

Name: _____

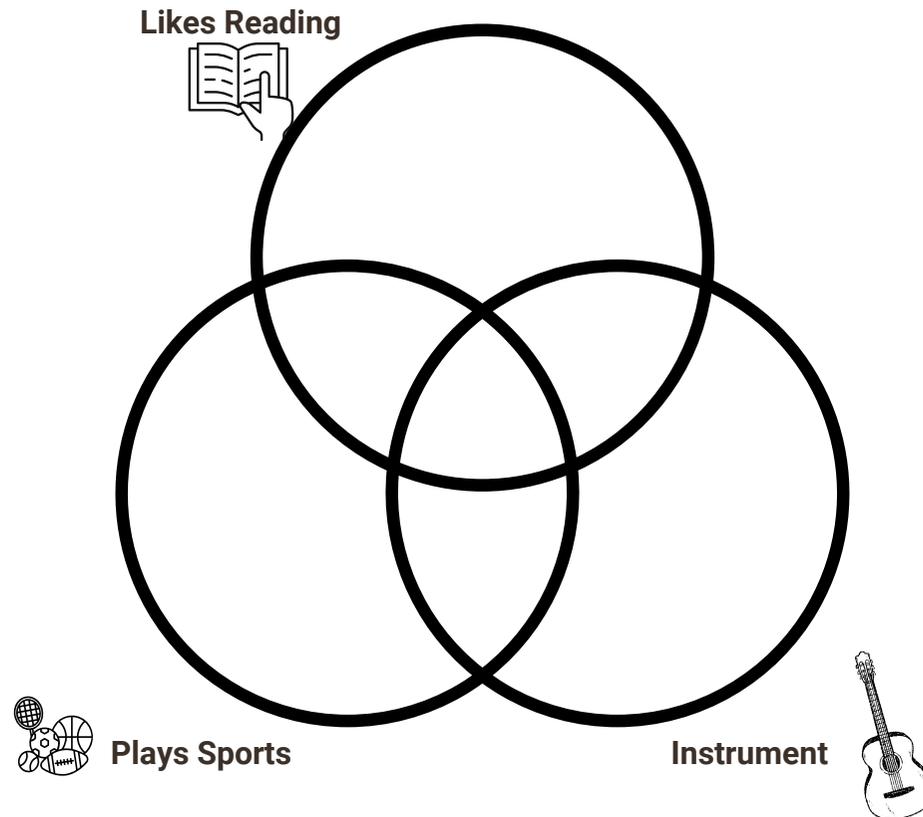
VENN DIAGRAMS



Task 1: Student Hobbies

The table below shows information about the hobbies of a group of students. Use the data to **place each name in the correct section** of the Venn diagram.

Name	Likes Reading	Plays Sport	Can Play an Instrument
Alice	Yes	Yes	No
Kate	No	Yes	Yes
Brandon	Yes	No	Yes
Oliver	Yes	Yes	Yes
Daniel	No	No	Yes
Matt	Yes	No	No
Oonagh	No	No	Yes



Name: _____

VENN DIAGRAMS



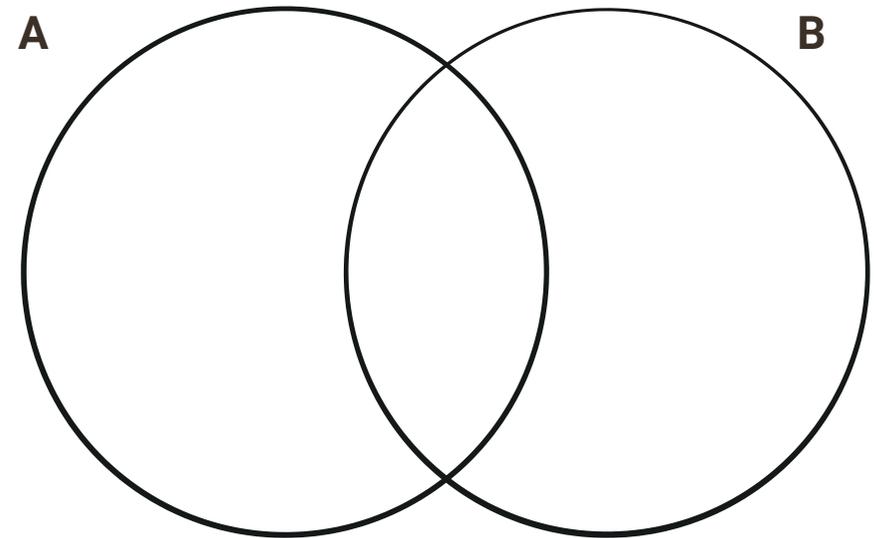
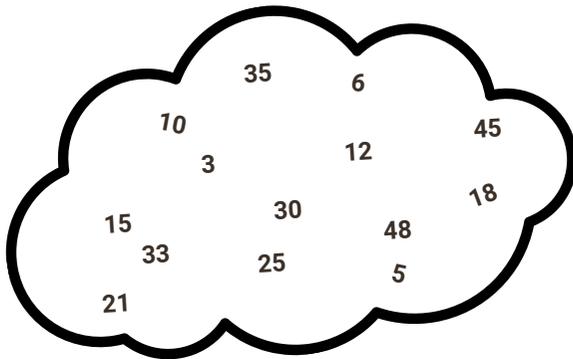
Task 2: Sorting Numbers

This Venn Diagram sorts numbers based on the following criteria:

A = Multiples of 3

B = Multiples of 5

Place the numbers from the cloud into the correct sections of the Venn Diagrams. Some numbers may belong in more than one section!



