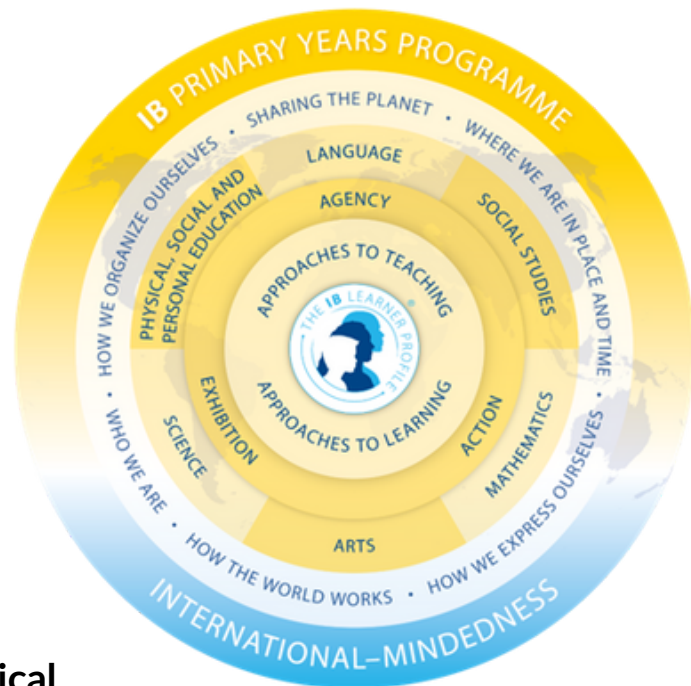


# Year 4 Parent Curriculum Guide



**The Primary Years Programme (PYP):** preparing students to be active participants in a lifelong journey of learning. The PYP is designed for students aged 3 to 12. It focuses on the development of the whole child as an inquirer, both in the classroom and in the world outside. It is a framework guided by six transdisciplinary themes of global significance, explored using knowledge and skills derived from six subject areas, as well as transdisciplinary skills, with a powerful emphasis on inquiry.



## Philosophical and pedagogical underpinnings of the PYP

- **International mindedness:** At the core of the IB is the mission of developing international mindedness in the learning community, which comes alive through the learner profile. The learner profile aims to instill traits that cover a range of cognitive, social, emotional, and personal attributes. From early years, students learn to be open-minded, considerate of different perspectives and cultures and to actively engage with global issues.
- **Agency:** Students are at the centre of the learning process- with agency through voice, choice, and ownership. Their opinions about what and how they learn, are valued, making them the co-constructors and co-designers of their learning.
- **Transdisciplinary learning:** Through its trans-disciplinary approach to learning, PYP weaves in knowledge, skills, and understandings from different subjects, seamlessly and organically. Students are invited to explore these through the lens of six significant transdisciplinary themes providing a context for real-world issues, making education relevant and engaging.
- **Conceptual understanding:** The PYP emphasizes the development of conceptual understanding, which enables students to delve deeper, beyond knowledge to make connections. They can, thus, engage with global issues and take affirmative action to effect change.
- **Personalized learning:** PYP aims to create self-directed learners, who set their own goals and create their own pathways to becoming lifelong learners. This personalized approach to education helps make learning meaningful and creates balance.
- **Approaches to learning skills (ATL):** Linking all programmes of the IB, a goal of IB education is to arm all learners with skills that will help them negotiate the rapidly changing world. This includes a focused approach to developing social, thinking, research, communication, and self-management skills in the day-to-day life of young PYP learners.



## The Learner Profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

### **Inquirers**

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

### **Knowledgeable**

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

### **Thinkers**

We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

### **Communicators**

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

### **Principled**

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

### **Open-minded**

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

### **Caring**

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

### **Risk-takers**

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

### **Balanced**

We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

### **Reflective**

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.



# Transdisciplinary learning

Transdisciplinary learning is not confined within the boundaries of traditional subjects but is supported and enriched by them. The PYP transdisciplinary learning is organized under 6 themes of “human commonalities”. Framing the programme of inquiry, these globally and socially driven themes provide a starting point from which students can examine issues and opportunities as they are being experienced in the real world.

| Transdisciplinary themes       | Descriptions   |
|--------------------------------|--|
| Who we are                     | An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social and spiritual health; human relationships including families, friends, communities and cultures; rights and responsibilities; what it means to be human.                                      |
| Where we are in place and time | An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between, and the interconnectedness of, individuals and civilizations from local and global perspectives.                |
| How we express ourselves       | An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic.   |
| How the world works            | An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment. |
| How we organize ourselves      | An inquiry into the interconnectedness of human-made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment.  |
| Sharing the planet             | An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution.                               |

# Transdisciplinary Programme of Inquiry (POI)

- A transdisciplinary POI offers students a broad, balanced, conceptual and connected learning experience.
- Six transdisciplinary themes form the structure of the POI.
- The themes capture human commonalities that are significant and relevant across cultures, geographic regions and student learning stages.
- The POI ensures students gain a balance of subject-specific knowledge, conceptual understandings and skills, alongside opportunities to develop the attributes of the IB learner profile and to take action.
- Units of inquiry are collaboratively planned, developed and continually modified based on reflection with students.

