

YEAR 4 HOMEWORK Pack 14

These are your additional weekly learning tasks that should be completed at least 3 times a week:

L.O.L:

- ☐ ☐ ☐ Practice your common exception words - reading and spelling them
- ☐ ☐ ☐ Spelling - practice your spellings and complete a mini test. Don't forget about Spelling Shed!
- ☐ ☐ ☐ Reading - read your book at home to an adult/family member and discuss your reading.
- ☐ ☐ ☐ Times tables- keep practising these as you will need to know all to facts up to 12x12 in Year 5. Don't forget about TTRockstars.

Maths:

- ☐ ☐ ☐ Practice your times tables orally, in written form or using TT Rockstars

Spelling Shed



YEAR 4 HOMEWORK



OAK
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Online Classroom

As part of our home learning offer, we are encouraging all of our children to engage in the National Oak Academy home learning website.

<https://classroom.thenational.academy/>

This website has daily video lessons, with additional quizzes and worksheets to apply the learning.

We expect children at home to complete a daily maths, english and PSHE/foundation lesson alongside their weekly tasks (from the first page).

If you are unable to access this website, the learning has been included in this home learning pack and can be completed without the lessons.

These lessons are based on the work from week 11 (6th July), we will be working a week behind so these packs are ready for you on time. You will find all lessons by selecting Schedule, Year 4, Week 11 and the correct day. Or by following this link

<https://classroom.thenational.academy/schedule-by-year/year-4>

YEAR 4 HOMEWORK



L.O.L - Monday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Word Meaning

- Read the word aloud
- Read the word in the context of the sentence
- Can you work out the word class?
- Could you replace the word with a synonym?
- What is the root word?
- Check in a dictionary

Poetry:
Reading Comprehension
Word Meaning

Read the poem below and
underline words that you may not
know or use in your writing very
often



A Heron fishing -
the solitary bird waits
patiently for lunch



A hungry Blackbird
hops on the ground, searching for
unsuspecting worms



Autumn leaves descend
A myriad of colours
Lay upon the ground



YEAR 4 HOMEWORK



L.O.L - Monday's lesson

Additional video available on:
<https://classroom.thenational.academy/>



Wind blowing a gale
The weather forecast is bad...
Let's stay warm inside

The nocturnal owl
Most active at dawn and dusk
Seldom in the day



Answer the following questions:

1. Which word tells us that the Autumn leaves are falling to the ground?

2. *The Heron waits 'patiently for lunch'.* What does this suggest?

YEAR 4 HOMEWORK



L.O.L - Monday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

3. What impression does the phrase '*a myriad of colours*' give the reader?

4. Find these words in the haiku then read around them to work out their meaning. Match the synonym and antonym to the word.

word	synonym	antonym
solitary	mobile	often
active	rarely	together
seldom	alone	inactive

6

5. Read this haiku

*The nocturnal owl
Most active at dawn and dusk
Seldom in the day*

What information does it tell the reader about the owl?

YEAR 4 HOMEWORK



Maths - Monday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

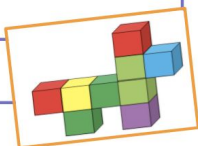
To develop strategies to plan and solve problems

Calculation	Answer	Calculation	Answer
$734 \times 60 =$		$342 \times 80 =$	
$143 \times 70 =$		$425 \times 90 =$	

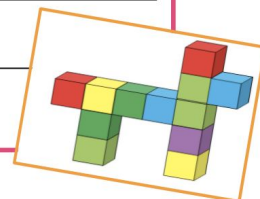
Moving on

Can you work out how many blocks would be needed to make the first 6 dogs in the sequence?

Dog number	Total Cubes
1	9
2	12
3	
4	
5	
6	



What is the rule of this sequence? What happens to the total cubes value each time? Explain in a sentence:



YEAR 4 HOMEWORK



Maths - Monday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Main task

Can you work out how many blocks would be needed to make the next 8 dogs in the sequence? Also include the body sections!

Dog number	Body	Legs	Tail	Ears	Nose	Head	Total
6	8	12	1	1	1	1	24
7							
8							
9							
10							
11							
12							

Challenge

How many cubes for dog 100?

Dog number	Body	Legs	Tail	Ears	Nose	Head	Total
6	8	12	1	1	1	1	24
7	9	14	1	1	1	1	27

Remember:

To work out the body we use the formula:
DOG NUMBER + 2

To work out the legs we use the formula:
DOG NUMBER x 2

YEAR 4 HOMEWORK



Time and Place- Monday's lesson-
Additional video available on:
<https://classroom.thenational.academy/>

How does resource exploitation cause problems?

Can you find out what our star words mean?

Star Words

natural resources

consumption

extraction

deforestation

pollution

How are natural resources obtained?



farming



logging



mining

Farming

Farming - crops and livestock

Wild grains - 105,000 years ago

9500 BCE - Neolithic founder crops

Animal domestication - Mesopotamia

280,000 farms in Britain



Mining / Fossil Fuels

Mining - extracting from the Earth

Mining - Mostly coal

Oil - Oil rigs and oil wells

Gas - Tends to be found on same land as oil

Power plants - Steam



Logging

Logging - cutting trees

Sawmills / paper mills

Transported - barges, trains or trucks

Agriculture



YEAR 4 HOMEWORK



Time and Place- Monday's lesson-
Additional video available on:
<https://classroom.thenational.academy/>

What problems does this create? (Farming)

Pollution: affects people and wildlife

Soil degradation: leads to erosion and desertification

Climate change: contributes to a rise in Earth's temperature

Deforestation leads to the destruction of animal and plant habitats

Irrigation - Large amounts of water required



What problems does this create? (Logging)

Forest - 30% of the world's land mass

Farming, grazing, mining and drilling - 50% of all deforestation

Logging contributes to climate change

Destruction of habitats leading to extinction

Soil erosion and flooding



What problems does this create? (Fossil Fuels)

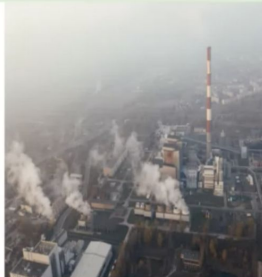
Fossil Fuels are mainly used for producing energy and for transportation

Pollution

Breathing problems

Oil spills

Fossil fuels are exhaustible



Now go back to our lesson question. Can you write three paragraphs answering this question.

