#### At-Home Investigation

# **Find 3 large containers.** How could you find the capacity of each container?

#### Make your plan:

#### What instruments could I use to measure with?

Find any that you have at home and draw the one you are choosing to use for measurement.

Explain why you chose that one.



How will I make sure that I am measuring accurately?

#### **Carry out your plan:**

Measure your three containers. **How much does each one hold?** Show what you did. Include any number sentences.

#### **Apply your learning:**

Compare the containers. Put them in order by how much they hold. Explain how you did it.

# E7. Measure and estimate volumes



Sometimes we need to guess the volume of a container so that we know if our measurement is about right. Discuss these questions with a friend and then make the measurements using cups and litres.
1. How many cups does it take to fill up a one litre jug? Measure them carefully and find out:
2. How did you do it?
For measuring the volume of a glass of milk:  1. Would you measure it in cups or litres or both? Why?
2. Have a guess: what do you think the volume will be?  3. Choose an instrument and measure it. What did you get? How good was your guess?
For measuring the volume of water needed to fill up a bucket:  1. Would you measure it in cups or litres or both? Why?
2. Have a guess: what do you think the volume will be?  3. Choose an instrument and measure it. What did you get? How good was your guess?

#### **BACKWARDS QUESTION:**

Your team had a two litre drinks cooler for the team to use. If there are 10 players on the team, will everyone get one cup full? Explain:

#### Investigating measuring instruments

# How many tablespoons will it take to fill one measuring cup (250mL)?

Find a tablespoon, or substitute by using 4 teaspoonfuls.

How many tablespoonfuls will it take to fill a measuring cup to 250mL?



# How many measuring cupfuls (250mL) will it take to fill a 2L milk bottle or ice-cream container?

Work it out using the numbers or measure it to see.

Explain what you found and how you know that you are correct.

#### How many tablespoons would it take to fill a 1 litre container?

Work it out using the numbers or measure it to see.

Explain what you found and how you know that you are correct.

## Interleaved practise

Year 3, week 6

#### Number:

- 1. Write the pattern that matches this description: Begin with the number 143. Take away 5 to find each number in the pattern until you have done it 6 times.
- 2. Place the numbers from 1 to 20 on this chart

Odd	Even	

3. Write this number on the place value chart: 7 x 1000 + 3 x 100 + 1 x 10 + 8 x 1

Thousands	Hundreds	Tens	Ones

- 4. Draw an array for 4 x 8. Show how you worked out how many there are.
- 5. This rectangle shows half of a chocolate bar. Draw what the whole chocolate bar would look like?

Measurement/Geometry:

- 6. This shape is symmetrical because one half can fit exactly over the other half.

  Draw lines to show that these shapes are symmetrical.
- 7. Draw the hands on the clock to show a quarter past 7.



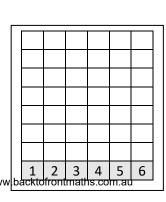
8. How long is your foot? Estimate first and then measure using centimetres.

My estimate \_\_\_\_\_ My measure \_\_\_\_\_

Chance/Data:

9. I rolled a 6-sided dice 25 times and these are the numbers that I rolled: 1,3,2,5,6,3,5,3,4,1,2,1,2,3,6,4,1,6,3,5,5,1,2,4,4

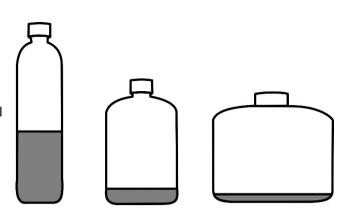
Use the blank graph to show the results of my experiment.



### Estimating capacity by sight

Each of these containers has exactly one cup of liquid in them. Use this information to estimate how much liquid each container will hold in either millilitres or litres.

Show how you did it.



Find two clear bottles in your house. Add exactly 1 cup of water (250mL) to each bottle. Draw what they look like with the water in them:

Using this information, how could you work out roughly how much they hold? What steps would you need to take? Please note: you do not need to give the capacity, just explain how you would estimate it.