



THIRD SPACE
LEARNING

Can I understand and identify factor pairs?

Success Criteria

- I can explain what a factor is/ factor pairs are
- I can find factor pairs for given numbers



To understand and identify factor pairs

In focus task

The answer is 40.

What could the multiplication question be?

For example:

10 x 4 or 10 x 2 x 2



To understand and identify factor pairs

A factor is a whole number that multiplies by another whole number to make a product.

Using this sentence stem, which of these numbers are factors?

$$5 \times 3 = 15$$

_____ and _____ are factors of _____.

5 and 3 are factors of 15.

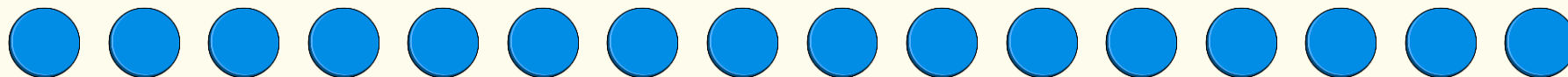
Answers



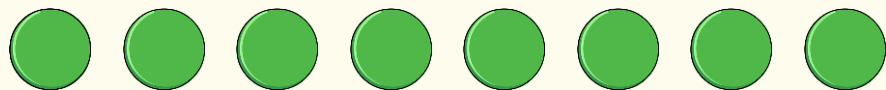
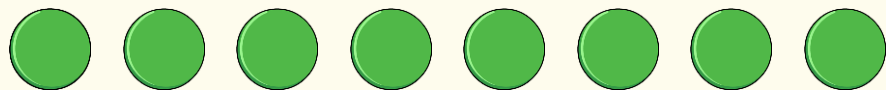
To understand and identify factor pairs

Guided Practice:

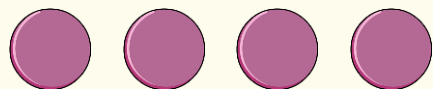
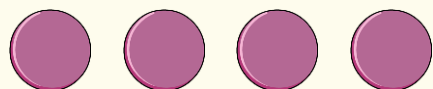
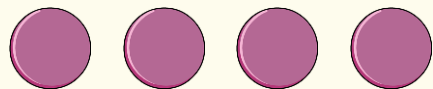
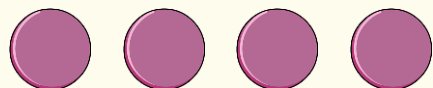
Complete the factor pairs for 16.



$$\underline{1} \times \underline{16} = 16$$



$$\underline{2} \times \underline{8} = 16$$



$$\underline{4} \times \underline{4} = 16$$

The factors of 16 are 1, 2, 4, 8 and 16. We only write 4 once as it is repeated. 16 has 5 factors.

Answers



To understand and identify factor pairs

Independent Practice:

- 1.** Use counters to help you find all the factor pairs of these numbers.
 - a.** 18
 - b.** 20
 - c.** 30
 - d.** 28
 - e.** 32