When learning is organized around transdisciplinary themes, authentic and meaningful connections are made across, between and beyond subjects. The iterative relationship between the learner, the learning community, and learning and teaching bring to life this transdisciplinary learning experience.

- **The programme of inquiry consists of transdisciplinary units of inquiry that include:**
- **a central idea**— the primary conceptual lens that frames the transdisciplinary unit of inquiry and support students' conceptual understandings of the transdisciplinary theme under which it is situated.
- **concepts**—key and related concepts that support higher-order thinking and provide lenses for considering knowledge related to the central idea in a range of ways.
- **lines of inquiry**—statements that define the potential scope of an inquiry.

[Click here for the DIA Program Of Inquiry.](#)

# Agency and Action



## The learner

The PYP curriculum recognizes learners' innate potential to inquire, question, wonder and theorize about themselves, others, and the world around them.

## Learning and teaching

The PYP ensures that learning is engaging, relevant, challenging and significant. A transdisciplinary and conceptual inquiry approach encapsulates these aspects of learning, underpinned by authentic integrated assessment.

## The learning community

Everyone involved in the life of the school is recognized: students and their families, all school staff members, other important adults in the students' lives and the community at large.

Through taking individual and collective action, students come to understand the responsibilities associated with being internationally minded and to appreciate the benefits of working with others for a shared purpose.

Action can be taken at many levels, as indicated in the diagram, and does not always have to be big to be significant. Students take action in response to their inquiry.



A  
C  
T  
I  
O  
N

Participation

Advocacy

Social Justice

Social Entrepreneurship

Lifestyle Choices

Action can take any of these forms, either as personal initiative or collective endeavour.

# Concepts

Concepts are powerful, broad and abstract organizing ideas that may be transdisciplinary or subject-based.

Concept-based inquiry is a powerful vehicle for learning that promotes meaning and understanding, and challenges students to engage with significant ideas.

- Concepts help to:
- explore the essence of a subject
- add coherence to the curriculum
- deepen disciplinary understanding
- build the capacity to engage with complex ideas
- build understandings across, between and beyond subjects
- integrate and transfer learning to new contexts.

The IB identifies the following Seven Concepts that drive the units of inquiry

| Concept               | Key question                      | definition   |
|-----------------------|-----------------------------------|--|
| <b>Form</b>           | What is it like?                  | The understanding that everything has a form with recognizable features that can be observed, identified, described and categorized.   |
| <b>Function</b>       | How does it work?                 | The understanding that everything has a purpose, a role or a way of behaving that can be investigated.   |
| <b>Causation</b>      | Why is it as it is?               | The understanding that things do not just happen; there are causal relationships at work, and that actions have consequences.  |
| <b>Change</b>         | How is it transforming?           | The understanding that change is the process of movement from one state to another. It is universal and inevitable.  |
| <b>Connection</b>     | How is it linked to other things? | The understanding that we live in a world of interacting systems in which the actions of any individual element affect others.   |
| <b>Perspective</b>    | What are the points of view?      | The understanding that knowledge is moderated by different points of view which lead to different interpretations, understandings and findings; perspectives may be individual, group, cultural or subject-specific. |
| <b>Responsibility</b> | What are our obligations?         | The understanding that people make choices based on their understandings, beliefs and values, and the actions they take as a result do make a difference   |

# Approaches to Learning (ATL) Skills

Approaches to learning (ATL) are grounded in the belief that learning how to learn is fundamental to a student's education.

Five categories of interrelated skills and associated sub-skills support students of all ages to become self-regulated learners.

Through a variety of strategies, teachers collaboratively plan for implicit and explicit opportunities to develop ATL both inside and outside the programme of inquiry.