How does resource exploitation cause problems?

YEAR 4 HOMEWORK



Language

- Skim and scan to find the word or phrase on the text
- Read the word or phrase carefully in the context of the sentence or paragraph
- What is the author trying to say in this context?
- What is the author trying to achieve by using this technique?

L.O.L -Tuesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Poetry:

Reading Comprehension

Language



Like silent statues
trees reach up towards the sky -
The sun winks at me



Clutching it tightly
Look - a dandelion clock -
Tick tock, tick tock, tick...



Clouds roll overhead
Water rushes down the weir -
A kingfisher waits



YEAR 4 HOMEWORK



L.O.L -Tuesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

A blanket of grass
The moon a shiny button
Small cotton wool clouds



An overgrown patch
Nettles constrict and choke the
flora of this wood

Answer the following questions:

1. Identify the following from the haikus we have read today.

Simile: _____

Metaphor: _____

Adverb: _____

Adjective: _____

2. Read this haiku. Which phrases give you the impression that the trees and the sun have human-like qualities (personification)?

Like silent statues

trees reach up towards the sky -

The sun winks at me

YEAR 4 HOMEWORK



L.O.L -Tuesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

3. Read this haiku.

What is the effect of repeating 'tick tock, tick tock'?

Clutching it tightly

Look - a dandelion clock -

Tick tock, tick tock, tick...

4. Read this haiku.

How has the author used the text to make the situation tense?
Comment on the effect.

Goldfinch, Sparrow, Dove

perched upon the bird feeder -

The cat underneath

YEAR 4 HOMEWORK



L.O.L -Tuesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

5. Read these lines from a haiku.

Tick the boxes to show whether each one contains 5 syllables or 7.

	5 syllables	7 syllables
Dappled sunlight through the trees.		
Silence surrounds me		
A squirrel watches		

Can you then order the lines into a haiku poem?



YEAR 4 HOMEWORK



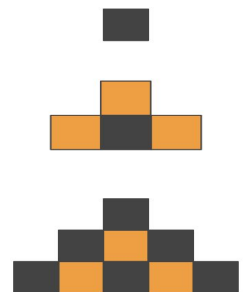
Maths - Tuesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Main task

What other patterns can we spot if we break it down even more?

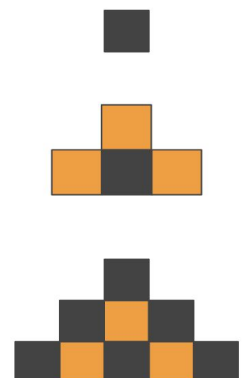
Step number	New blocks	Total blocks
1	1	1
2	3	4
3		
4		
5		
6		
7		
8		



Challenge

Using what we know, how can we work out the number of blocks for ANY step number?

Step number	Way to work it out	Total
1	1×1 or 1^2	1
2	2×2 or 2^2	4
3		
9		
10		
20		
50		



YEAR 4 HOMEWORK



Spanish - Tuesday's lesson- Physical appearance

Additional video available on:
<https://classroom.thenational.academy/>

Los ojos
The eyes



Tengo los ojos azules.
I have blue eyes.

Tengo los ojos marrones.
I have brown eyes.

Tengo los ojos verdes.
I have green eyes.

El pelo
The hair



Tengo el pelo marrón.
I have brown hair.

Tengo el pelo rubio.
I have blonde hair.

Tengo el pelo negro.
I have black hair.

Tengo el pelo pelirrojo.
I have ginger hair.

**Activity 2: Draw a picture of yourself
and describe your eyes and hair in
Spanish**

YEAR 4 HOMEWORK



L.O.L -Wednesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Read the poem
below, then look at
the key features.

Poetry: Identifying and understanding the features of a text

A Heron fishing - (5)
the solitary bird waits (7)
patiently for lunch (5)

Autumn leaves descend
A myriad of colours
Lay upon the ground

A hungry Blackbird
hops on the ground, searching for
unsuspecting worms

Key Features

- Contains three lines
- It contains 17 syllables in total:
5 syllables in the first line, 7 syllables in the
second line and 5 syllables in the third line
- Does not rhyme
- Frequently have a seasonal reference.
- Usually contain a theme of nature or natural phenomena.
Contains two juxtaposed subjects in contrasting parts. This
division can be shown by a dash or ellipsis.



YEAR 4 HOMEWORK



L.O.L -Wednesday's lesson- Read the poem

Additional video available on:
<https://classroom.thenational.academy/>

Wind blowing a gale

The weather forecast is bad...

Let's stay warm inside

Like silent statues

trees reach up towards the sky -

The sun winks at me

Clutching it tightly

Look - a dandelion clock -

Tick tock, tick tock, tick...

An overgrown patch

Nettles constrict and choke the

flora of this wood

The nocturnal owl

Most active at dawn and dusk

Seldom in the day

Clouds roll overhead

Water rushes down the weir -

A kingfisher waits

A blanket of grass

The moon a shiny button

Small cotton wool clouds

YEAR 4 HOMEWORK



L.O.L -Wednesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Answer the following questions:

1. How many lines are there in a haiku poem?

2. How many syllables are there in a typical haiku poem?

Identify how many syllables the words below have:

a) Squirrel _____

b) Afternoon _____

c) Astonishing _____

3. What is the most common theme in haiku poetry?

4. Read the following haiku. Identify 3 features of haiku poetry.

*Goldfinch, Sparrow, Dove
perched upon the bird feeder-
The cat underneath*

1. _____

2. _____

3. _____

YEAR 4 HOMEWORK



Maths - Wednesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

To identify and complete number sequences

To Start

Times tables speed challenge

	4	8	7	10	5	6	9	2	3
4									
9									
8									
10									
11									
12									
6									
7									
5									

Moving on

Can you work out how many blocks would be needed to make the first 6 steps in the sequence?

Step	Total triangles
1	1
2	4
3	
4	
5	
6	

What is the rule of this sequence? What happens to the total number of triangles each time? Explain in a sentence:



YEAR 4 HOMEWORK



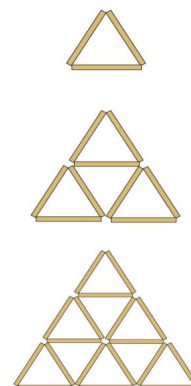
Maths - Wednesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Main task

Lets go a step further now and record more information

Step	new matches	Total matches	Triangles
1	3	3	1
2	6	9	4
3			
4			
5			
6			
7			
8			



Challenge

What do we notice? Can you explain 3 things that you notice here?

