Measurement (volume and capacity)

HERE'S THE MATHS

This week's maths focuses on measurement of volume and capacity, using litres and millilitres. Your child is learning to convert from litres to millilitres and vice versa. They find the value of each interval on a scale and use this to read values between divisions. If you have measuring jugs in your kitchen you can look at these together – perhaps when cooking. Children often find reading scales challenging, so practise helps.

ACTIVITY

1	2	3	4	5	6
250 ml	100 ml	500 ml	200 ml	50 ml	1000 ml

1	2	3	4	5	6
2 l	1 l	5 l	10 l	3 l	4 l
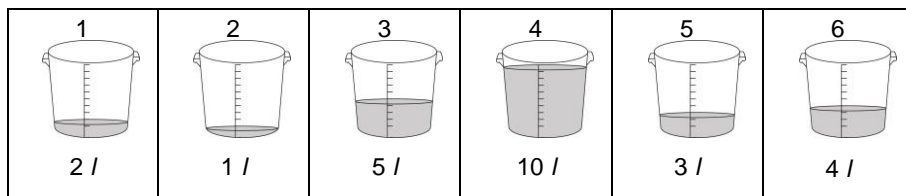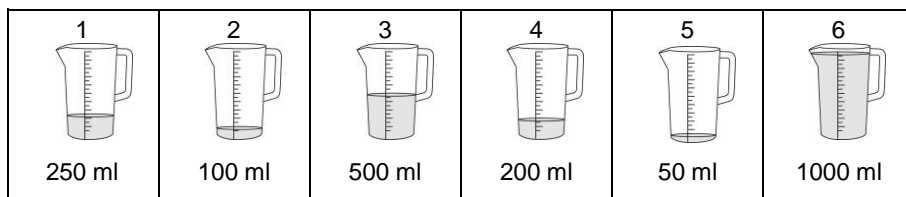
What to do
- Take turns to roll the dice to determine a jug and again to choose a container.
- Work out how many jugfuls will fill the container.
- Change roles.
- Continue for 10 minutes.

You will need:
- 1–6 dice

QUESTIONS TO ASK

What is 2·7 *l* in millilitres?

Round 1764 ml to the nearest 100 ml.

Which is the greater volume, $\frac{1}{2}$ litre or 450 ml?

How many 250 ml glasses can be filled from a 2 *l* jug?

Express 1400 ml in litres.

Year 4 Maths Newsletter 10

Date: _____   Name: _____

MATHS TOPICS

These are the maths topics your child will be working on during the next three weeks:
- Multiplication and division
- Fractions
- Measurement (volume and capacity)

KEY MATHEMATICAL IDEAS

During these three weeks your child will be learning to:
- use the most efficient method to multiply HTO × O
- solve problems involving fractions
- calculate capacities in litres and millilitres using decimals to two decimal places. and convert from litres to millilitres and vice versa.

TIPS FOR GOOD HOMEWORK HABITS

If your child is struggling, don't give them the answer in order to finish the homework. Instead, talk through the task together and help them to arrive at the solution themselves.

Multiplication and division

This week your child is practising the formal written method of multiplication for HTO × O calculations, including estimating and checking the answers to calculations. They continue to look carefully at each calculation to determine the most efficient method to use.

ACTIVITY

What to do
- One person chooses 3 red cards and makes the largest possible HTO number.
- Choose a black card to multiply the HTO number by, using a method of choice.
- The other person has a turn.
- The person with the higher answer scores a point.
- Play for 10 minutes.
- The highest score wins.

You will need:
- set of 0–9 cards (use playing cards of a red suit; use the Joker to represent zero)
- set of 2–9 cards (use playing cards of a black suit)

QUESTIONS TO ASK

Tell me a calculation with two 4-digit numbers that you can do mentally.

Estimate the answer to 189 × 8.

Partition 743 into hundreds, tens and units.

Add 2000 to 4765.

Add 46 to 390.

Fractions

Your child is learning to identify equivalent fractions, using their knowledge of multiples. They recognise the family of fractions equal to a half: $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$ and a quarter. They add and subtract fractions with the same denominator. They use their knowledge of fractions to solve problems involving fractions.

ACTIVITY

What to do
- Roll the dice to decide the number of pizzas you can buy.
- Roll the dice again to decide the number of people sharing these pizzas.
- Calculate how much pizza each person gets (draw a diagram if necessary).
- Repeat and continue for 10 minutes.

Variation
- Use 1–12 cards to introduce more fractions.

You will need:
- 1–6 dice

QUESTIONS TO ASK

Tell me two fractions that are equivalent to $\frac{1}{2}$.

How do you know if a fraction is bigger than 1?

Can you change $\frac{7}{2}$ into a mixed number?

What does $\frac{5}{7} - \frac{3}{7}$ equal?

What does $\frac{3}{4} + \frac{1}{4}$ equal?