| Categories                    | Sub-skills   |
|-------------------------------|--|
| <b>Thinking skills</b>        | <ul style="list-style-type: none"> <li>• Critical-thinking skills (analysing and evaluating issues and ideas)</li> <li>• Creative-thinking skills (generating novel ideas and considering new perspectives)</li> <li>• Transfer skills (using skills and knowledge in multiple contexts)</li> <li>• Reflection/metacognitive skills ((re)considering the process of learning).</li> </ul>                      |
| <b>Research skills</b>        | <ul style="list-style-type: none"> <li>• Information-literacy skills (formulating and planning, data gathering and recording, synthesizing and interpreting, evaluating and communicating)</li> <li>• Media-literacy skills (interacting with media to use and create ideas and information)</li> <li>• Ethical use of media/information (understanding and applying social and ethical technology)</li> </ul> |
| <b>Communication skills</b>   | <ul style="list-style-type: none"> <li>• Exchanging-information skills (listening, interpreting, speaking)</li> <li>• Literacy skills (reading, writing and using language to gather and communicate information)</li> <li>• ICT skills (using technology to gather, investigate and communicate information)</li> </ul>   |
| <b>Social skills</b>          | <ul style="list-style-type: none"> <li>• Developing positive interpersonal relationships and collaboration skills (using self-control, managing setbacks, supporting peers)</li> <li>• Developing social-emotional intelligence</li> </ul>   |
| <b>Self-management skills</b> | <ul style="list-style-type: none"> <li>• Organization skills (managing time and tasks effectively)</li> <li>• States of mind (mindfulness, perseverance, emotional management, self-motivation, resilience).</li> </ul>  |

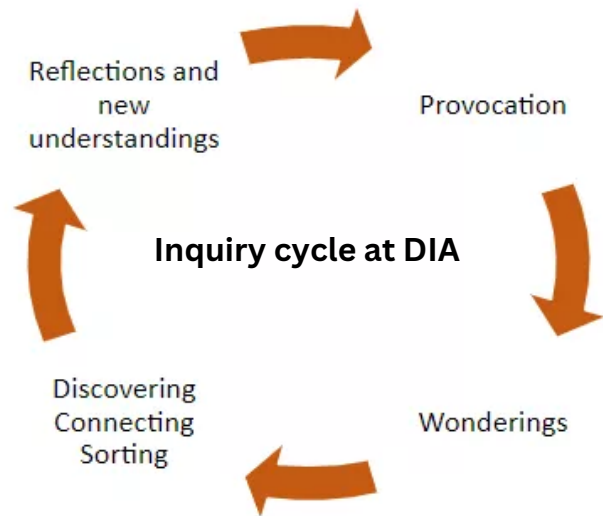


# Inquiry-based learning

- Inquiry recognizes students as being responsible for their own learning and is connected to the idea of Agency- where students take ownership of that learning.
- It creates opportunities for transferring the learning into authentic, real-life contexts, where students become problem solvers, through questioning, exploring, investigating, analyzing, and concluding.
- Inquiry nurtures curiosity and instills a life-long love for learning.

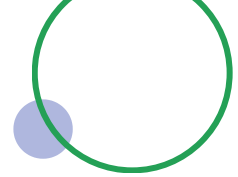
## The inquiry process involves:

- exploring, wondering and questioning
- experimenting and playing with possibilities
- making connections between previous learning and current learning
- making predictions and acting purposefully to see what happens
- collecting data and reporting findings
- clarifying existing ideas and reappraising perceptions of events
- applying concepts to deepen conceptual understandings
- researching and seeking information
- establishing and testing theories
- solving problems in a variety of ways
- taking and defending a position.



|  |   |   |                                      |  |  |
|--|---|---|--------------------------------------|--|--|
| Are curious and engage in learning                   | Are resourceful and resilient   | Learn independently and collaborate with others | Pose and pursue open-ended questions | Use the learning community as a resource                     | Reflect on learning  |
| Select materials to support investigations           | Collect and analyse data as a result of inquiry questions             | <b>Inquiry students</b>                         |                                      | Use observation as a vital tool in learning                  | Build, communicate, test, and adapt theories                                     |
| Engage in critical and creative thinking             | Develop skills for inquiry and research                               |   |                                      | Consider opportunities to develop learner profile attributes | Make deliberate links between knowledge discovered and conceptual understandings |
| Transfer understandings across contexts and subjects | Represent and share understandings in meaningful and significant ways | Seek new perspectives                           | Take action                          | See learning as joyful and learn with enthusiasm             | Sustain love for lifelong learning.  |

# Reading



## Reading in Year 4

Building on from Year 3, children use Accelerated Reader in order to cultivate positive reading habits. They select books from within their ZPD giving them autonomy over their reading choices whilst choosing texts at an appropriate reading level.

Every week, children visit the school library where they have the choice of any books that suit their interest levels.

We also share whole class texts, meaning we can enjoy the suspense, the excitement and the lessons it teaches us together.

The objectives we teach in Year 4 remain the same as Year 3, however the levels of mastery and independence are much deeper.

## Reading skills in Year 4

Children in Year 4 continue to build on their comprehension skills from earlier year groups:

They build up their understanding of new vocabulary and transfer this to their conversations and their writing.

They retrieve key information from fiction and non-fiction texts and use the text to provide evidence for their answers.