Step	new matches	Total matches	Triangles
1	3	3	1
2	6	9	4
3	9	18	9
4	12	30	16



YEAR 4 HOMEWORK



Science - Wednesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

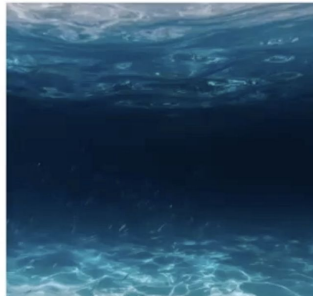
How are organisms adapted to live underwater?

STAR WORDS



Can you find out what our star words mean?

Marine environments



The oceans cover 71% of the Earth's surface.

The oceans contain 99% of the living space on the planet.

95% of the world's oceans are unexplored.

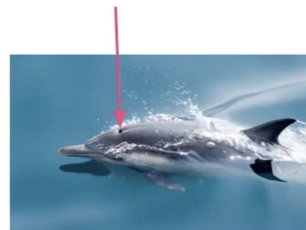
Camouflage



Movement



Breathing



YEAR 4 HOMEWORK



Science - Wednesday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

How are organisms adapted to live underwater?

Marine environments



Answer the following question in a paragraph.
How are marine animals adapted to survive under the water?
(think about camouflage, breathing and movement in your answer)

YEAR 4 HOMEWORK



L.O.L -Thursday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

What are **dashes**?

A dash is a little horizontal line that floats in the middle of a line of text (not at the bottom: that's an underscore). It's longer than a hyphen and is commonly used to **indicate a range or a pause**.

Dashes are used to **separate groups of words**.



A Heron fishing —
the solitary bird waits
patiently for lunch



Poetry:

SPaG

Punctuation: dashes & ellipses

How to use a dash?

Use a dash to show a pause or break in meaning in the middle of a sentence: My brothers — Richard and John — are visiting today.

Use a dash to show an afterthought:

I attached the photo to my email — at least I hope I did!

In haiku poetry, a dash suggests an instantaneous jump from one part to the other, as if the two parts are both happening at the same time.

What is an **ellipsis**?

The ellipsis punctuation mark is three consecutive dots used to demonstrate:

- A pause for effect to increase tension
- An unfinished thought, or one where some meaning is implied and not spelled out
- A trail off into silence
- A word or words have been missed out from a text deliberately
- **In haiku poetry**, an ellipsis suggests a slight pause, as if one thing happens and then the other.

For example:

- Slowly, we crept on into the dark cave...
- He carefully opened the container and discovered... loads of coins!
- "Do you think you're ready? I just don't know if I'm..." stammered Tom.
- The review states: "I enjoyed the film immensely... it's the perfect family fare."
- The weather forecast is bad...
Let's stay warm inside



Wind blowing a gale

The weather forecast is bad...

Let's stay warm inside

YEAR 4 HOMEWORK



L.O.L -Thursday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Now have a go at answering the following questions:

1. Explain the effects on these pieces of punctuation in a haiku:

A dash: _____

An ellipsis: _____

2. In this haiku what is the effect of using an ellipsis (3 dots) on the second line?

*A prickly hedgehog
Slowly shuffles towards the hedge ...
A great place to hide*

3. In this haiku what is the effect of using a dash on the second line?

*Clouds roll overhead
Water rushes down the weir -
a kingfisher waits*

4. Write a haiku using no punctuation that tells a short nature 'story'.

YEAR 4 HOMEWORK



L.O.L -Thursday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

5. Read this haiku.

The dash suggests that the rain makes the sounds pitter, patter, plop
whilst it hits the window pane.

Dark clouds overhead
rain upon the window pane-
Pitter, patter, plop

Can you **change the dash to an ellipsis** and write a line to suggest what
might happen **after** the rain hits the window pane?

YEAR 4 HOMEWORK



Maths - Thursday's lesson

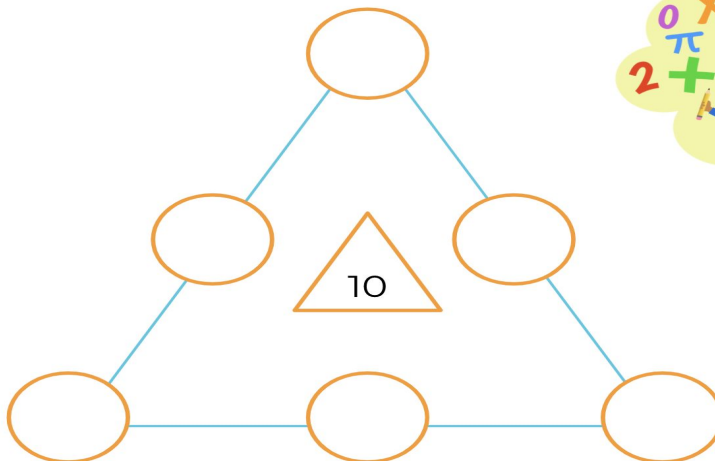
Additional video available on:
<https://classroom.thenational.academy/>

To develop strategies to plan and solve problems

To Start

Can you fit the numbers:

1, 2, 3, 4, 5 and 6 into the circles so that each 3 circles joined by lines have the same total of 10?

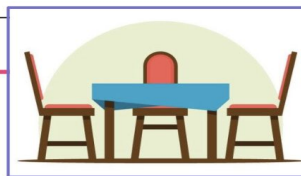


Moving on

Can you work out how many chairs would be needed to make the first 8 steps in the sequence?

Term	Total chairs
1	4
2	6
3	
4	
5	
6	
7	
8	

What is the rule of this sequence? What happens to the total chairs value each time? Explain in a sentence:



YEAR 4 HOMEWORK



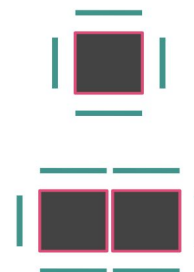
Maths - Thursday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Main Task

If the number of chairs increases by 2 each time, can you fill in this information?

