

### Data Sets Practice

Find the average and uncertainty for the following data sets:

1. Five students time a bowling ball travelling from point A to point B. They record the following times:

2.45s 2.49s 2.58s 2.55s 2.51s    Average with uncertainty \_\_\_\_\_ +/- \_\_\_\_\_ s

2. Seven students independently measure the length of a car. They record the following lengths:

4.5 m 4.7 m 4.4 m 4.6 m 4.8 m 4.5 m 4.6 m    Average \_\_\_\_\_ +/- \_\_\_\_\_ m

3. Four students independently measure the volume of a small metal cube. They record the following volumes:

18 mL 20 mL 20 mL 19 mL    Average with uncertainty \_\_\_\_\_ +/- \_\_\_\_\_ mL

4. Two students as in case 3 above also independently measure the volume of a small metal cube. They record the following volumes:

22 mL 22 mL    Average with uncertainty \_\_\_\_\_ +/- \_\_\_\_\_

5. Three students independently measure the mass of an egg. They record the following masses:

47 mg 32 mg 37 mg    Average with uncertainty \_\_\_\_\_ +/- \_\_\_\_\_

6. Circle the data set that appears to be the most trustworthy.

7. Draw a square around the data set that appears to be the least trustworthy.

8. Write a single sentence that explains what it is about the circled data set that indicates it was measured more carefully than the squared data set?