



Year 2 Maths Home Learning | Summer Term



Week Commencing 29th June

<https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-lessons/1>

<https://whiterosemaths.com/homelearning/year-2/>

Maths



If you want to keep your mental maths skills sharp we have included an arithmetic quiz in the Week 8 Home learning folder (with answers!).

After watching the videos and doing the practice activities, have a go at these activities. Depending on your confidence choose Mild, Medium or Spicy. **Adults** we have now attached an answer sheet for all of the activities on this worksheet (year 2 home learning page, week 10, answers).

Remember that these activities are to work from, not on. There is no expectation to complete all of the work or to print worksheets off – children can work on paper if they want to write it down. It is also fine for your child to just say the answer, or for instance, where it says 'circle all of the number bonds' it's fine for them to simply point to them! ☺

Extensions – You may wish to deepen your learning by looking at the worksheets provided by the BBC too.

Our Maths focus for this week is **MEASUREMENT (week 2)**

Monday

Measure in grams

In Year 2, the children use standard units of mass (grams) for the first time. They continue to use balance scales before moving on to use standard weighing scales. Children apply their counting in 2s, 5s and 10s skills to reading scales accurately.

<https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-lessons/1>

<https://whiterosemaths.com/homelearning/year-2/>

Additional lesson: <https://classroom.thenational.academy/lessons/to-solve-word-problems-about-capacity-and-volume>

Mild

If the weighing scales are equal on both sides that means that they are balancing equally. So have a look at what the total of the weights are to find your answer.

What is the mass of each object?

a)



The pencil has a mass of g.

b)



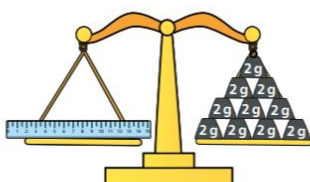
The teddy has a mass of g.

c)



The apple has a mass of g.

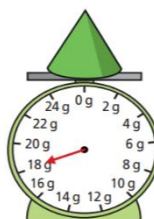
How many grams does the ruler weigh?



g

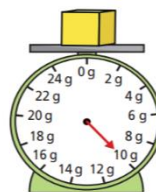
What is the mass of each 3D shape?

a)



g

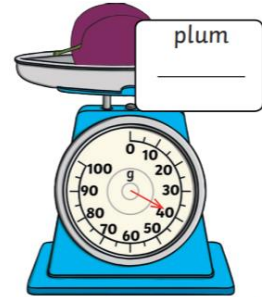
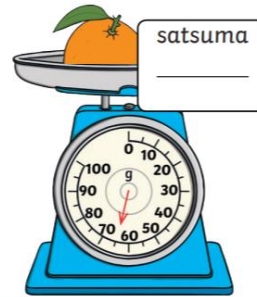
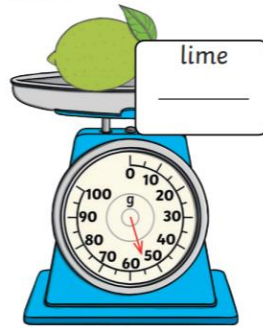
b)



g

Medium

Write the mass of each piece of fruit. Remember to write the units!



Order the fruits from lightest to heaviest.



Measuring Mass in Grams

Adam is measuring the mass of two pencil cases.



The pink pencil case has a greater mass than the spotty pencil case.

Is he correct? Prove it!
What is the difference in mass between the two pencil cases?

Can you find two items in your classroom to measure in grams? What is the difference between their masses?

Diving into Mastery – Deeper Adult Guidance with Question Prompts

Children reason about weight by comparing two objects with the weights given in grams. They read scales with intervals of 2g.

What is the mass of each pencil case?

Which is heavier? How much heavier is it?

How can we work out the difference in mass?

What two items can you find in the classroom to measure and compare? Which one is heavier/lighter? How do you know?

Where it says classroom – you can find 2 different objects at home!

Spicy

Use scales to record the mass of objects in grams.



