

Sorting with Carroll and Venn diagrams

CURRICULUM ALIGNMENT

DAT.DAT.3

pose questions of interest and collect, display and critically analyse data in a range of ways for a range of purposes and communicate the findings.

INTERACTIVES **Drag Sort · challenge, display**

WHAT THIS LESSON TEACHES

A Venn diagram uses two overlapping circles to sort items by two yes-or-no rules. Items go inside one circle, both, or outside both.

→ A red square goes in the overlap of 'is red' and 'has four sides'.

→ A blue triangle sits outside both 'is red' and 'has four sides'.

MODEL THIS ON THE BOARD

SORTING A SHADED SQUARE

- 1 Test the rule 'has straight sides': yes so place inside that circle.
- 2 Test the rule 'is shaded': yes so it also belongs in the second circle.
- 3 The item lands in the overlap where both rules are true.

DISCUSSION STARTER

REFLECT Which felt clearer today — the Venn hoops or the Carroll boxes?

ANSWER KEY

Scaffold: visual check on the page

Q1: in the "is red" region only

Q2: in the "has four sides" region only

Q3: in the overlap

a) Always : The overlap is for items that pass both yes-or-no tests.

b) Never : It goes inside the one circle it matches.

c) Always : It matches both rules so the overlap is correct.

d) Never : The overlap is only for items that fit both rules.