

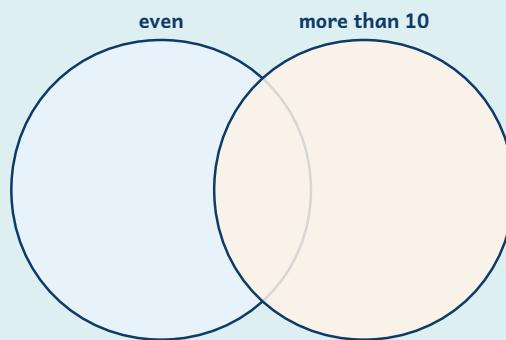
SORTING ON A CARROLL DIAGRAM

- 1 The columns sort even / odd; the rows sort single-digit / two-digit.
- 2 **4** is even and single-digit, so it sits in the top-left box; **9** is odd and single-digit, so it sits in the top-right box.
- 3 **22** is even and two-digit (bottom-left); **11** is odd and two-digit (bottom-right).

	even	odd
single-digit	4	
two-digit	9	

 WARM-UP

Write each number in the right part of the Venn diagram.



Place: 8 15 20 3

1. Write 8 where it belongs: it is even but not more than 10.
2. Write 15 where it belongs: it is more than 10 but not even.
3. Write 20 in the middle, where the two circles overlap, and 3 outside both.

 PRACTICE

- 1 On the Carroll grid with even / not even across the top and more than 10 / not more than 10 down the side, which box does 14 belong in?
- 2 On the Carroll grid with even / not even across the top and more than 10 / not more than 10 down the side, where do 11, 22 and 9 each go?

ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

- a. An item on a Carroll diagram lands in exactly one box.
- b. A number that is even and more than 10 goes in the overlap of a Venn diagram of 'even' and 'more than 10'.
- c. Every number written on a Carroll diagram is even.
- d. The number 22 sits in the same box as the number 9 on the even/odd, single-digit/two-digit grid.

REFLECT

Did the Carroll diagram or the Venn diagram make the groups clearer for you? Why?