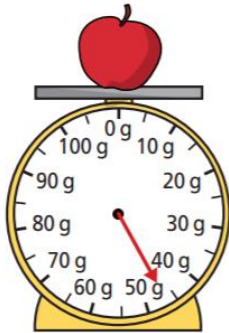
Order the items from heaviest to lightest.



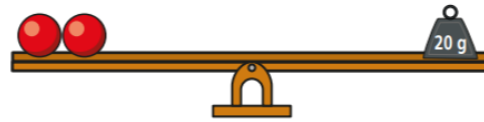
If you look closely you can see that the arrow is not pointing at a line, so you need to estimate the answer. Estimating means to 'sensibly guess' the number or value by using what you already know. So in this case, you know that the half way number between 40g and 50g is 45g, but it is not quite pointing at the 45g.

Estimate the mass of the apple.

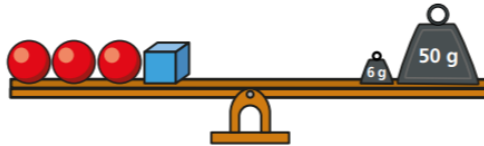
g



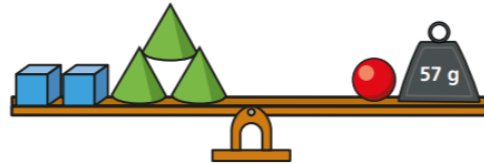
Work out the mass of each 3D shape.



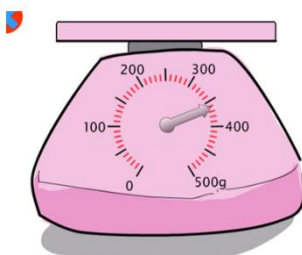
 = g



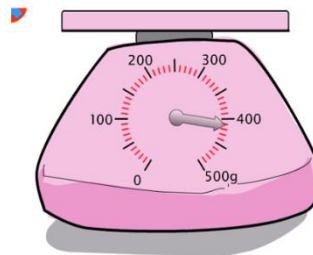
 = g



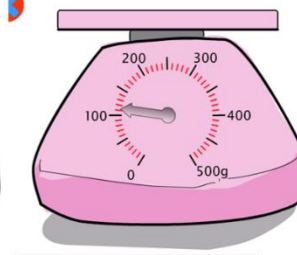
 = g



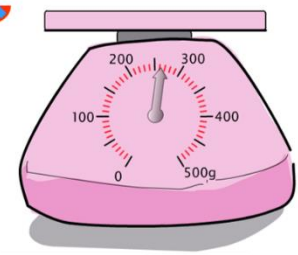
g



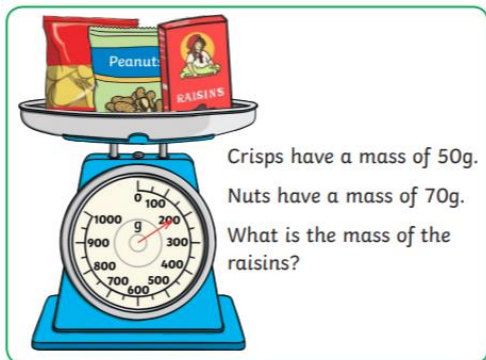
g



g



g



Crisps have a mass of 50g.
Nuts have a mass of 70g.
What is the mass of the raisins?

What is the mass of the three packets altogether?

How heavy are the crisps and nuts together?

How can you use that to work out the mass of the raisins?

Tuesday

Measure in kilograms

Children use their knowledge of measuring mass in grams to start to measure mass in kilograms. They apply counting in 2s, 5s and 10s to measure on different scales. 1 kilogram (kg) is equal to 1000 grams (g).