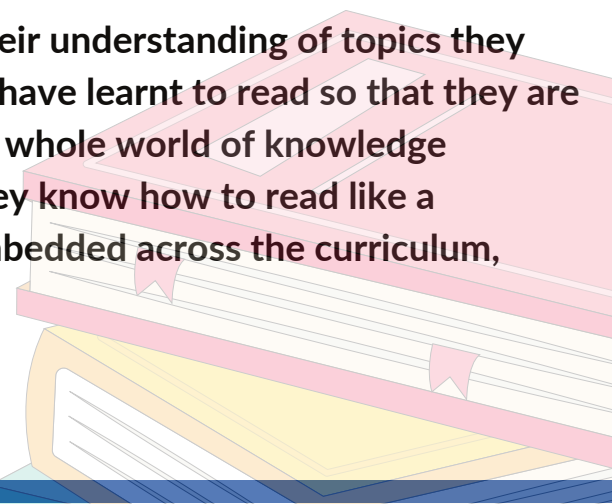
They use clues in the text to infer how a character might be feeling, why a character acted in a certain matter or why something happened.

They use information and clues in the text to predict what is going to happen next.

They study the words and types of clauses and phrases an author has used and discuss why the author may have made this choice.

## Disciplinary Literacy

High quality texts are available for children to develop their understanding of topics they are currently learning about – they understand that they have learnt to read so that they are able to read to learn. This skill allows children to access a whole world of knowledge because they can find out anything they want to once they know how to read like a scientist or read as a historian for example. Reading is embedded across the curriculum, whether it is Arabic, Art, MSCS or UOI.



# Year 3 and 4 Reading Objectives

|                                 | Year 3 and 4   |
|---------------------------------|--|
| <b>To read words accurately</b> | <p>Apply a growing knowledge of root words, prefixes and suffixes (etymology and morphology).</p> <p>Read further exception words, noting the spellings.</p>   |
| <b>To understand texts</b>      | <p>Draw inferences from reading.</p> <p>Predict from details stated and implied.</p> <p>Recall and summarise main ideas.</p> <p>Discuss words and phrases that capture the imagination.</p> <p>Retrieve and record information from non-fiction, using titles, headings, sub-headings and indexes.</p> <p>Prepare poems and plays to read aloud with expression, volume, tone and intonation.</p> <p>Identify recurring themes and elements of different stories (e.g. good triumphing over evil).</p> <p>Recognise some different forms of poetry.</p> <p>Explain and discuss understanding of reading, maintaining focus on the topic.</p> <p>Draw inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence.</p> <p>Predict what might happen from details stated and implied.</p> <p>Identify main ideas drawn from more than one paragraph and summarise these.</p> <p>Identify how language, structure and presentation contribute to meaning.</p> <p>Ask questions to improve understanding</p> |

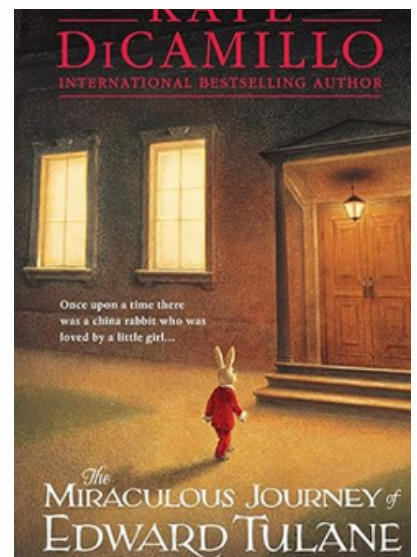
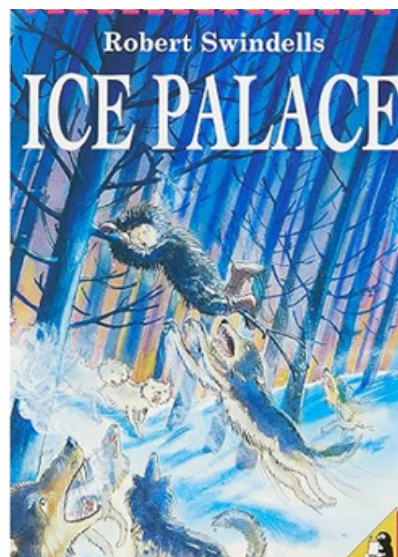
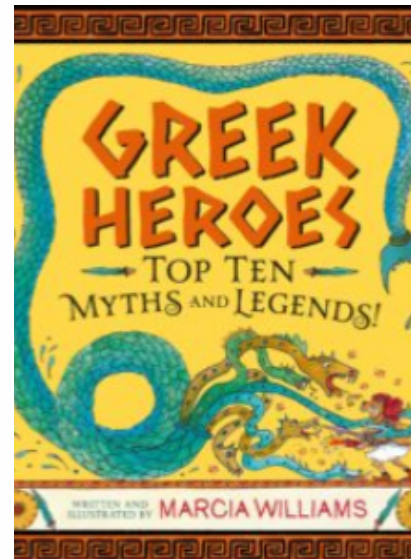
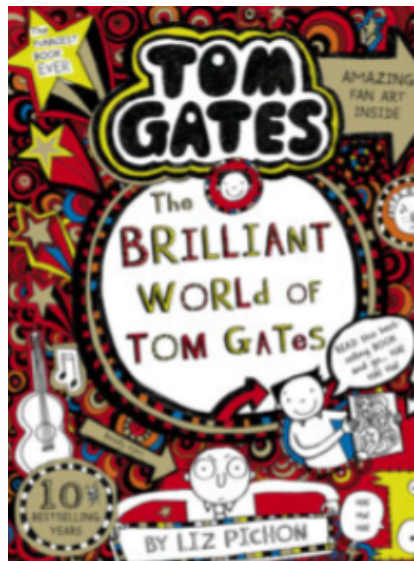
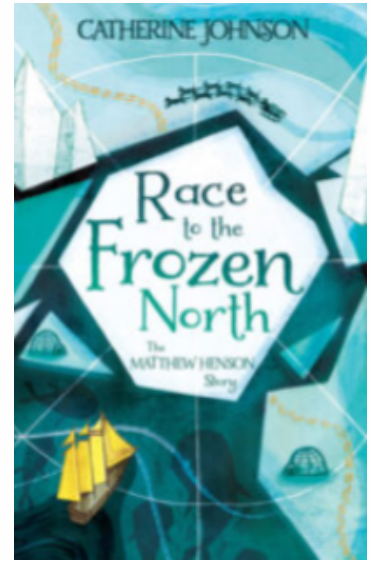
**As well as reading in school, it is still expected that students will be reading at home every night for at least 20 minutes.**





