



ORLEANS PRIMARY SCHOOL



Year 4 - Autumn 2 Curriculum Overview

SCIENCE States of Matter – solids, liquids and gases.



During this unit, children will describe the differences between solids, liquids and gases. They will research the temperature at which materials change state, for example, when iron melts or when oxygen condenses into a liquid. They will describe melting and dissolving and give everyday examples of each; name some materials that will and some that will not dissolve in water and explain why undissolved solids can be separated from a solution by filtering and show how to do this. They will also recognise that although it is not possible to see a dissolved solid, it remains in the solution.

FRENCH In this unit pupils learn how to describe themselves physically and personally (building on personality trait vocabulary) and learn how to use the first person singular pronoun with avoir and être.



Key Instant Recall Facts

To help develop children's fluency in mathematics, we ask them to learn Key Instant Recall Facts (KIRFs) each half term. This term's KIRF is:

- I know multiplication and division facts for the 6x table.

Please refer to the KIRF letter and activities on Google Classroom for more information and activities to support learning.

D.T This unit develops the popular activity of making greetings cards and the moving picture made in key stage 1. Children research the content of the book and design and make a book that is finished to a high standard, with pages that incorporate moving parts, including linkages and levers.



PSHE How do we treat each other with respect?

In this topic, the children will be learning how people's behaviour affects themselves and others, including online. They will consider the relationship between rights and responsibilities, as well as discovering the rights that children have and why it is important to protect these

SPELLINGS AND READING

SPELLINGS WILL BE TESTED ON MONDAYS.

Children should read for a minimum of **10 mins** at home every night (try library books, newspapers or comics as well as scheme books).

PLEASE BRING BOOKS TO SCHOOL EVERY DAY – WE WILL HEAR CHILDREN READ AS OFTEN AS POSSIBLE.

HISTORY The Iron Age Through this enquiry children first identify the common features of hill forts and then investigate their likely function, not only as a defensive structure but also as a trading, meeting and ceremonial place. The Iron Age was the most violent period of prehistory in Britain, and another important focus of this enquiry is to support pupils to reflect on why this was the case. Securing additional living space and natural resources have been the major causes of wars down the generations, and children will see that this was certainly true of the Iron Age. Towards the end of the Iron Age, life in Britain progressed in two very profound ways – the creation of coinage and the first appearance of writing – and children will consider the significance of both.

COMPUTING

Children learn principles and techniques of basic animation. They research early techniques before the use of computers and then experiment with software to create their own animation.

RE Children will learn about Christianity with a focus on its origins, core beliefs the festivals that place



MUSIC

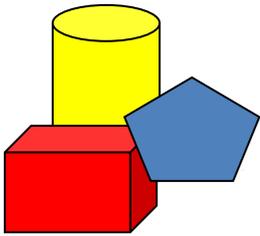


In music, the children will focus on a topic called Booming Brass. They will focus on Glen Miller and Mozart's Horn Concerto No.4 and look at the main brass instruments. They will then move on to Christmas Crackers!

Dance & Basketball - In Dance, pupils will focus on creating characters and narrative through movement and gesture. They will be working individually, in pairs and small groups. In Basketball, we will be developing competencies in key skills and principles such as defending, attacking, throwing, catching and dribbling. P.E days are on **Tuesday and Friday.**

P.E.





ORLEANS PRIMARY SCHOOL



MATHS

Multiplication & Division

- Use place value, known facts and derived facts to multiply mentally

factor factor product
 $3 \times 7 = 21$

factors = numbers you can multiply to get another number

product = the result when factors are multiplied

Independent Task

$300 \times 7 = 2100$
 $7 \times 300 = 2100$
 $30 \times 7 = 210$
 $7 \times 30 = 210$
 $3 \times 7 = 21$
 $700 \times 3 = 2100$
 $3 \times 700 = 2100$
 $70 \times 3 = 210$
 $3 \times 70 = 210$

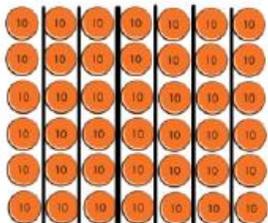
- Use place value, known facts and derived facts to divide mentally

3×7 $21 \div 3$ If I know $42 \div 7 = 6$, what derived division facts can I find?

? What's the same? What's different? Why?

