

## Chapter 32: Capacity

1. Match the containers to their most likely capacities.

(a)



(b)



(c)



(d)



(e)



(f)



5ml

1l

140l

2l

250ml

10l

2. Use the information from Question 1 to answer these.

- How much orange juice would there be in a pack of six cartons?
- If it took five minutes to fill the bath, how many litres per minute were pouring in?
- If you opened a milk carton and put five teaspoons from it into a cup of tea, how much would be left in the carton?
- If one raindrop (1ml) lands in the watering can each second for a full hour, how much more liquid is needed to fill the watering can?
- How many 300ml cups of tea can be made from a full kettle of water?

3. Fill in the missing litres and millilitres.

(a)  $4.07\text{l} = \underline{\quad}\text{l} \underline{\quad}\text{ml}$

(b)  $8\text{ml} = \underline{\quad}\text{l}$

(c)  $6\text{l } 53\text{ml} = \underline{\quad}\text{l}$

(d)  $5\text{l } 5\text{ml} = \underline{\quad}\text{ml}$

(e)  $8,093\text{ml} = \underline{\quad}\text{l}$

(f)  $9.8\text{l} = \underline{\quad}\text{ml}$

(g)  $3.27\text{l} = \underline{\quad}\text{l} \underline{\quad}\text{ml}$

(h)  $6\text{l } 7\text{ml} = \underline{\quad}\text{ml}$

(i)  $3,507\text{ml} = \underline{\quad}\text{l} \underline{\quad}\text{ml}$

4. Fill in the missing amounts.

(a)  $3\frac{6}{1000}\text{l} = \underline{\quad}\text{ml}$

(b)  $5\frac{1}{4}\text{l} = \underline{\quad}\text{ml}$

(c)  $6\frac{3}{4}\text{l} = \underline{\quad}\text{l} \underline{\quad}\text{ml}$

(d)  $5.23\text{l} = 5\frac{\square}{\square}\text{l}$

(e)  $9\frac{8}{1000}\text{l} = \underline{\quad}\text{l}$

(f)  $2.2\text{l} = \underline{\quad}\frac{\square}{\square}\text{l}$

(g)  $1\frac{14}{100}\text{l} = \underline{\quad}\text{l}$

(h)  $\underline{\quad}\text{l} = 3\frac{430}{1000}\text{l}$

(i)  $\underline{\quad}\text{ml} = 10\frac{1}{2}\text{l}$

## Tuesday - Shadow Book Pg. 65 – Qs. 5-7

5. True  or false ?

(a)  $\frac{2}{5}l = 250ml$

(b)  $25ml = 0.25l$

(c)  $3l\ 6ml = 3\frac{6}{1000}l$

(d)  $0.08l = \frac{80}{100}l$

(e)  $3l\ 45ml = 3.45l$

(f)  $6.8l = 6l\ 800ml$

(g)  $5\frac{3}{4}l = 5,075ml$

(h)  $9,800ml = 9\frac{4}{5}l$

(i)  $6\frac{30}{1000}l = 6,030ml$

6. How many ml must be added to each of these to make full litres only?

(a)  $2\frac{1}{2}l$  \_\_\_\_\_ ml

(b)  $3l\ 350ml$  \_\_\_\_\_ ml

(c)  $4l\ 180ml$  \_\_\_\_\_ ml

(d)  $6\frac{3}{10}l$  \_\_\_\_\_ ml

(e)  $7\frac{3}{4}l$  \_\_\_\_\_ ml

(f)  $2,625ml$  \_\_\_\_\_ ml

7. If the following amounts were drawn from a 9.5l can, how much would be left each time?

(a)  $1.5l$  \_\_\_\_\_ l

(b)  $7.25l$  \_\_\_\_\_ l

(c)  $8.637l$  \_\_\_\_\_ l

(d)  $6\frac{1}{1000}l$  \_\_\_\_\_ l

(e)  $4\frac{750}{1000}l$  \_\_\_\_\_ l

(f)  $5.450l$  \_\_\_\_\_ l

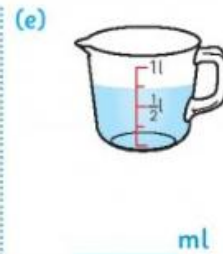
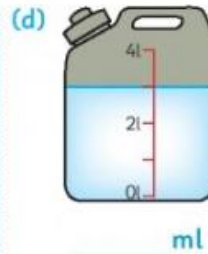
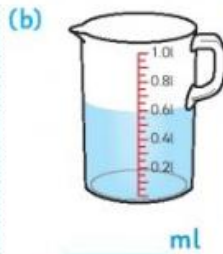
Based on *Busy at Maths 5*, pages 170–171

65

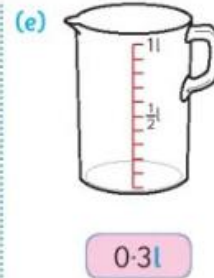
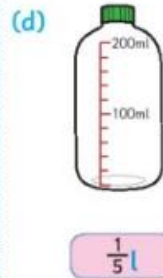
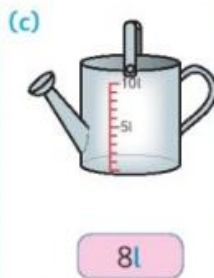
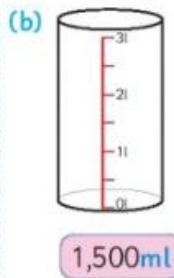
## Wednesday - Shadow Book Pg. 66 – Qs. 1-3