Term	Total Tables	Total Chairs
Term 13		
Term 15		
Term 17		
Term 19		
Term 21		
Term 23		
Term 25		
Term 27		



Pay attention to
which term of
the sequence it is



The formula to work out the number of chairs is quite easy:

Number of the term +1
Then
Multiply by 2

Challenge

Term	Total chairs	
1	4	$1 + 1 = 2$ then $2 \times 2 = 4$
2	6	$2 + 1 = 3$ then $3 \times 2 = 6$

Term	Calculation	Total chairs
31		
47		
130		

Now try these
examples



How can we use this to work out how many tables
we would need for 422 people?

YEAR 4 HOMEWORK



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Star Words

economy

disposable

recycling

environment

Time and Place - Thursday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

What is the circular economy?

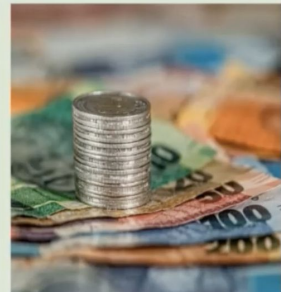
The Economy

Economy - making and trading things of value

Goods (physical things)

Services (things done by people)

Trade through finance (money)



Primary sector refers to the production of raw materials

Materials to be used for consumption or manufacturing

Farming, fishing, mining

Corn, coal, wood and iron



The Economy: Secondary Sector

The secondary sector involves transforming raw materials into goods (products)

Light industries: Food, textiles, paper, plastic

Heavy industries: Steel, shipbuilding

Both produce waste materials and heat



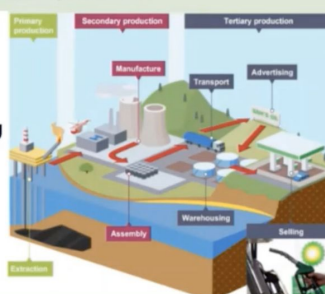
The Economy: Tertiary Sector

The Tertiary sector supports the production and distribution of products and raw materials

Transport, advertising, warehousing

Teaching and healthcare

All sectors of the economy are interlinked



YEAR 4 HOMEWORK



Time and Place - Thursday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

What is the circular economy?

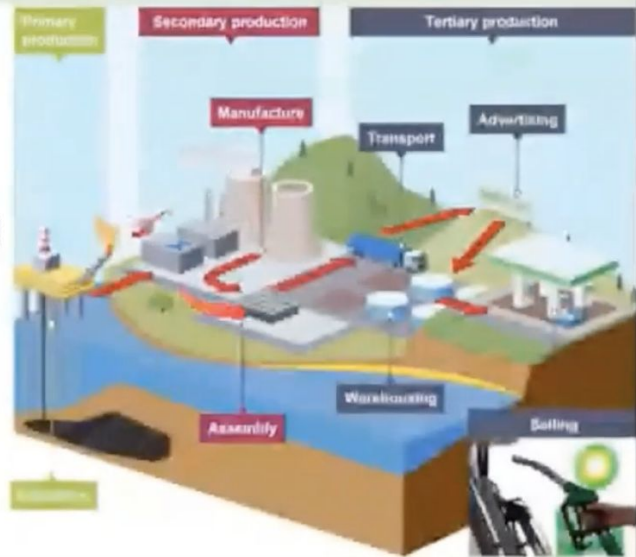
The Economy: Tertiary Sector

The Tertiary sector supports the production and distribution of products and raw materials

Transport, advertising, warehousing

Teaching and healthcare

All sectors of the economy are interlinked



A **circular economy** is a systemic approach to **economic** development designed to benefit businesses, society, and the environment. In contrast to the 'take-make-waste' linear model, a **circular economy** is regenerative by design and aims to gradually decouple growth from the consumption of finite resources.

Can you find one example of the circular economy?

YEAR 4 HOMEWORK



L.O.L -Friday's lesson

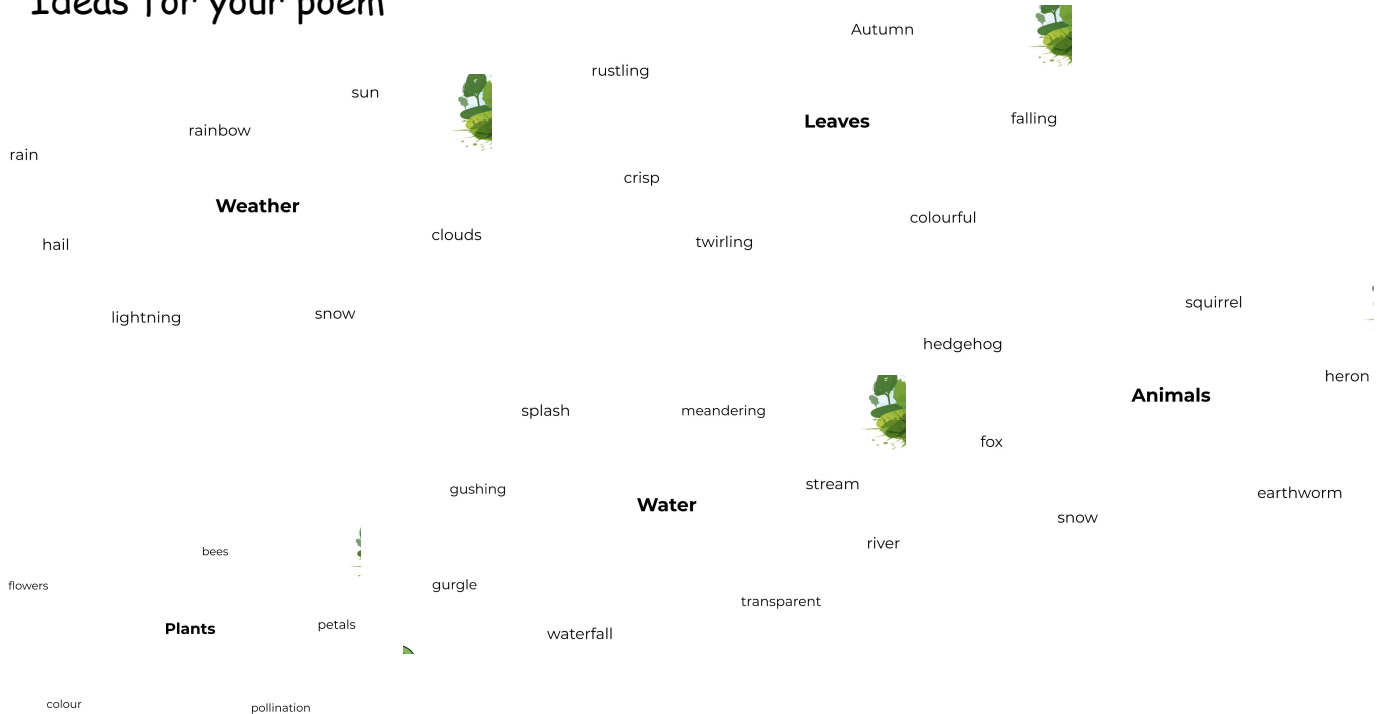
Additional video available on:
<https://classroom.thenational.academy/>

Writing: Haiku poems

Your task is to write your own haiku poems. Think about what you want to write and then be really concise in order to stick to the correct number of syllables. You could illustrate them afterwards.