<https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-lessons/1>

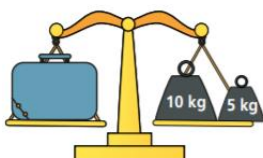
<https://whiterosemaths.com/homelearning/year-2/>

Additional lesson (relating to all measurements): <https://classroom.thenationalacademy/lessons/to-use-known-number-bonds-and-derive-related-facts-to-1000-using-the-con>

Mild

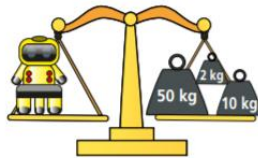
What is the mass of each object?

a)



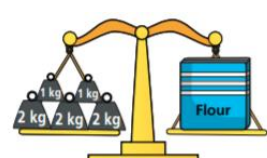
The case has a mass of kg.

b)



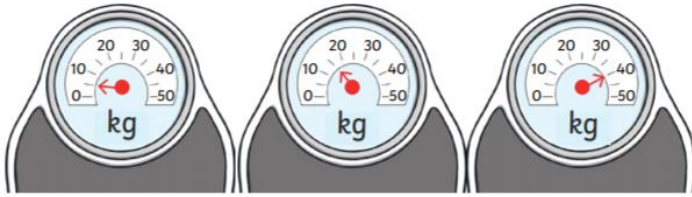
The robot has a mass of kg.

c)



The box of flour has a mass of kg.

What mass does each scale show?



Draw arrows to show these masses on the scale:

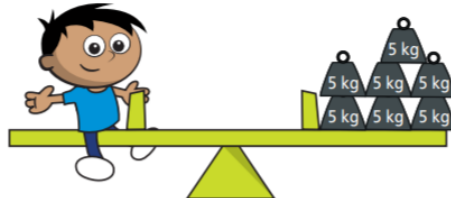


10kg

35kg

45kg

How many kilograms does Amir weigh?



kg

Medium



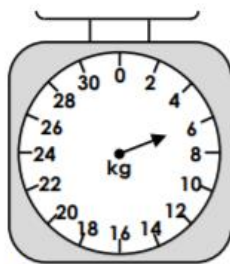
a) Circle the weights that will balance the scale.



b) Find another way. Circle the weights.



7a. Tick if the statement is true or false.

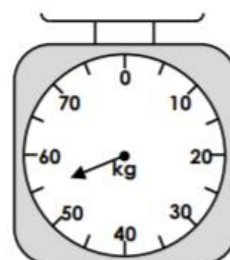


The scale reads lighter than 6kg.

☐
☐

True
False

7b. Tick if the statement is true or false.



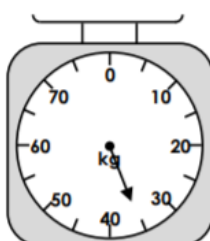
The scale reads 55 kg.

☐
☐

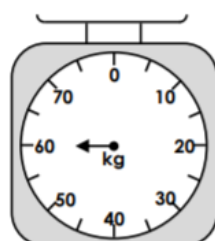
True
False

8a. Circle the scale that shows 5kg less than 65kg.

A

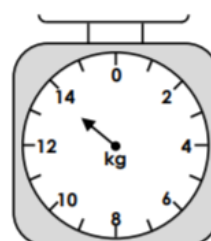


B

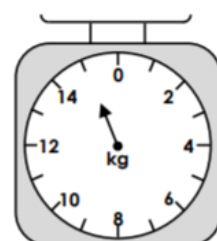


8b. Circle the scale that shows 2kg more than 13kg.

A



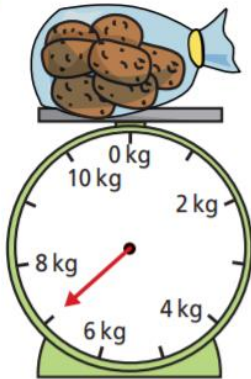
B



Spicy

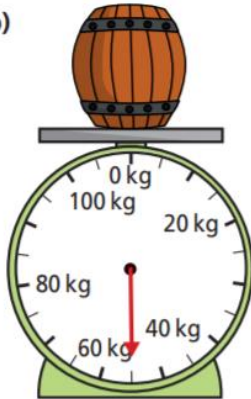
What is the mass of each object?

a)



kg

b)



kg

What is the mass of each barrel?



