Year 5 · Statistics: Measuring and Matching Data

Name: _____ Date: _____

Hi! This sheet helps you practise measuring things carefully and rounding to the right place, plus collecting data that has two features for each person. Take your time and show your thinking!

Warm-up

1. Round 47 centimetres to the nearest 10 centimetres.

2. A pencil measures 13.6 cm. Round its length to the nearest centimetre.

3. True or false: bivariate data means each person has two pieces of information recorded about them.

4. A ribbon is 8.2 metres long. Round it to the nearest metre.

Practice

5. Mere measures the heights of four kūmara plants: 24.3 cm, 24.7 cm, 25.2 cm and 24.5 cm. Round each height to the nearest centimetre.

6. Why is it important to say 'measure to the nearest centimetre' before collecting length data for a class survey?

7. At Avondale Primary, Tane records what each student does at lunchtime (plays sport, reads, or eats with friends) and whether they are a boy or a girl. How many variables is Tane collecting for each student, and what type of data is this?

8. Aroha measures the arm span of five friends, rounding to the nearest 5 centimetres. Her raw measurements are 122 cm, 128 cm, 131 cm, 124 cm and 137 cm. Round each to the nearest 5 cm.

9. A class collected bivariate data on pets. They wrote down each student's favourite pet (dog, cat, or fish) and their gender. Here are the counts: Boys, dog 6, cat 2, fish 3. Girls, dog 4, cat 7, fish 1. How many students altogether, and which pet was chosen most often overall?

10. Sione needs to measure the temperature of the school pool. His thermometer shows 19.8°C. The rule says round to the nearest whole degree. What temperature does he record, and why should everyone use the same rounding rule?

Challenge

11. A class of 24 students recorded two things each: how they get to school (walk, bus, or car) and their gender. Boys: walk 5, bus 3, car 4. Girls: walk 6, bus 2, car 4. Make a statement comparing how boys and girls travel, using the data.

12. Kaia measures the length of the classroom in three ways. Rounded to the nearest metre she gets 8 m. Rounded to the nearest 10 centimetres she gets 780 cm. Rounded to the nearest centimetre she gets 784 cm. Explain why the three answers are different but not wrong, and which measurement is the most precise.