- *Haiku have 3 lines*
- *Haiku have 17 syllables in total - they have a syllable pattern of 5/7/5*
- *Haiku do not rhyme*
- *Haiku are usually written on the theme of nature*
- *You can run one line over into another*
- *You can use a dash or an ellipsis or no punctuation at all*

Ideas for your poem



YEAR 4 HOMEWORK



L.O.L -Friday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Figurative language

Figurative language is a key feature in poetry.

Think which features you may be able to include *such as similes, metaphors, personification and alliteration*.

For example:

Simile: Like silent statues

Metaphor: The moon a shiny button

Personification: The sun winks at me

Alliteration: Tick tick

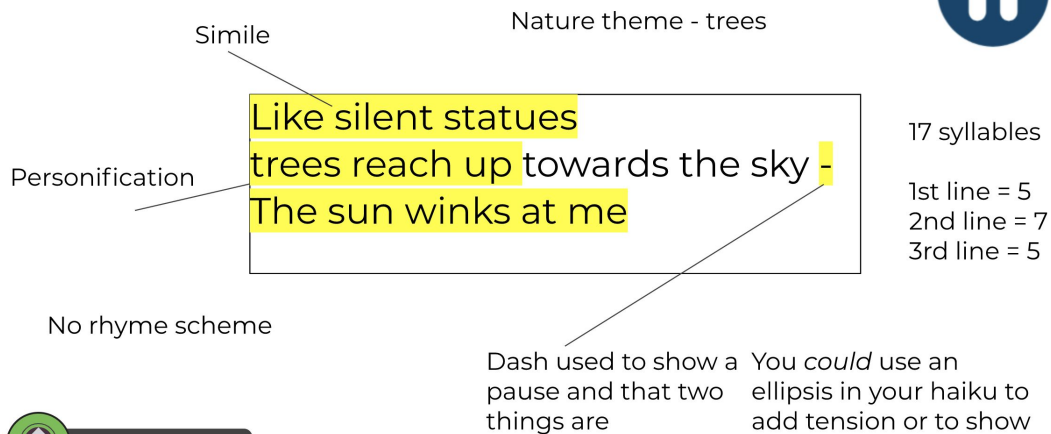


Diagram illustrating a haiku poem structure and its components:

Simile (points to "Like silent statues")

Personification (points to "The sun winks at me")

Nature theme - trees

17 syllables

1st line = 5
2nd line = 7
3rd line = 5

No rhyme scheme

Dash used to show a pause and that two things are (points to the dash in "trees reach up towards the sky -")

You could use an ellipsis in your haiku to add tension or to show (points to the dash in "trees reach up towards the sky -")

The haiku text is displayed in a box:

Like silent statues
trees reach up towards the sky -
The sun winks at me

Additional video available on:
<https://classroom.thenational.academy/>

YEAR 4 HOMEWORK



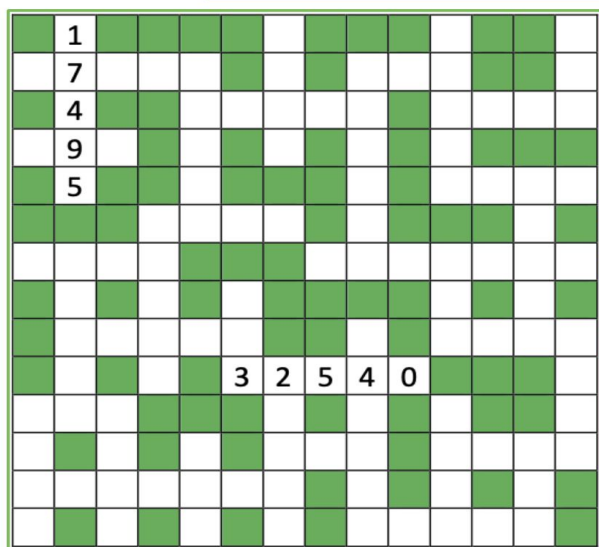
Maths - Friday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

To develop strategies to plan and solve problems

To Start

Can you complete the number grid by putting the numbers into the correct places?



3 DIGITS		4 DIGITS	
149	536	1943	7561
261	675	2845	8237
348	796	3371	8263
472	813	3491	9057
483		5247	9842
		5962	

5 DIGITS	6 DIGITS	7 DIGITS
14259	52076	405183
17495	57346	843925
28136	63307	
32540	65074	
37281	72751	
42310	82714	

Sequence	Rule
25, 50, 75, 100, 125, 150, 175, 200	
-5, -10, -15, -20, -25, -30	
1600, 800, 400, 200, 100, 50, 25	
46, 62, 78, 94, 110, 126, 142	
1001, 931, 861, 791, 721, 651	
5000, 1000, 2000, 40, 8	

YEAR 4 HOMEWORK



Maths - Friday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Can you write the first 6 terms in each sequence? – follow the rule and pay attention to the start number

1. The rule is add 11, the start-point is 17

2. The rule is add 25, the start-point is 37

3. The rule is subtract 23, the start point is 29

4. The rule is subtract 9, the start point is 15

5. The rule is add 104, the start point is -94

Can you write the first missing terms in each sequence?

Sequence	Rule
150, 190, _____, 270, 310, _____	
29, 34, 39, 44, _____, _____	
-9, -18, -27, _____, _____, -54	
6.4, 6.9, _____, _____, 8.4, 8.9	
9.9, 8.7, _____, 6.3, 5.1, _____	
-44, -25, _____, 13, _____, 51	

YEAR 4 HOMEWORK



Maths - Friday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Challenge 1

Have a go at answering these questions

The numbers in this sequence increase by 75 each time.

Write in the two missing numbers.



725

800

875

950

The numbers in this sequence increase by 14 each time.