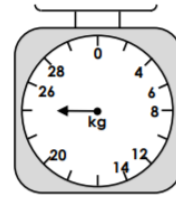
Double the mass of A



Half the mass of A

What is the difference between the mass of B and C?

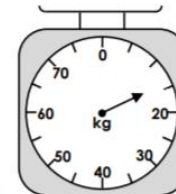
11a. Tick if the statement is true or false.



The scale reads 25kg.

☐ True
☐ False

11b. Tick if the statement is true or false.



The scale reads 19 kg.

☐ True
☐ False

a) Mo weighs his dog in January and June.



How much heavier is the dog in June?

kg

b) By December, the dog's weight has increased by another 10 kg.

By December, Mo's dog weighs kg.

1 kilogram (kg) is equal to 1000 grams (g).

Convert these lengths in to the unit of measure given...look carefully!

a) 2000g = _____ kg

h) 1.5kg = _____ g

b) 5000g = _____ kg

i) 3.5kg = _____ g

c) 9000g = _____ kg

j) 1.25kg = _____ g

Wednesday

Compare volume

Children compare the volume of containers using < , > and = They build on their understanding of the difference between capacity and volume. Capacity is the amount a container can hold. Volume is the amount it is actually holding.

<https://www.bbc.co.uk/bitesize/tags/z7s22sg/year-2-lessons/1>

<https://whiterosemaths.com/homelearning/year-2/>

Additional lesson (compare ml and l): <https://classroom.thenational.academy/lessons/to-compare-and-order-millilitres-and-litres>

Mild

Here are three glasses.



A



B



C

a) Which glass is empty? _____

b) Which glass is half full? _____

c) Which glass is full? _____

Eva, Ron and Amir have some juice.



Eva

This is my juice.



Shade the glasses to show how much juice Ron and Amir could have.

Tommy has some milk in a glass.



Circle all the glasses that have more milk than Tommy's.



A



B



C



D



Ron

I have more juice than Eva.



Amir

I have less juice than Eva.



Medium

Volume is the amount of space taken up by an object, while **capacity** is the measure of an object's ability to hold a substance, like a solid, a liquid or a gas.

Practical activity:

Show three different containers. Which container has the largest capacity? Using water or rice, make each container: one quarter full, half full, three-quarters full.

Which fish tank contains less water?

Tick your answer.



Tick the object with the greater capacity.



Tick the object with the greatest capacity.



Complete the sentences using the words 'less', 'more' or equal'.



A

B

Container A has _____ than container B.



A

B

C

Container C has _____ than container B.

Container A has _____ than container C but _____ than container B.

Label these bottles to show their volume.

half full	full
quarter full	three-quarters full



Complete these sentences using the words 'more' and 'less'.

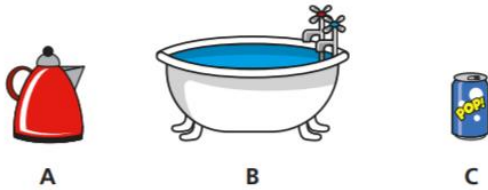
Container A is _____ full than container D.

Container C is _____ full than container A.

Spicy

Put these objects in order of how much water they can hold.

Start with the object that has the smallest capacity.



smallest

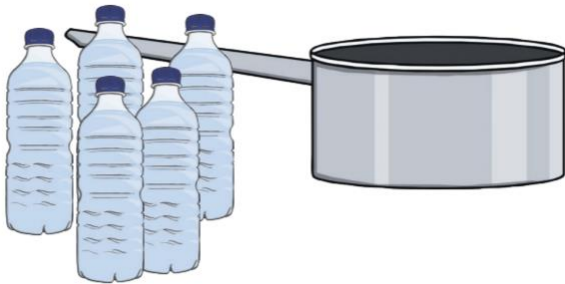
greatest

Whitney had two full bottles of juice.
She poured some juice into two glasses.