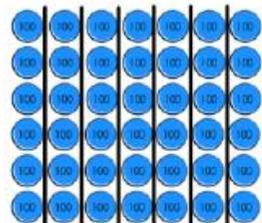
$420 \div 7 =$

$7 \times \square = 420$



$4200 \div 7 =$

$7 \times \square = 4200$



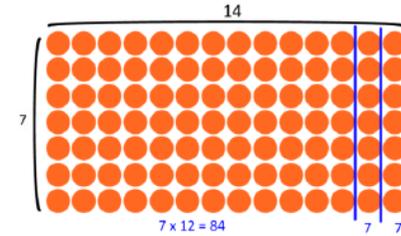
- Calculate multiplication facts using the distributive law

Show how the array could represent calculating 7×12 , and then adding on seven twice, to reach the product of 7×14 :

$7 \times 12 = 84$

$84 + 7 = 91$

$91 + 7 = 98$



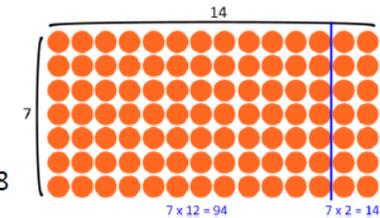
Discuss how instead of using repeated addition to add on from 84, the array can be split into fewer groups, using known facts.

Begin by explaining that the array could be split into two arrays, representing 7×12 and 7×2 .

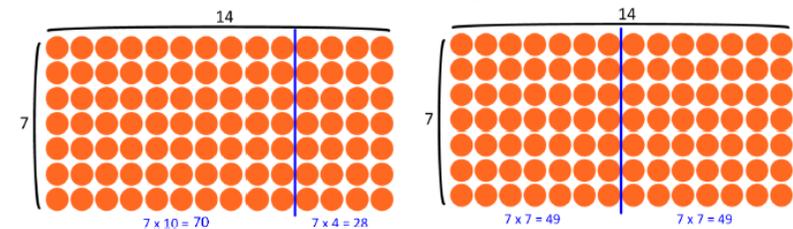
Complete the calculation: $7 \times 12 = 84$

$7 \times 2 = 14$

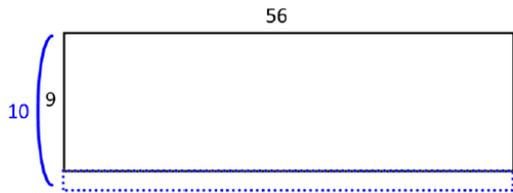
$84 + 14 = 98$



Discuss how else the array could split, using other known facts:

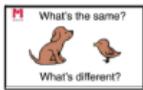
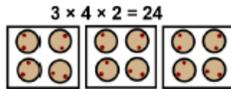
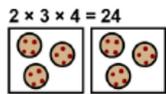


? Which way of calculating 7×14 do you prefer? Why?



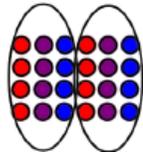
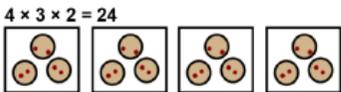
I know $56 \times 10 = 560$, but that's ten lots of 56 – one lot too many. Therefore, I need to subtract 56 to find nine lots of 56. $560 - 56 = 504$. So, $9 \times 56 = 504$.

• Multiplying three 1-digit numbers

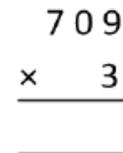
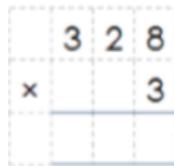


Let's Explore

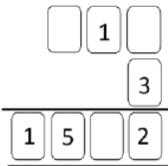
There are six possible orders to find the product of 2, 3 and 4. Can you represent them all using an array?



"I have shown the equation $3 \times 4 \times 2$. I can see three groups of four, two times."

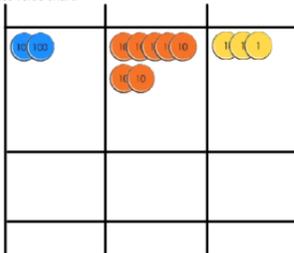


Find the missing numbers.

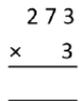


• Short multiplication

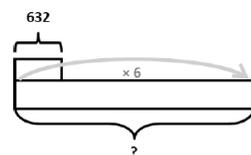
$273 \times 3 = \square$ On a place value chart:



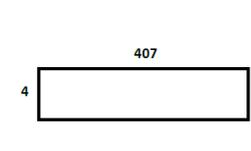
Using short multiplication:



On Friday, 632 people visit Niagara Falls in the morning. On Saturday morning, six times as many people visit. How many visited on Saturday morning?



Keyrings are delivered to the Niagara Falls souvenir stand in packs of 4. The stand orders 407 boxes. How many keyrings have they ordered?

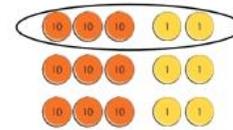


• Mental division strategies

Distributive Law and known facts

Model solving the problem using known facts.

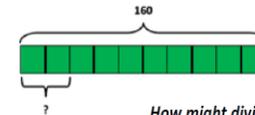
$96 \div 3 = 32$



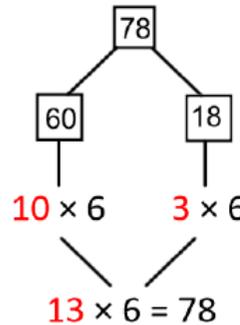
- I know that three multiplied by three is equal to nine, therefore three multiplied by 30 is equal to 90. This means that 90 divided by three is equal to 30. 90 divided into three groups is 30.
- I know that six divided by three is two. Six divided into three groups is two.
- 96 divided by three is equal to 32.