### Capacity

1. How many ml are in each of these containers?



2. Draw the correct amount of liquid in each of these containers.



3. Add or subtract the following.

(a) 
$$\begin{array}{r} 0.983l \\ + 4.627l \\ \hline \end{array}$$

(b) 
$$\begin{array}{r} 4.075l \\ - 1.177l \\ \hline \end{array}$$

(c) 
$$\begin{array}{r} 3l\ 746ml \\ + 1l\ 555ml \\ \hline \end{array}$$

(d) 
$$\begin{array}{r} 7l\ 10ml \\ - 3l\ 51ml \\ \hline \end{array}$$

(e) 
$$\begin{array}{r} 8.095l \\ - 2.706l \\ \hline \end{array}$$

(f)  $3\frac{3}{4}l - 2.6l$

(g)  $7.36l + 2,435ml$

(h)  $6\frac{4}{5}l - 2,093ml$

(i)  $10l\ 45ml - 2.93l$

(j)  $4\frac{7}{100}l + 6\frac{98}{1000}l$

(k)  $20l\ 5ml - 8.025l$

4. Use decimal form to multiply or divide the following.

(a)  $3\text{ l } 95\text{ ml} \times 5$

(b)  $\frac{3}{4}\text{ l} \times 12$

(c)  $8\frac{3}{5}\text{ l} \div 4$

(d)  $6.093\text{ l} \times 23$

(e)  $3.807\text{ l} \div 9$

(f)  $6\frac{1}{2}\text{ l} \div 25$

(g)  $3\text{ l } 88\text{ ml} \times 19$

(h)  $1\frac{3}{8}\text{ l} \div 5$

(i)  $837\text{ ml} \times 36$

5. Arrange these capacities in order, starting with **smallest**.

(a)  $1.5\text{ l}$ ,  $1\text{ l } 5\text{ ml}$ ,  $1\frac{1}{5}\text{ l}$ ,  $1.05\text{ l}$ ,  $1.505\text{ l}$


(b)  $2\frac{3}{4}\text{ l}$ ,  $2\text{ l } 700\text{ ml}$ ,  $2\frac{4}{5}\text{ l}$ ,  $2.85\text{ l}$

(c)  $6.06\text{ l}$ ,  $6\frac{6}{1000}\text{ l}$ ,  $6,600\text{ ml}$ ,  $6\frac{66}{100}\text{ l}$

(d)  $10\text{ l } 300\text{ ml}$ ,  $10\frac{33}{1000}\text{ l}$ ,  $10\frac{1}{4}\text{ l}$ ,  $10.003\text{ l}$

(e)  $0.07\text{ l}$ ,  $700\text{ ml}$ ,  $\frac{7}{1000}\text{ l}$ ,  $\frac{707}{1000}\text{ l}$

(f)  $\frac{1}{4}\text{ l}$ ,  $330\text{ ml}$ ,  $\frac{1}{5}\text{ l}$ ,  $\frac{3}{10}\text{ l}$

6.  David drank  $500\text{ ml}$  from a  $4\text{ l}$  container. Rónan drank  $650\text{ ml}$ , Jack drank  $\frac{2}{5}\text{ l}$  and Sam drank  $1.35\text{ l}$ . How many litres and millilitres were left in the container? \_\_\_\_\_ l \_\_\_\_\_ ml

7. From a  $3\text{ l}$  smoothie container Ava drank  $600\text{ ml}$ , Emma drank  $450\text{ ml}$ , Esther drank  $0.75\text{ l}$  and Elaine drank  $\frac{4}{5}\text{ l}$ . Suzie drank the rest. How much did Suzie drink? \_\_\_\_\_ l

## Capacity

1. Work out the cost per litre for these.



Price	€33.00	€1.74	€0.87	€1.89	€2.35
Per litre					

2. Now answer these questions based on the information above:

- If a restaurant uses 30 litres of washing-up liquid a year, how much would they save by buying the better value bottle? € \_\_\_\_\_
- A taxi driver uses 3 litres of petrol per day. How much will he spend on fuel if he works 23 days in June? € \_\_\_\_\_
- An athletics club bought 25 of the small cartons of orange juice for an event. How much would they have saved if they had bought the big cartons instead? € \_\_\_\_\_

3. This is how many litres of petrol each vehicle uses when traveling 100km:



smart car  
3.2l/100km



SUV  
6.4l/100km



hatchback car  
4.5l/100km



saloon car  
5.1l/100km



hybrid car  
3.4l/100km

- Use your calculator to work out how far each car could travel on one litre of petrol (answer in km and metres, and to two decimal places).
- If each vehicle travelled 12,000km in a year and petrol costs an average of €1.80 per litre, work out how much each owner spent on fuel.
- If you drove 386km from Cork to Donegal, use a calculator to work out how much more petrol you would use with the car that uses the most fuel instead of the car that uses the least.
- Aidan and Catriona got a lift to school every day in an SUV. If the journey is 3km each way and they have 183 days in a school year, use your calculator to work out how much they would save if they cycled instead (assume one litre of petrol costs €1.80).