Which glass has the most juice in?
Which has the least juice in?
Explain how you know.

It takes 5 bottles to fill the pan with water.



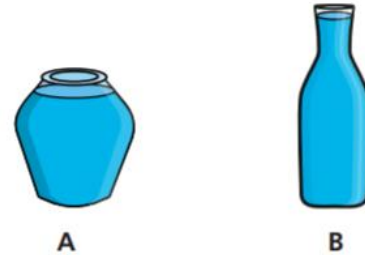
How many bottles will it take to fill 2 pans?



This pot is larger than the pan. It takes 3 more bottles to fill it.

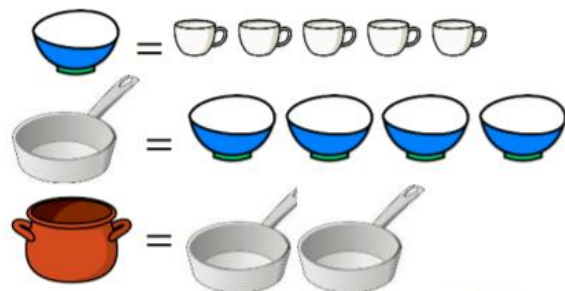
How many bottles of water are needed to fill it half-full?

Whitney says B contains more water than A.



Why might Whitney think this?

What could she do to check?



How many  does the  hold?

Children solve problems involving comparing capacities of containers. They will need a selection of three containers, some water and a cup.

How many bottles does it take to fill one pan?

How many bottles would it take to fill two pans? How do you know?

How many bottles does it take to fill the large pan?

How many bottles would it take to fill it to make it half full?

How many cups does it take to fill your chosen container?

Can you record your result?

Can you order them from largest to smallest capacity?

Thursday

Measure in milliliters

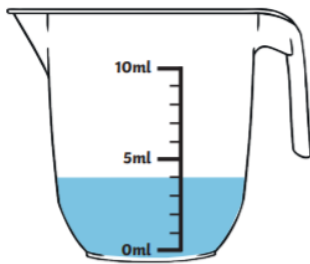
<https://www.bbc.co.uk/bitesize/tags/z7s22sq/year-2-lessons/1>

<https://whiterosemaths.com/homelearning/year-2/>

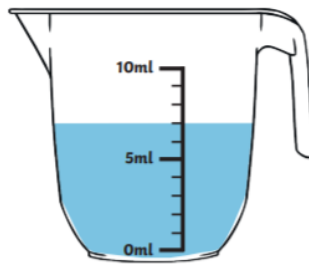
Additional lesson (to use milliliters): <https://classroom.thenational.academy/lessons/to-use-millilitres>

Mild

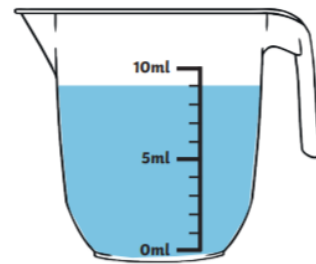
How many millilitres does each jug hold?



1. _____ ml



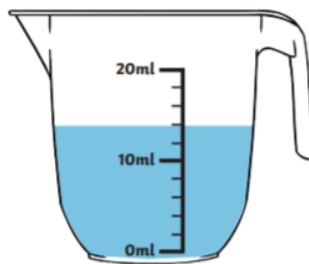
2. _____ ml



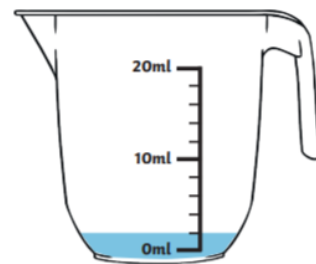
3. _____ ml



4. _____ ml



5. _____ ml



6. _____ ml

Fill in the blanks to complete the statements about these containers.