A new group of 160 tourists are taken on a guided tour of Niagara Falls. There are five tour guides and each gets an equal group. How many tourists are in each group?

$160 \div 5 = \square$



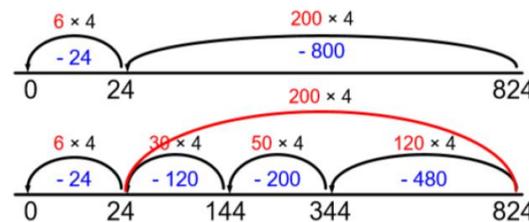
How might dividing by ten help you to mentally divide a number by five?



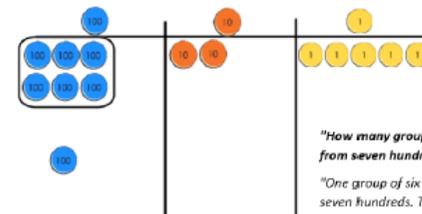
$78 \div 6 =$



$824 \div 4 =$



Short division
 $726 \div 6 =$



$6 \overline{) 726}$

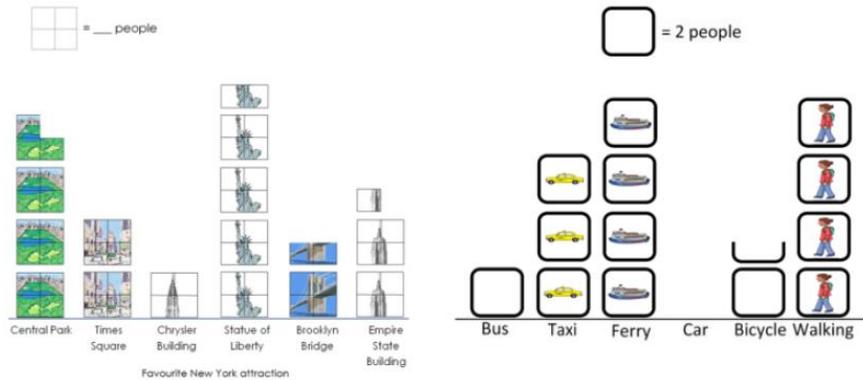
"How many groups of six hundreds can be made from seven hundreds?"
"One group of six hundreds can be made from seven hundreds. There is one hundred remaining."

$5 \overline{) 85}$ $3 \overline{) 78}$

$924 \div 6$ $896 \div 7$
 $776 \div 4$ $894 \div 3$

Data

- Read, interpret and compare pictograms, bar charts and time graphs
- Construct pictograms, bar charts and time graphs



Pictogram

Tally

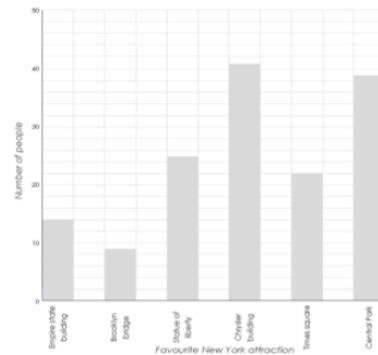
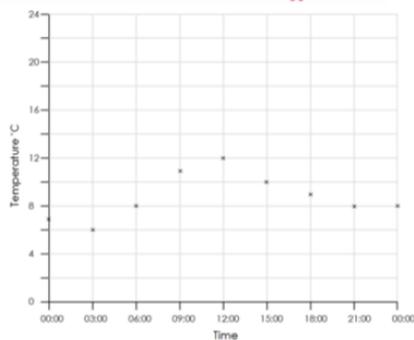
Pizza	
Hot dog	
Pretzel	
Doughnut	
Cheesecake	

Frequency table

Favourite New York snack	Number of children
Pizza	36
Hot dog	16
Pretzel	8
Doughnut	14
Cheesecake	6
Total	80



What's the same? What's different?



ENGLISH

Fiction: Short Novel (quest story)

Focus Text: *Ice Palace* by Robert Swindells

Ivan, the main character goes in search of his brother taken by the mysterious 'Starjik'. It is a moving and well written story with strong themes such as family love and bravery and much to explore in terms of character and dilemma.

Overall aims of this teaching sequence

- To enjoy a story and discuss its meanings
- To explore narrative plot, settings, characters and draw inferences to aid understanding
- To broaden understanding of writers' use of language and build a varied vocabulary
- To write non-fiction texts based on fictional stimulus
- To write a non-chronological report
- To write a narrative ending

Writing Outcomes

- Poetry (list poems, imagery)
- Instructions (rules for playing a game)
- Recount (note, written in role)
- Non-chronological report (information leaflet)
- Thought bubbles, notes (writing in role)
- Captions
- Narrative ending

