

Teacher Lesson Guide for Part 1: Sort the Sets

Focus Lesson 1: 3 Steps (Week 1)

Teacher Guide Video

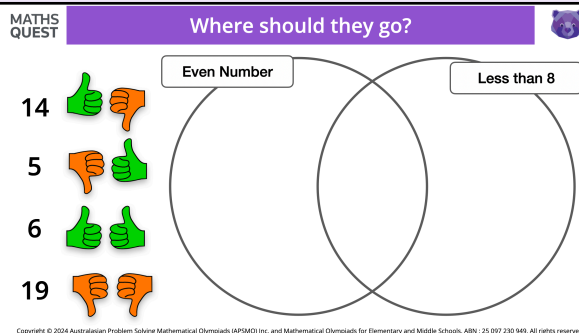
Step 1: Sorting into Sets 5 mins

Activity Type: [Class Video](#)

Resources: [Link to video](#) and IBW/Display

Notes:

- This is a 5 minute video that demonstrates how elements can be sorted into sets.
- It demonstrates how a Venn diagram has an intersection for elements that belong to both sets.
- Two techniques to support students to sort elements into sets are demonstrated.



Step 2: Venn diagram Click Through 10 mins

Activity Type: [Click Through](#) with Activity Sheet 1

Resources: [Link to Click Through](#); printed activity sheets; red, blue and green pencils for students

Notes:

- There are 3 activities included in this Click Through:

Where do they go?

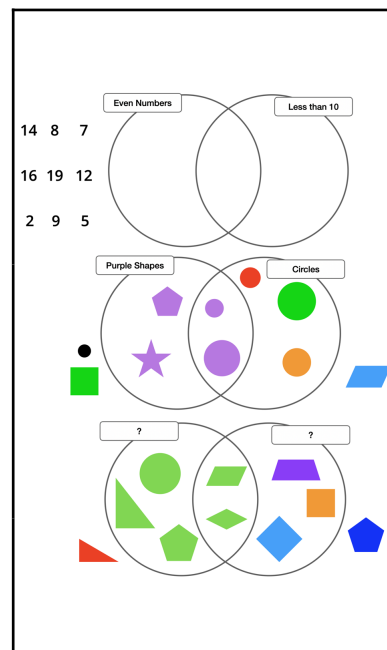
- There are 3 empty Venn diagrams with elements to sort as a class. Consider one element at a time and ask students to show with their thumbs if an element is in one set, both sets or not in a set.
- As each element is decided upon, have students record its location on their activity sheet.
- Answers are shown after each challenge.

Find the Lost Element

- There are 3 Venn diagrams that have an element in the wrong place.
- Spot the element and then students circle it on their activity sheet.
- Answers are shown and the element is put in the correct place.

Name the Sets

- 3 sets are shown with elements in place, but not titles on the sets.
- Look carefully at what is included *and excluded* from each set to decide how to name it.
- Students record the names of sets on their activity sheet.
- Answer are included.



Step 3: Differentiated Activity Sheets 20 mins

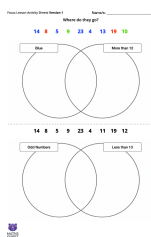
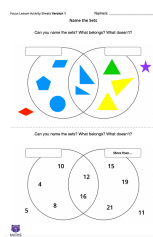
Activity Type: Student Activity Sheets - partner work

Resources: Printed Focus Lesson activity sheets for students; coloured pencils

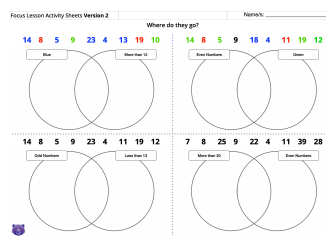
Notes:

- There are 2 versions of the Focus Lesson activity sheets. Version 1 has 2 challenges for each activity and Version 2 has 4 challenges. Select the appropriate tasks for your students to complete.

Version 1



Version 2

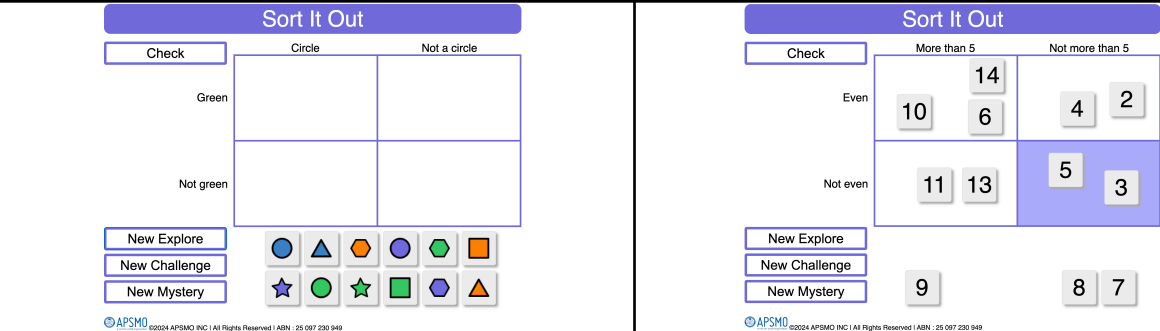


Follow-on Activities: A Selection of 3 Steps (Week 2)

Step 4: Introduction to Carroll diagrams 5 mins

Activity Type: [Class Video](#)
Resources: Link to video and IBW/Display
Notes:

- This video introduces Carroll diagrams and demonstrates how they are similar and different to Venn diagrams.



Step 5: Sort it Out

Activity Type: [Digital Activity](#)
Resources: QR code; iPads/tablets or laptops
Notes:

- This digital activity lets students generate elements to sort into a Carroll diagram.
- Elements will either be numbers or shapes.
- Sort the Sets will check the placement of each element and alert students if a change needs to be made.
- Sort the Sets can be adjusted for different levels of challenge. Explore level will give students numbers up to 15 to sort and require them to sort shapes by colour and type.
- Challenge level includes number up to 50 and requires students to sort shapes by type, pattern and number of sides.
- Mystery level hides the properties at the top of the diagram. Students move and check elements to determine what the properties must be. Once all the elements are correctly sorted, click on Check to reveal the properties.

Step 6: Complete / Fill Diagrams

Activity Type: Activity Sheet
Resources: Follow On Activity Sheets
Notes:

- There are 2 versions of this Venn diagram activity for you to select from.
- The first version has some elements already placed in the diagram and asks students to add at least 6 more.
- The second has empty sets and asks students to add at least 11 elements to the different regions.