# Books, books, books...

Here is a selection of books that may be suitable for Year 4 readers. Please use your parental discretion as we have not read all books on the list. Click on each image to find out more about it.





# Writing

## Writing in Year 4

Writing in Year 4 builds on the learning from Year 3. Students are taught to write in a range of genres using a varied range of stimuli linked to our Units of Inquiry. The objectives remain almost the same however the expectations and levels of independence and mastery are higher.

## Embedding writing throughout the curriculum

As the PYP is transdisciplinary, we integrate writing across all subjects. This develops their understanding of disciplinary literacy as well as giving regular writing practice in order to develop students skills.

Some examples are how we might write across the curriculum include:

- Researching and writing a biography of a scientist they are studying in science
- Creating an information text based on an animal researched in UOI
- Explaining, justifying and reasoning in mathematics using mathematical vocabulary



# Year 3 and 4 Writing Objectives

|  | Year 3 and 4   |
|--|--|
| <b>To write with purpose</b>             | Write for a wide range of purposes using the main features identified in reading.<br>Use techniques used by authors to create characters and settings.<br>Compose and rehearse sentences orally.<br>Plan, write, edit and improve.                                   |
| <b>To use imaginative description</b>    | Create characters, settings and plots.<br>Use alliteration effectively.<br>Use similes effectively.<br>Use a range of descriptive phrases including some collective nouns.   |
| <b>To organise writing appropriately</b> | Use organisational devices such as headings and sub headings.<br>Use the perfect form of verbs to mark relationships of time and cause.<br>Use connectives that signal time, shift attention, inject suspense and shift the setting.                                 |
| <b>To use paragraphs</b>                 | Organise paragraphs around a theme.<br>Sequence paragraphs.  |
| <b>To use sentences appropriately</b>    | Use a mixture of simple, compound and complex sentences. Write sentences that include: <ul style="list-style-type: none"><li>- conjunctions</li><li>- adverbs</li><li>- direct speech, punctuated correctly</li><li>- clauses</li><li>- adverbial phrases.</li></ul> |
| <b>To present neatly</b>                 | Join letters, deciding which letters are best left un-joined.<br>Make handwriting legible by ensuring downstrokes of letters are parallel and letters are spaced appropriately   |

**Year 3 and 4**

**To spell correctly**

Use prefixes and suffixes and understand how to add them.  
Spell further homophones.  
Spell correctly often misspelt words.  
Place the possessive apostrophe accurately in words with regular plurals (for example, girls', boys') and in words with irregular plurals (for example, children's).  
Use the first two or three letters of a word to check its spelling in a dictionary.  
Write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far

**To punctuate accurately**

Develop understanding of writing concepts by:  
Extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although.  
Using the present perfect form of verbs in contrast to the past tense.  
Choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition.  
Using conjunctions, adverbs and prepositions to express time and cause.  
Using fronted adverbials  
Indicate grammatical and other features by:  
Using commas after fronted adverbials.  
Indicating possession by using the possessive apostrophe with plural nouns.  
Using and punctuating direct speech.