Write the missing numbers.

82

96

124

138

The numbers in this sequence increase by 30 each time.

20 50 80 110 ...

The sequence continues in the same way.

Which number in the sequence will be **closest to 300**?

YEAR 4 HOMEWORK



Juan Miro, *Landscape*
(*The Grasshopper*) 1926



Art - Friday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Juan Miro and Automatic drawing

For this style of art you have to let your hand move across the paper without thinking about patterns or shapes. What can you see in this picture? Ask a family member do they see the same thing or something different?

Task- Follow these instructions

- 1- Draw three large dots anywhere on your piece of paper.
- 2- Draw two long straight lines that go off the paper
- 3--Draw one long curved line that starts at one of the dots
- 4- Draw one squiggly line that starts at one of the dots and goes off the paper
- 5- Draw one large circle anywhere
- 6- Draw one large triangle anywhere.
- 7- Draw a long line that goes through the circle or triangle.

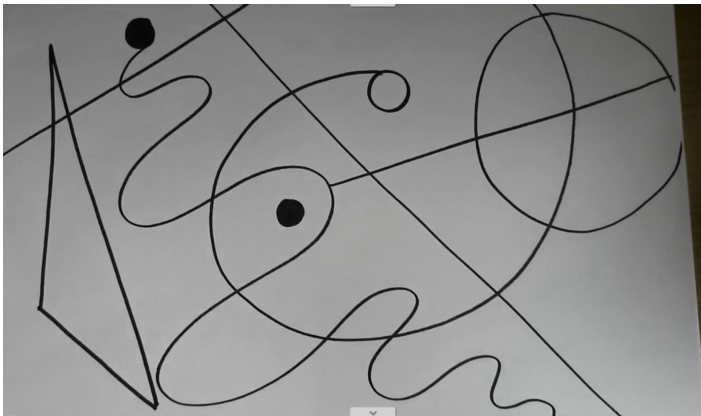
YEAR 4 HOMEWORK



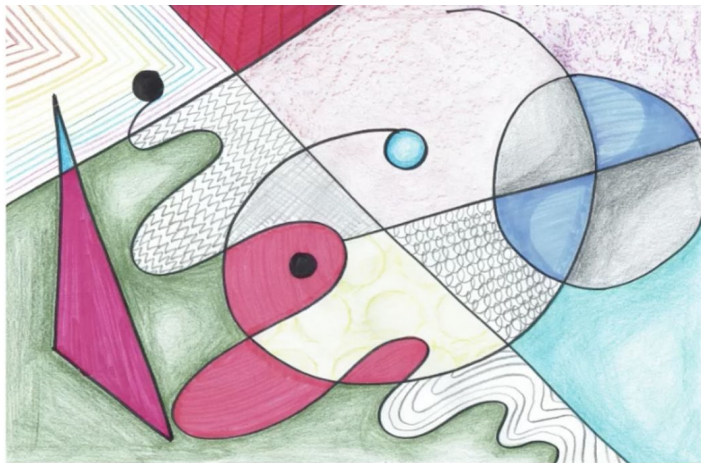
Art - Friday's lesson

Additional video available on:
<https://classroom.thenational.academy/>

Juan Miro and Automatic drawing



This is what mine looked like.
Does yours look the same or
different?
Now start to add some colours
anywhere you like.



My finished piece.

- WWW: My work is original
because...
 - this is my personal
response to the
instructions.

YEAR 4 HOMEWORK

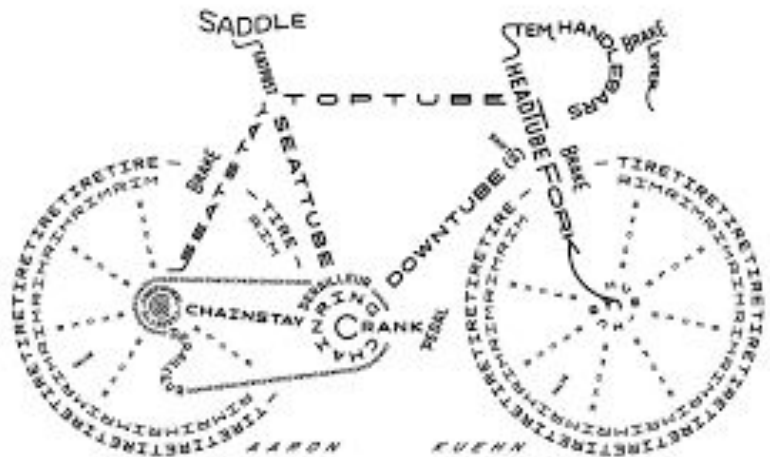


Weekly spellings:



Using your spellings words, make a picture using the words as the lines of the image, be as creative as you wish and use the word more than once within your image.

1. Calendar
2. Appear
3. Believe
4. Grammar
5. Increase
6. Interest
7. Opposite
8. Straight
9. Strength
10. Women



Rainbow Write

First write each word in pencil. Then trace over each word three times. Each time you trace, you must use a **DIFFERENT** color crayon. Trace neatly and you will see a rainbow!

Silly Sentences

Write silly sentences
using a spelling word in each
sentence. Please underline your
spelling words! Write neatly!

Example: My dog wears a blue and purple dress when he takes a bath.

Hidden Words

Draw and color a picture. Hide your spelling words inside your picture.

Show your picture to someone and see if they can find your hidden words!

Backwards Words

Write your spelling words forwards
and then backwards. Write neatly!