750ml



300ml



550ml

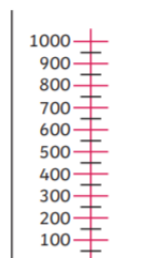


The bottle of milk holds _____ than the can of cola.

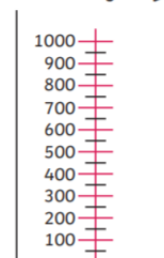
The capacity of the can of cola is _____ ml.

The can of cola holds _____ than the carton of orange juice.

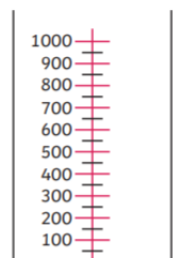
Colour in these measuring jugs to show the volume of liquid.



750ml



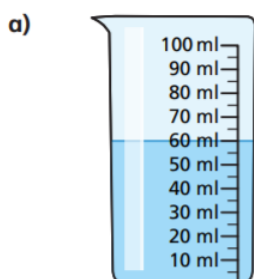
300ml



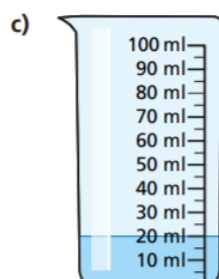
550ml

Medium

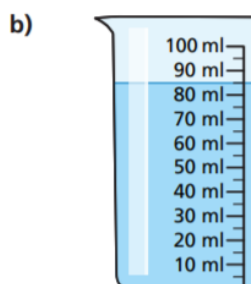
How much water is there in each beaker?



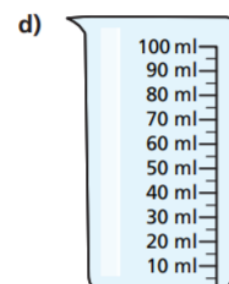
_____ ml



_____ ml

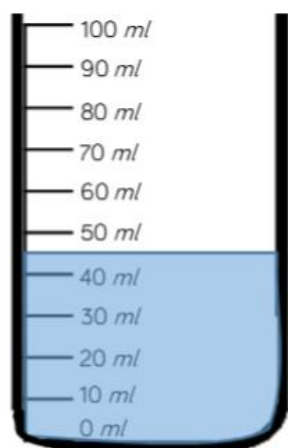


_____ ml



_____ ml

Estimate the amount of water in the container.



A teaspoon holds 5 ml.

A tablespoon holds 15 ml.



5 ml



15 ml

Work out the total capacity of the spoons.

a)



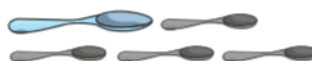
ml

b)



ml

c)



ml

A recipe includes 45 ml of lemon juice.



I can measure this using a teaspoon.

Dora



teaspoon 5 ml

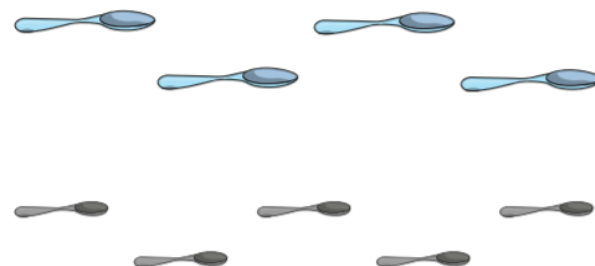


tablespoon 15 ml

a) How many teaspoons is 45 ml?

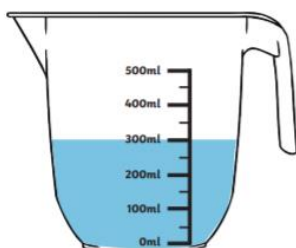
b) Find another way of measuring 45 ml.

Circle your answer.

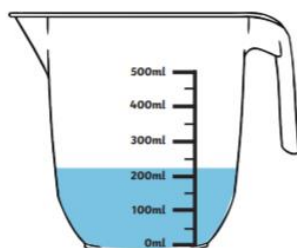


Spicy

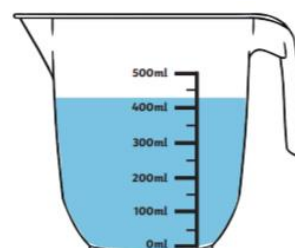
How many millilitres does each jug hold? You may have to estimate some.