**To analyse writing**

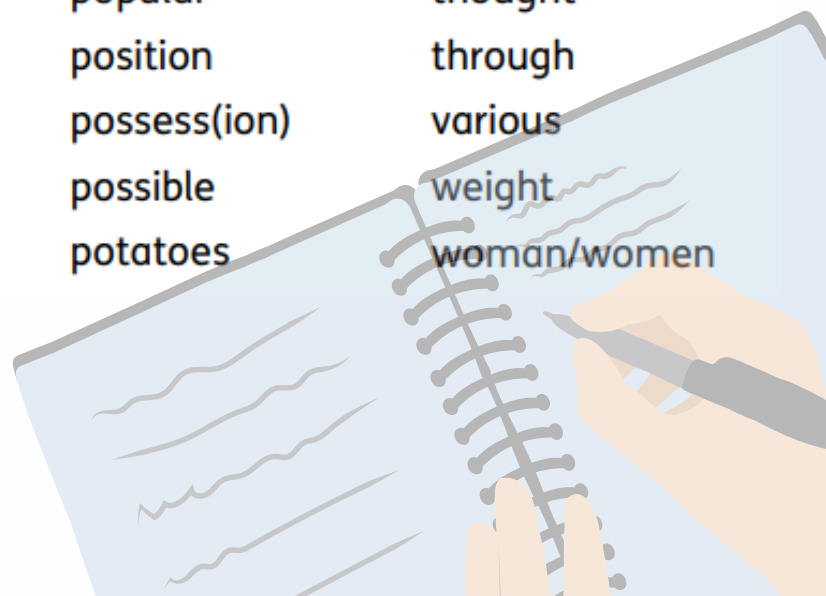
Use and understand grammatical terminology when discussing writing and reading:  
word family, conjunction, adverb, preposition, direct speech, inverted commas (or 'speech marks'), prefix, consonant, vowel, clause, subordinate clause

**To present writing**

Read aloud writing to a group or whole class, using appropriate intonation.

100 common exception words that Year 3 and 4 pupils are expected to spell. Please practice these at home with your child.

|                |              |                |                 |
|----------------|--------------|----------------|-----------------|
| accident(ally) | disappear    | interest       | pressure        |
| actual(ly)     | early        | island         | probably        |
| address        | earth        | knowledge      | promise         |
| answer         | eight/eighth | learn          | purpose         |
| appear         | enough       | length         | quarter         |
| arrive         | exercise     | library        | question        |
| believe        | experience   | material       | recent          |
| bicycle        | experiment   | medicine       | regular         |
| breath         | extreme      | mention        | reign           |
| breathe        | famous       | minute         | remember        |
| build          | favourite    | natural        | sentence        |
| busy/business  | February     | naughty        | separate        |
| calendar       | forward(s)   | notice         | special         |
| caught         | fruit        | occasion(ally) | straight        |
| centre         | grammar      | often          | strange         |
| century        | group        | opposite       | strength        |
| certain        | guard        | ordinary       | suppose         |
| circle         | guide        | particular     | surprise        |
| complete       | heard        | peculiar       | therefore       |
| consider       | heart        | perhaps        | though/although |
| continue       | height       | popular        | thought         |
| decide         | history      | position       | through         |
| describe       | imagine      | possess(ion)   | various         |
| different      | increase     | possible       | weight          |
| difficult      | important    | potatoes       | woman/women     |





# This is an example of student writing that is working at the expected standard for a Year 4 child.

## Y4 Lotty

4. fronted adverbials lack commas

4. noun phrases add detail to the setting effectively set the mood

2. missing apostrophe singular possession

4. the noun to which the pronouns refer is ambiguous: the house or the waterfall?

5. comments engage the reader

4. fronted adverbials detail the setting

4. past perfect tense indicate distant past

5. ellipsis adds tension

3. subordinating conjunction to organise time

2. missing apostrophe for contraction

4. punctuation within dialogue inconsistent

2. missing capital letters for names

4. appropriate vocabulary moves the action along: hurried, avoiding, incoming, scurried

4. the plot device creates cohesion by referencing the waterfall in the opening

4. short sentence moves the action on

4. balanced nouns and pronouns create cohesion

4. vocabulary and sentence form appropriate to 'fantastical' narrative

4. sentence demarcation not always accurate

Long ago in a dark forest there was a house surrounded by a calm flowing lake alongside a falling waterfall. It was not as tall as people would have expected although it was calm and quiet. If you looked at it it would look back you with warmth and love. It was surrounded by long fingered trees. Beneath the windows flowers stood up in the most interesting way. You would be silly to think that a house like that would be haunted. Beneath the dreamy wooden roof stood a girl draped in her blue shivering cloak. This girl's parents had died long before she turned seven so she had forgotten her name. She called herself little Blue Riding Hood. Most people called her Blue. Blue was as kind as a fairy.