Example: where erehw

YEAR 4 HOMEWORK



Year 4 common exception words:



Year 3 and 4 Common Exception Words

Aa	breath	consider	enough	group	island	natural	popular	Rr	surprise
accident	breathe	continue	exercise	guard	Kk	naughty	position	recent	Tt
accidentally	build	Dd	experience	guide	knowledge	notice	possess	regular	therefore
actual	busy	decide	extreme	Hh	Ll	Oo	possession	reign	though
actually	business	describe	Ff	heard	learn	occasion	possible	remember	thought
address	Cc	different	famous	heart	length	occasionally	potatoes	Ss	through
although	calendar	difficult	favourite	height	library	often	pressure	sentence	Vv
answer	caught	disappear	February	history	Mm	opposite	probably	separate	various
appear	centre	Ee	forward	Ii	material	ordinary	promise	special	Ww
arrive	century	early	forwards	imagine	medicine	Pp	purpose	straight	weight
Bb	certain	earth	fruit	increase	mention	particular	Qq	strange	woman
believe	circle	eight	Gg	important	minute	peculiar	quarter	strength	women
bicycle	complete	eighth	grammar	interest	Nn	perhaps	question	suppose	

YEAR 4 HOMEWORK

Rainbow in a Glass

Watch Scientist Joe conduct the experiment [here!](#)

Materials

- ★ Water
- ★ A mug
- ★ 5 separate cups
- ★ A Tablespoon
- ★ A clear glass
- ★ A dropper or pipette



Instructions:

1. Separate the Skittles into the cups, in these amounts: 2 red, 4 orange, 6 yellow, 8 green, and 10 purple.
2. Heat a mug of water in the microwave for a minute and a half (or long enough that the water is hot, but not boiling). Be careful removing the water from the microwave—it's hot!
3. Measure and pour two tablespoons of hot water into each cup, on top of the Skittles.
4. Stir each cup carefully so no water splashes out. The cups need to be cool for the next part of the experiment, so leave them somewhere where they won't get knocked over. Stir them every ten minutes or so until the Skittles are dissolved and the water is room temperature.
5. Using the dropper, add the colored water from the five cups to the clear glass. Start with purple, then add green, then yellow, orange, and red last. Go slowly here, we don't want the different layers to mix.
6. Congratulations, you made a rainbow. You didn't even have to go outside!

YEAR 4 HOMEWORK



Additional learning:



1	$19 - 6 = \square$	<input type="checkbox"/>	2	$8 + 9 + 2 = \square$	<input type="checkbox"/>
3	$375 + 4 = \square$	<input type="checkbox"/>	4	$\square = 4 \times 7$	<input type="checkbox"/>
5	$426 + 50 = \square$	<input type="checkbox"/>	6	$\begin{array}{r} 36 \\ + 49 \\ \hline \end{array}$	<input type="checkbox"/>
7	$\square = 36 \div 3$	<input type="checkbox"/>	8	$\frac{1}{6} + \frac{4}{6} = \square$	<input type="checkbox"/>
9	$\begin{array}{r} 90 \\ - 26 \\ \hline \end{array}$	<input type="checkbox"/>	10	$\frac{1}{3}$ of 24 = \square	<input type="checkbox"/>
11	$8 \times 5 \times 4 = \square$	<input type="checkbox"/>	12	$\frac{5}{8} - \frac{2}{8} = \square$	<input type="checkbox"/>

YEAR 4 HOMEWORK



Additional learning:



13

$8 \times 9 = \boxed{}$

☐

14

$36 + \boxed{} = 93$

☐

15

$120 \div 4 = \boxed{}$

☐

16

$71 - \boxed{} = 34$

☐

17

$\boxed{} = 50 \times 6$

☐

18

$$\begin{array}{r} 27 \\ \times 3 \\ \hline \end{array}$$

☐

19

$\frac{3}{4} \text{ of } 24 = \boxed{}$

☐

20

$$\begin{array}{r} 54 \\ \times 4 \\ \hline \end{array}$$

☐

YEAR 4 HOMEWORK

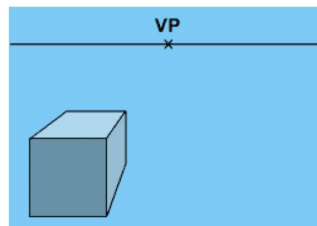
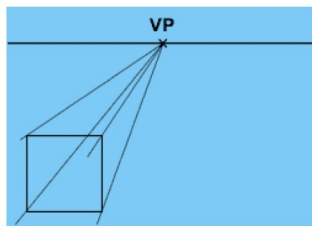
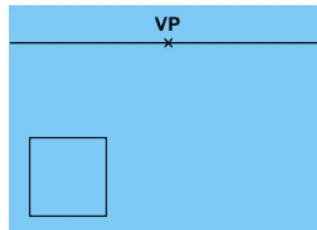
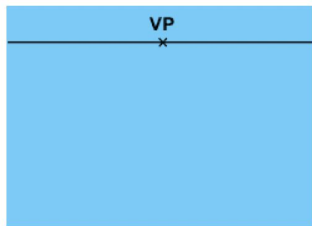


Additional learning:



1 Vanishing Point = 1 Point Perspective

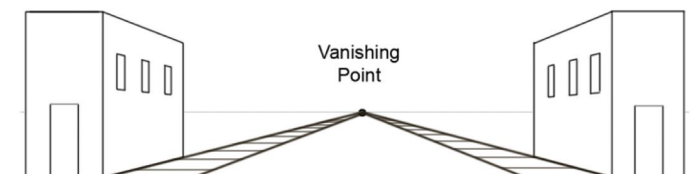
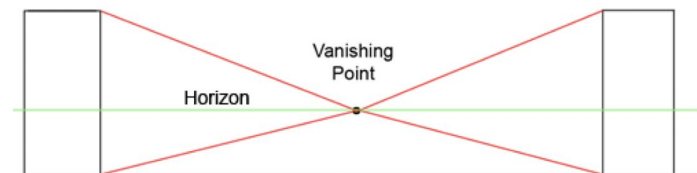
Draw a cube using a vanishing point



Recapping the skills in Art, practise drawing in perspective using 1 vanishing point.

Start by drawing a 3D cube, using this technique, then progress to drawing buildings.

1 Point Perspective



YEAR 4 HOMEWORK



Additional learning:



Plastic facts:

- 1500 plastic water bottles are consumed every second in the US.
- Out of the 50 billion bottles of water being bought each year, 80% end up in a landfill, even though recycling programs exist.
- 17 million barrels of oil are used in producing bottled water each year.
- Total number of plastic bags used worldwide annually - 1 trillion
- Total number of plastic bags China consumes everyday - 3 billion
- Total number of plastic bags used every minute in the US - 1 million
- 13 billion plastic carrier bags are used in the UK each year
- Total number of years it takes for a plastic bag to degrade - 1,000 years
- Total amount of plastic bags that were discarded in 2008 - 3.5 million tons
- Total amount of plastic floating in every square mile of ocean - 46,000 pieces
- Percent of plastic made every year that will end up in the ocean - 10%

Using the pictures, the information and also your own independent research. Design and create an information leaflet or poster about the dangers of ocean plastic and pollution. Include some fascinating facts like this one:

There are as many as 51 trillion microplastic particles in the sea, 500 times more than the number of stars in our galaxy.