Extension: Add **three** more numbers of your choice to the 'cloud' that belong to **each** section of the Venn diagram. Justify why each fits that section.

How can you check that you have placed all numbers correctly?

Name: _____

VENN DIAGRAMS

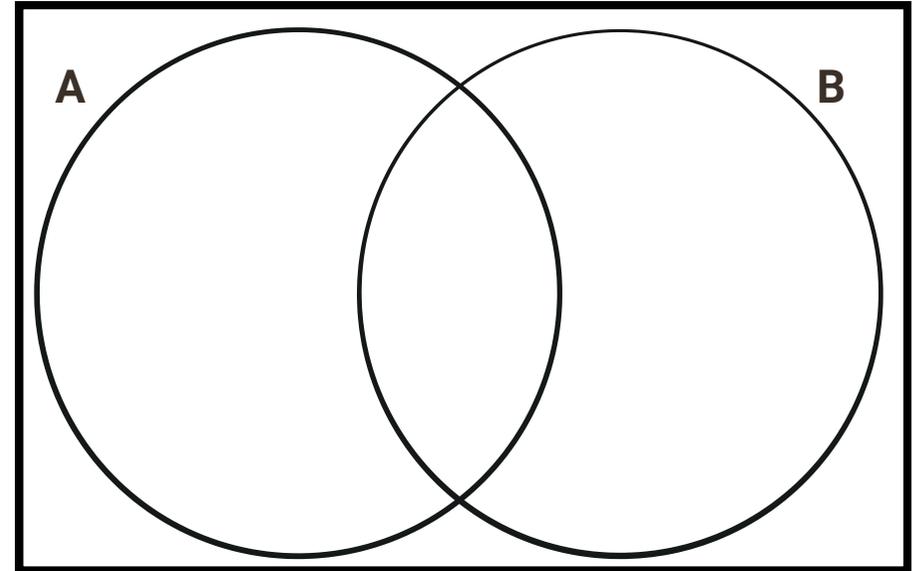
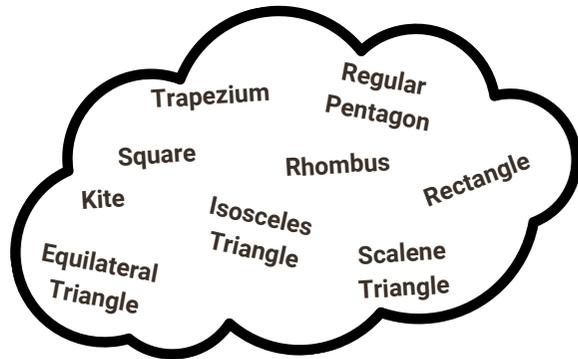


Task 3: Sorting Shapes

Use the Venn diagram to sort the shapes from the list into the correct sections

A = Shapes with all sides equal in length.

B = Shapes with at least one pair of parallel sides.



Extension: Can you **add another shape** to this Venn Diagram? What would it be, and where would it go?

Why does this Venn Diagram need a border around the outside?

Name: _____

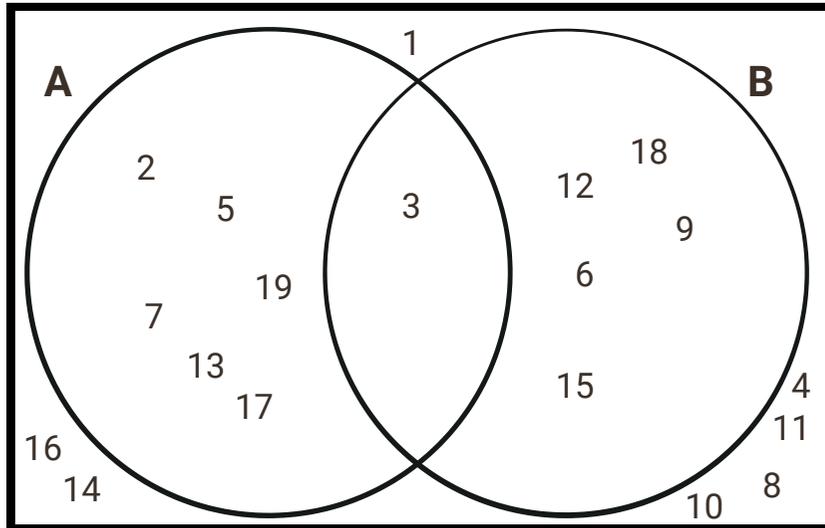
VENN DIAGRAMS



Task 4: Analysing

Below is a **completed** Venn diagram, where the numbers have been placed into one of four regions:

- Set A = Prime numbers less than 20.
- Set B = Multiples of 3 less than 20.
- In both A and B = common to both sets.
- Outside the circles neither prime nor multiple of 3.



1

First analyse the Venn Diagram, then answer these True or False Questions:

- **All** multiples of 3 must appear in the intersection. **True / False.**
- **Every** number in the left circle is **divisible** only by 1 and **itself**. **True / False.**
- Any number outside both circles is **neither** prime nor a multiple of 3. **True / False.**
- **15** is placed in the correct region because it is **both** prime and a multiple of 3. **True / False.**
- **1** is outside the circles because it is **not** prime or a multiple of 3. **True / False.**

2

Extension: Using the skills you have learned, create your own Venn diagram. You can choose any topic you like!

- Use hobbies (like task 1) or create categories based on different maths facts.
- Try creating a **three-way Venn diagram** to challenge yourself!
- Make sure you have **clear categories** and label them.
- **Don't forget:** some items may not fit into any category and can be placed outside the circles.