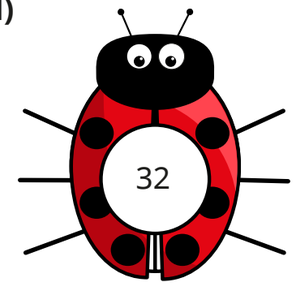
c)



28 has ☐ factor pairs.

28 has ☐ factors.

d)



32 has ☐ factor pairs.

32 has ☐ factors.

5 **a)** Draw a factor bug for 18

b) List all the factors of 18

6 Find all the factor pairs for each number.

a) 22

b) 40

c) 25

7 Circle the numbers that are factors of 16

2 **4** **6** **8** **10** **13**

Use cubes or counters to help you.

8 Is the statement true or false?

All numbers have an even number of factors.

Explain your answer.