Key questions to answer:

What is ocean plastic?

Where does it come from?

How long does it take for certain plastics to degrade?

Why is Ocean pollution a problem?

How can it be solved?

YEAR 4 HOMEWORK



Additional learning:



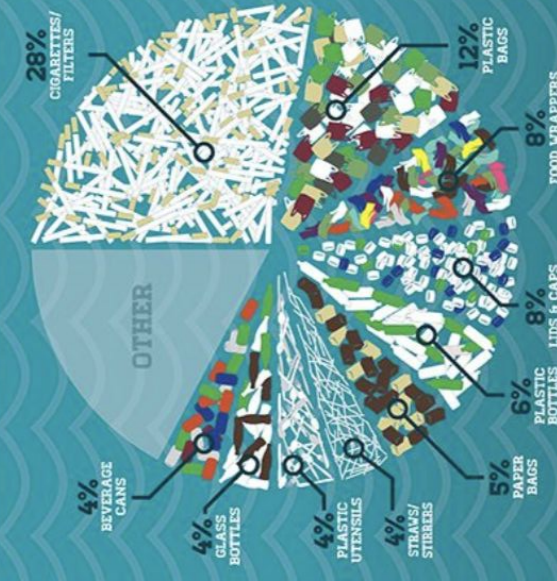
The Pacific Garbage Patch, which is one of the world's biggest environmental dangers.
Image Credit: AFP



THE GREAT PACIFIC

GARBAGE

PATCH



TOP 10 MARINE DEBRIS ITEMS

HOW LONG UNTIL IT'S GONE?



SCIENTISTS HAVE COLLECTED UP TO 1.9 MILLION BITS OF PLASTIC PER SQUARE MILE OF THE GREAT PACIFIC GARBAGE PATCH



THE GREAT GARBAGE PATCH IS A DANGEROUS GARBAGE SOUP FLOATING IN THE OCEAN



THERE IS 6 TIMES MORE PLASTIC THAN PLANKTON



5 YEARS

1 YEAR

AMOUNT OF TIME IT TAKES GARBAGE FROM NORTH AMERICA TO REACH THE GARBAGE PATCH

AMOUNT OF TIME IT TAKES GARBAGE FROM ASIA TO REACH THE GARBAGE PATCH

ONLY 7% OF PLASTIC IN THE U.S. IS RECYCLED



80% OF THE GARBAGE IN THE OCEAN, COMES FROM LAND

20% COMES FROM SHIPS



IN AREAS AFFECTED BY THE GREAT PACIFIC GARBAGE PATCH, FISH INGEST APPROXIMATELY 12,000 - 24,000 POUNDS OF PLASTIC EVERY YEAR

THE GREAT PACIFIC GARBAGE PATCH IS LARGER THAN THE SIZE OF THE UNITED STATES



267 DIFFERENT SPECIES ARE KNOWN TO HAVE SUFFERED FROM ENTANGLEMENT OR INGESTION OF OCEAN GARBAGE



35 BILLION WATER BOTTLES THROWN AWAY EACH YEAR IN THE U.S.



THE PACIFIC OCEAN COVERS 30% OF THE EARTH'S SURFACE



YEAR 4 END OF YEAR EXPECTATIONS

This page provides information for parents and carers about the end of year expectations for Year Four children in our school. These expectations have been identified as being the minimum requirements your child must meet in order to ensure continued progress throughout the following year.

Reading

- Read a range of texts for enjoyment
- Re-tell some stories orally with expression
- Give a personal point of view on a text
- Identify themes and conventions in a wide range of books
- Discuss words and phrases that capture the reader's interest and imagination
- Recognise and perform different forms of poetry
- Explain a text with confidence
- Justify inferences with evidence, predicting what might happen from details stated or implied
- Identify how sentence type can be changed by altering word order, tenses, adding/deleting words or amending punctuation
- Skim and scan to locate information and/or answer a question

Speaking and Listening

- Articulate and justify opinions
- Speak with clear diction so that the audience can hear what is being said
- Maintain and monitor the interest of the listener
- Participate in discussions, taking turns and listening to what others have to say

YEAR 4 END OF YEAR EXPECTATIONS

Writing

- Plan, draft and write in a range of genres
- Proofread for spelling and punctuation errors
- Evaluate and edit own and others writing
- Read aloud own work, to a group or the whole class using appropriate intonation and tone
- Build a varied and rich range of vocabulary
- Use adjectival phrases (e.g. biting cold wind)
- Vary sentence structure, using different openers
- Appropriate choice of noun or pronoun
- Apostrophe for singular & plural possession
- Comma after fronted adverbial (e.g. Later that day, I heard some good news.)
- Use commas to mark clauses
- Use connectives to link paragraphs around a theme
- Legible, joined handwriting of consistent quality
- Spell common homophones
- Use prefixes and suffixes
- Spell words that are often misspelt

YEAR 4 END OF YEAR EXPECTATIONS

Maths

- Count backwards through zero to include negative numbers
- Compare and order numbers beyond 1000
- Compare and order numbers with 2 decimal places
- Read Roman numerals to 100 (I to C) • Find 1000 more/less than a given number
- Count in multiples of 6, 7, 9, 25 & 1000
- Recall & use multiplication & division facts for all tables to 12 x 12
- Recognise Place Value of any 4-digit number
- Round any number to the nearest 10, 100 or 1000
- Round decimals with 1dp to nearest whole number
- Add & subtract: Numbers with up to 4-digits using efficient written method
- Numbers with up to 1dp
- Multiply 2-digit by 1-digit numbers and 3-digit by 1-digit numbers using column multiplication
- Divide 3-digit by 1-digit using short division
- Count up/down in hundredths
- +/- fractions with same denominator
- Identify simple equivalent fractions
- Add and subtract fractions with common denominators
- Recognise and write decimal equivalents of any number of tenths or hundredths
- Recognise, round and write decimal equivalents
- Read, write & convert time between analogue & digital, 12 & 24 hour clocks
- Compare 2-D shapes, including quadrilaterals and triangles
- Find the area and perimeter of a shape
- Estimate and calculate measurements
- Identify properties of angles
- Introduce simple translations and identify symmetry
- Use coordinates
- Use bar charts, pictograms and line graphs
- Estimate, compare and calculate different measurements, including money in pounds and pence
- Solve number and real-life problems