Blue took notice of a small brown nut although she thought it was a nut. The nut came closer... and closer when it got to her she noticed that it was a baby bear. Its small ears were so small that you wouldn't believe it. Well hello you little cutie what are you doing here? Blue exclaimed. "I've lost my way." The baby bear said. "Can you help me find my mummy?" "Of course I can" Blue replied. "What does she look like?" She added. "She looks like me but a bit bigger." Baby bear quickly said. "Come on then what are we waiting for lets go." Said Blue. "OK replied baby bear. "My name is Blue what is yours?" ASKed Blue. "My name is Paddington" Answered Paddington. "You are very nice" commented Paddington. "Thank you" said blue and they set off.

Blue and Paddington hurried over the bridge avoiding any incoming cars. On the left was a stream they scurried into the field next to it. Suddenly Paddington tripped blue went to catch him but fell with him. They tumbled down the river they floated past baby bears mother. Blue shouted but she didn't hear her. They noticed that they were coming to a waterfall! Blue recognized it. Suddenly they fell they landed at the bottom of the waterfall. they found themselves back at blues cottage. It was as if magic had led them there.

paddington took one look at Blue he had never met a friend who was so loyal. Paddington asked if he and his mummy could live with her. Blue said yes and they lived happily ever after. //

| Commentary   |  |   |   |
|--|--|---|---|
| Composition  | Vocabulary, Grammar & Punctuation  | Spelling  | Handwriting   |
| <p>The structure of the narrative is appropriate to the form with an introduction clearly signaled by the detail of the setting and the circumstance of the main protagonist, which is resolved at the end, following a sequence of short adventures, as Blue finds a friend and a family. The setting and characterisation is well established in the early part of the writing with diminishing frequency in later paragraphs, but successful when attempted (you little cutie, a friend so loyal).</p> <p>Paragraphs are clearly organised around themes (description of Blue and her home, the adventure with the bear, the river adventure). However, there is only very infrequent language to link between paragraphs (<i>and she hurried on, suddenly</i>).</p> <p>The descriptive vocabulary is often adventurous and matches the 'magical' narrative genre (<i>long fingered trees, draped in her blue shimmering cloak, dreary wooden roof</i>). Vocabulary, asides and narrative details show a clear awareness of the reader (<i>You would be silly to think..., not as tall as people would have expected, took one look, it was as if magic had led them there</i>). Sentences are sometimes structured according to the purpose: the use of fronted adverbials of place to introduce descriptive sentences, short sentences to move on the action.</p> | <p>Grammar is mostly accurate, including some use of subordination (<i>although it was calm and quiet, avoiding any incoming campers, who was so loyal</i>) and compounding to create a range of structures. Verb forms are accurate including the use of the past perfect tense (<i>had died, had forgotten, had never met</i>) to create a sense of distant past and modal verbs (<i>would have expected, wouldn't believe</i>) to create precision. However, sentences are often left undemarcated by both capital letters and full stops.</p> <p>Fronted adverbials are used to describe the setting (<i>long ago in a dark forest, beneath the windows</i>) and to move on the action (<i>when it got to her</i>) in the early part of the narrative, but not maintained in the latter part of the narrative.</p> <p>Commas are not used. They are not used to demarcate fronted adverbials, nor are they used prior to a closing inverted comma following direct speech.</p> <p>Noun phrases are thoughtful and appropriate to the task in the early part of the narrative (calm flowing lake, most interesting way) with occasional missteps (falling waterfall), but these become infrequent later on. There is no attempt to employ adjectival phrases to expand nouns.</p> | <p>Lotty's spelling lacks the accuracy one might expect of a year 4 student.</p> <p>Several common exception words are spelled in incorrectly: <i>whith</i> (with) <i>mos</i> (most) <i>where</i> (were), <i>whent</i> (went), <i>of</i> (off)</p> <p>Neither apostrophes of contraction nor of possession are used: <i>didnt</i> (didn't), <i>Blues</i> (Blue's)</p> <p>Long vowel digraph spellings are not secure in many words (<i>flowted, surrownded, feild</i>,</p> <p>Patterns and doubling consonants are insecure: <i>triped, comented, shimmering, Padington</i></p> <p>The -ed suffix is sometimes spelled -d: <i>answerd, fingerd</i></p> <p>The y to i suffixing pattern sometimes results in ei rather than ie: <i>scurried, repleid</i></p> <p>The final non-syllabic 'e' pattern, however, seems more secure: <i>incoming, draped, noticed</i></p> | <p>Handwriting appears fluent and spaced sufficiently to aid legibility; very occasionally the small size makes it difficult to identify individual words.</p> <p>Ascenders are parallel and of a regular size although occasionally descenders barely fall below the line.</p> <p>Horizontal and vertical strokes consistently join appropriate letters.</p> <p>At times, capital letters are used mid-sentence.</p> |

# Maths

## Maths in Year 4

Students in Year 4 build on their learning from the previous years and get a good grounding in the basic skills ready to move to their last two years of primary school. At this stage, pupils times table knowledge should become firmly embedded, including knowing the associated division facts. We teach through a mastery approach which aims to deepen knowledge and skills and practice applying them to a range of contexts.

