Year 5 · Statistics: Grouping Data and Clustered Bar Graphs

Name: _____ Date: _____

Hi! This sheet helps you practise putting number data into groups in a table, and drawing clustered bar graphs where coloured bars sit side-by-side. Take your time and use a ruler for your graphs.

Warm-up

1. A rainfall reading was 2.4 mm. Which group does it belong in: 0–0.99, 1–1.99, 2–2.99, or 3–3.99?

2. Tally these heights into the group 1.0–1.49 m: 1.2 m, 1.45 m, 1.6 m, 1.05 m. How many fit the group?

3. On a bar graph, what is a 'key' used for?

4. A clustered bar graph shows boys and girls at each year level. How many bars would sit side-by-side above 'Year 5'?

Practice

5. Aroha measured the lengths (in metres) of 10 skateboards at the Avondale skate park: 0.7, 0.8, 1.2, 1.5, 1.3, 0.9, 1.8, 1.1, 0.6, 1.4. Make a grouped table using the ranges 0–0.99, 1–1.99, 2–2.99 and write the count for each group.

6. Here are the times (in seconds) 8 students took to run 50 m: 9.2, 10.5, 11.8, 9.9, 12.3, 10.1, 11.2, 12.9. Group them into 9–9.99, 10–10.99, 11–11.99 and 12–12.99. How many are in each group?

7. A class recorded how much rain (in mm) fell each day for a week: 0.4, 1.5, 2.1, 0.8, 1.2, 3.4, 2.7. Using the groups 0–0.99, 1–1.99, 2–2.99, 3–3.99, which group has the most days?

8. Word problem: Vertex Academy asked Year 4 and Year 5 students their favourite lunch. Year 4: pies 6, sushi 4, sandwiches 5. Year 5: pies 3, sushi 8, sandwiches 4. Describe how you would set up a clustered bar graph for this data, including the axes and key.

9. Word problem: Using the lunch data above, how many more Year 5 students than Year 4 students chose sushi, and which year group chose more pies?

10. A group of tomatoes were weighed (in kg): 0.15, 0.22, 0.35, 0.18, 0.29, 0.41, 0.33. Group them into 0–0.09, 0.10–0.19, 0.20–0.29, 0.30–0.39, 0.40–0.49 and give the count for each group.

Challenge

11. Two shops recorded drinks sold on Saturday and Sunday. Shop A: Saturday 40, Sunday 55. Shop B: Saturday 60, Sunday 45. If you drew a clustered bar graph with the two days on the horizontal axis, which day would have the taller total of both bars combined, and by how much?

12. A scientist measured the lengths (in cm) of 12 fish: 5.2, 6.8, 5.9, 7.4, 6.1, 5.5, 8.2, 7.9, 6.3, 5.8, 7.1, 8.6. Group them into 5–5.99, 6–6.99, 7–7.99, 8–8.99. Then work out what fraction of the fish are 7 cm or longer.