1) Choose the correct mathematical word to label the part of the calculation.

Factor   Product   Factor Pair

```
┌─────────────┐
│             │
└──────┬──────┘
    ↓     ↓
```

$2 × 3 = 6$

```
┌──────────┐      ┌──────────┐
│          │      │          │
└──────────┘      └──────────┘
```

2) Find all three factor pairs for 16.
Draw the arrays to match each factor pair.
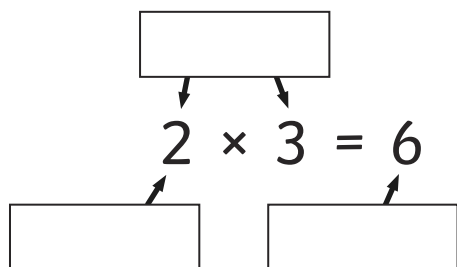
Array 1	Array 2	Array 3
The factor pair is:	The factor pair is:	The factor pair is:
☐ and ☐	☐ and ☐	☐ and ☐

3) **a)** Underline all the numbers that are not factors of 64.

1   2   3   4   5   6   7   8   9   10

b) Find two more factors for 64 that are not in the list above. _____

4) Complete the factor spider webs.

18

20

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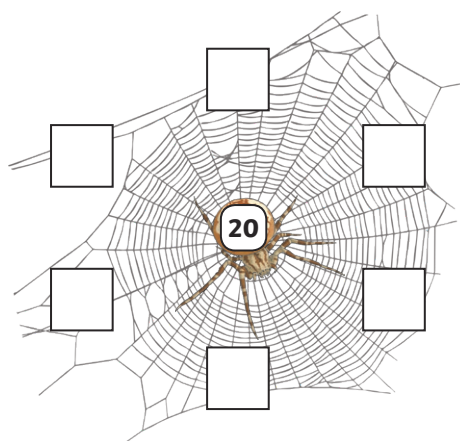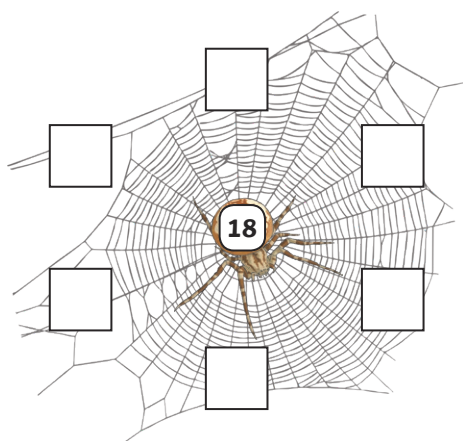
1) Read the statements below and decide whether each one is true or false. Explain your answers.

a) 1 is a factor of every product.

True or false? _____

Explain your answer:

_____

_____

b) A factor is the amount that is created when products are multiplied together.

True or false? _____

Explain your answer:

_____

_____

c) 8 has six factors.

True or false? _____

Explain your answer:

_____

_____

2) Which factor pair is the odd one out and why?

120 and 2   **8 and 30**   **40 and 60**   **10 and 24**

_____

_____

3) The children have been given 48 counters to make an array with.
Who do you agree with and who do you disagree with? Explain your answer.

Liza
You can make an array that has 6 rows with 8 counters in each row.

Mikel
You can make an array that has 2 columns with 24 counters in each column.

Tonya
You can make an array that has 2 rows with 24 counters in each row.

_____

_____

_____

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1) Sort the number cards onto the Venn diagram. Decide the sorting criteria using your knowledge of factors. Find three possible solutions, using a different colour for each one.

Factors of _____
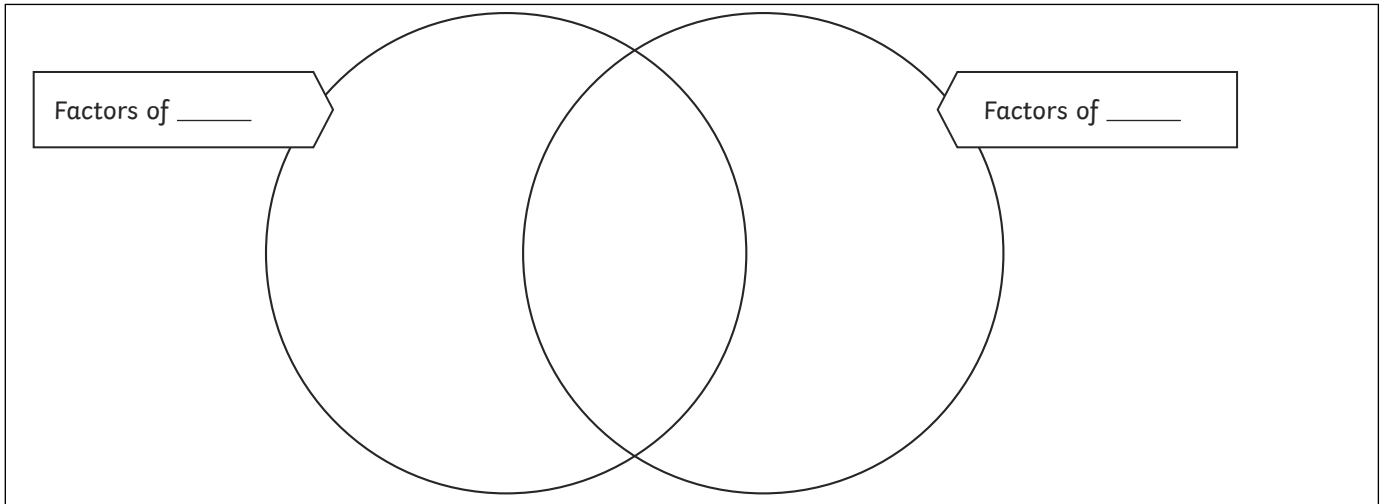
Factors of _____

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

2) There are five numbers between 0 and 100 that have 12 factors. Use these clues to identify each number. Then, in the table, list all 12 factors of each number that you have found.

I am a multiple of ten that is less than 75. One of my factors is 6.

I am a multiple of 8.

I have a digit sum of 12 but I am not 39 or 48.

I have nine tens and one of my factors is 12.

I am between 85 and 100.

Number	Factors