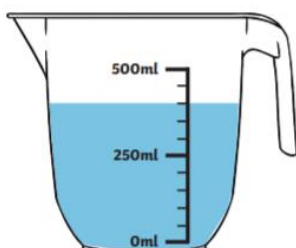
4. _____ ml



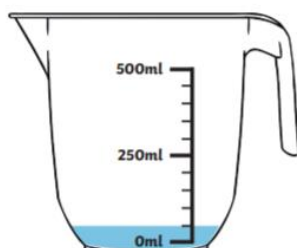
5. _____ ml



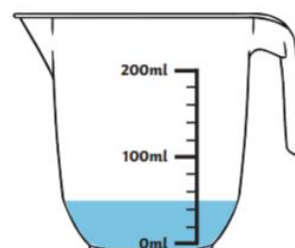
6. _____ ml



7. _____ ml



8. _____ ml

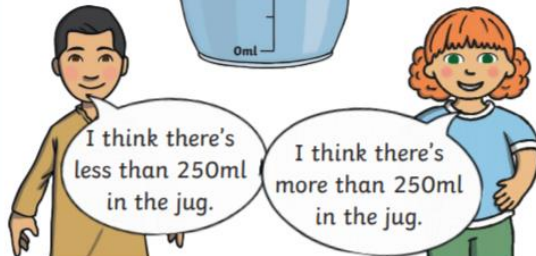
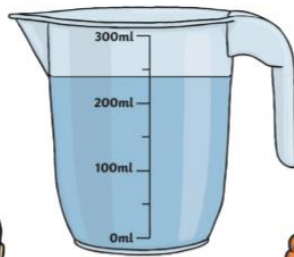


9. _____ ml

Millilitres



Ranjit and Holly are using a measuring jug to measure water.



Who is correct? Convince me! How much do you think is in the jug?

Pour some water into a jug so that it reaches an unlabelled interval. Challenge your friend to estimate how much water is in the jug. Can they explain how they worked it out?

Millilitres



My bottle holds 200ml of water. It takes 10 spoons of water to fill the bottle.

What is the capacity of 1 spoon?



The capacity of a cup is 100ml. I can pour 6 cups of tea from my teapot. How much tea does the teapot hold?



Can you think of a capacity problem for your friend to solve?

Friday

Key Skills Quiz, Measurement Consolidation and Time Table Rock Stars

Quiz

Mild	Medium/Spicy
1. What is the total score on the dice? 	11. $40 \div 10 =$
2. What is the missing number? 10 30 40 50	12. Which are the even numbers? 9 18 27 36
3. What number is one less than 46?	13. What symbol is missing? $56 = 7$ 8
4. Circle the right phrase: 9 is less than/equal to/more than 3×4	14. What symbol is missing? $4 = 36$ 9
5. Write this number in numerals: eleven	15. Tick (✓) if true: $7 \times 3 = 3 \times 7$ ☐ $18 \div 6 = 6 \div 18$ ☐
6. What symbol is missing? 6 1 = 7	16. 4 boys share 32 chocolates. How many chocolates does each boy get?

Measurement consolidation lesson

An extra lesson to help consolidate your child's learning surrounding measurement.

NATIONAL OAK ACADEMY

<https://classroom.thenational.academy/lessons/consolidation-and-application>

Times Table Rock stars

Have a go at your times tables on TTRockstars this week. Maybe you could battle with one of your friends? We can't wait to see how much your times tables have improved!



Times Table Rock Star Battle- We have organised a "battle" between each class in our year group. The start date is today and the finishing date is Friday 3rd July so the results will be published that week on Twitter. Get battling and lets see who wins!!!

Well done girls and boys, you have finished week 10!

We are so proud of your efforts 😊