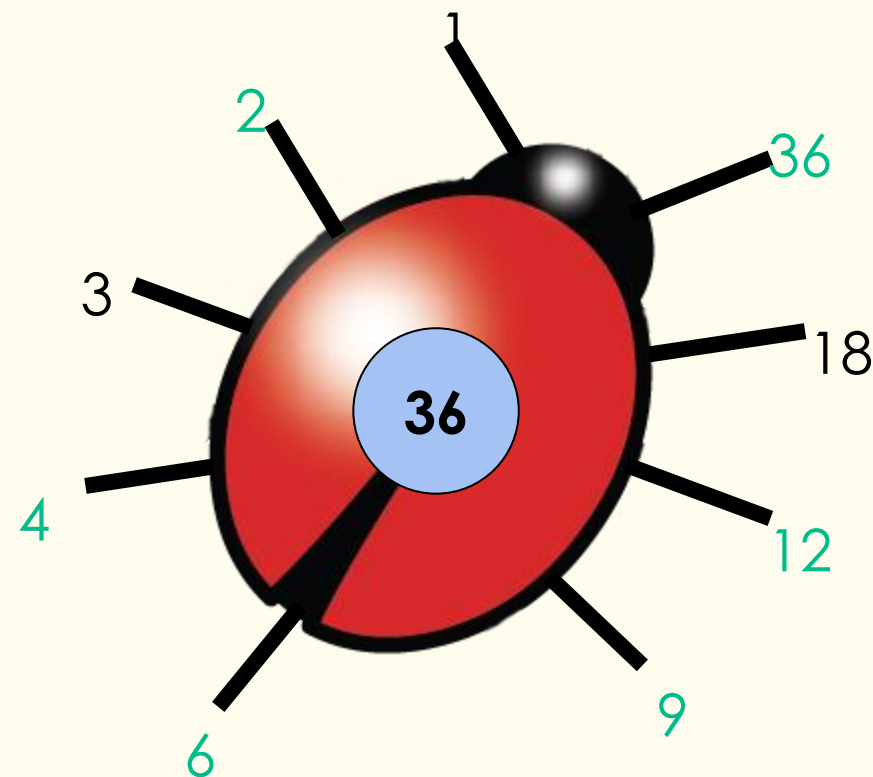
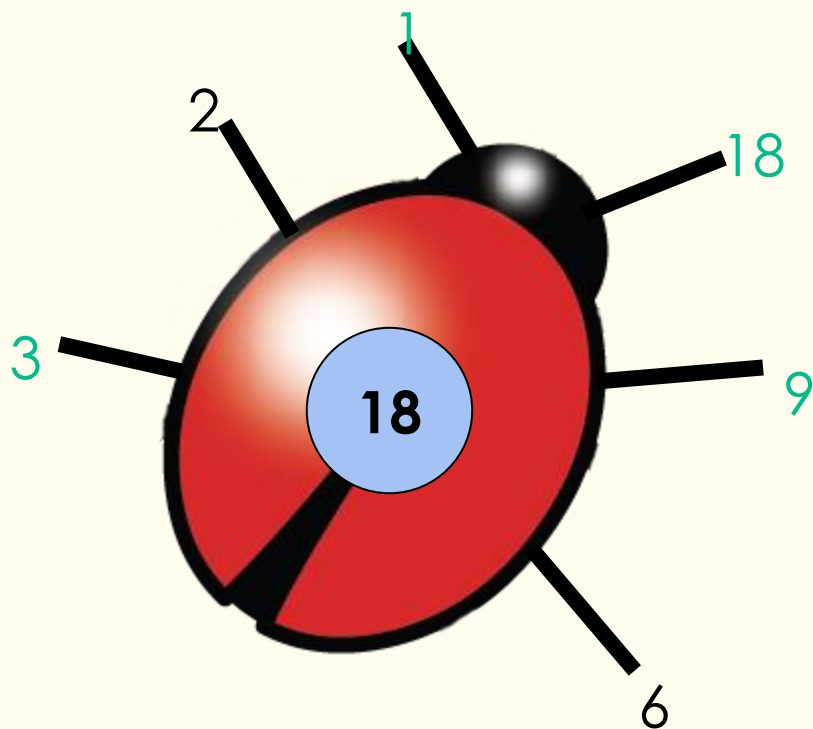


To understand and identify factor pairs

Guided Practice:

This is a factor bug. You can use it to record all the factors of a number.

Complete the factor bugs for 18 and 36.



Answers



To understand and identify factor pairs

Independent Practice:

2. Create factor bugs for these numbers.

a. 27

b. 24

c. 22

d. 40

e. 42



To understand and identify factor pairs

Guided Practice:

The factors of 20
are 1, 20, 4, 5, 2, 10,
4 and 5.



The astronaut has made a mistake.

Explain the mistake he has made.

The astronaut has not listed the factors in order so has got confused and listed 4 and 5 twice.

Answers

To understand and identify factor pairs

Independent Practice:

- 3.** True or false? Prove your answer is correct.
- a.** 35 has four factors.
 - b.** 24 six factors.
 - c.** The factors of 18 are 2, 6, 9 and 3.
 - d.** The larger the number, the more factors it has.
 - e.** 25 and 27 have the same number of factors.
 - f.** 60 has double the number of factors of 30.



To understand and identify factor pairs

Light Bulb Challenge

The astronaut says, “1 is a factor of all numbers.”

Do you agree?

Explain your answer.



The astronaut is correct.

Answers