We base the structure of our year on the White Rose Maths scheme, which is a spiral curriculum which revisits topics regularly and builds on them to promote a more in-depth understanding as well as ensuring skills are embedded into long term memory.

Maths is divided into four key areas:

- Number and Place Value
- Measurement
- Shape and Space
- Statistics/Data Handling

We use a variety of methods to teach mathematical understanding and there is an emphasis on students using mathematical language in order to reason and justify their answers.





# Year 4 Maths Objectives

## Year 4

### Number - number and place value

- Count in multiples of 6, 7, 9, 25 and 1000
- Order and compare numbers beyond 1,000
- Find 1,000 more or less than a given number
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value
- Identify, represent and estimate numbers using different representations
- Round any number to the nearest 10, 100 or 1,000
- Count backwards through zero to include negative numbers
- Solve number and practical problems that involve  $4N1 - 4N5$  and with increasingly large positive numbers
- 

### Number - addition, subtraction, multiplication and division

- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Estimate and use inverse operations to check answers to a calculation
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why
- Recall multiplication and division facts for multiplication tables up to  $12 \times 12$
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers
- Recognise and use factor pairs and commutativity in mental calculations
- Multiply two-digit and three-digit numbers by a one-digit number using formal written layout
- Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as  $n$  objects are connected to  $m$  objects

### Number - fractions (including decimals and percentages)

- Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten
- Recognise and show, using diagrams, families of common equivalent fractions
- Add and subtract fractions with the same denominator
- Recognise and write decimal equivalents to  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$
- Recognise and write decimal equivalents of any number of tenths or hundredths
- Round decimals with one decimal place to the nearest whole number
- Compare numbers with the same number of decimal places up to two decimal places
- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths
- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
- Solve simple measure and money problems involving fractions and decimals to two decimal places

### Ratio and Proportion

- Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- Solve problems involving similar shapes where the scale factor is known or can be found
- Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples



## Year 4

### Measurement

- Compare different measures, including money in pounds and pence
- Estimate different measures, including money in pounds and pence
- Read, write and convert time between analogue and digital 12 clocks
- Read, write and convert time between analogue and digital 24-hour clocks
- Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days
- Convert between different units of measure [for example, kilometre to metre; hour to minute]
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
- Find the area of rectilinear shapes by counting squares
- Calculate different measures, including money in pounds and pence

### Geometry - properties of shapes

- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes
- Identify lines of symmetry in 2-D shapes presented in different orientations
- Complete a simple symmetric figure with respect to a specific line of symmetry
- Identify acute and obtuse angles and compare and order angles up to two right angles by size

### Geometry - position and direction

- Describe movements between positions as translations of a given unit to the left/right and up/down
- Describe positions on a 2-D grid as coordinates in the first quadrant
- Plot specified points and draw sides to complete a given polygon

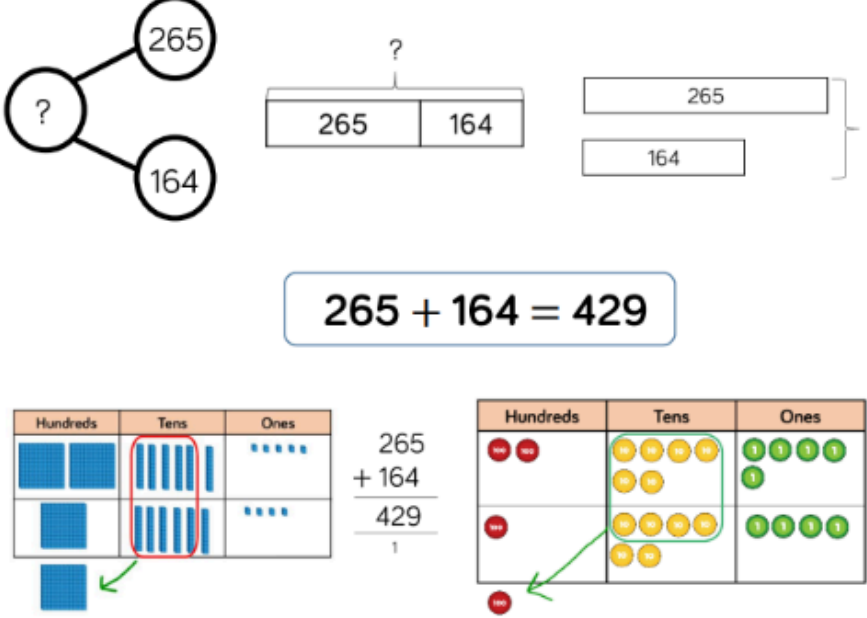
### Statistics

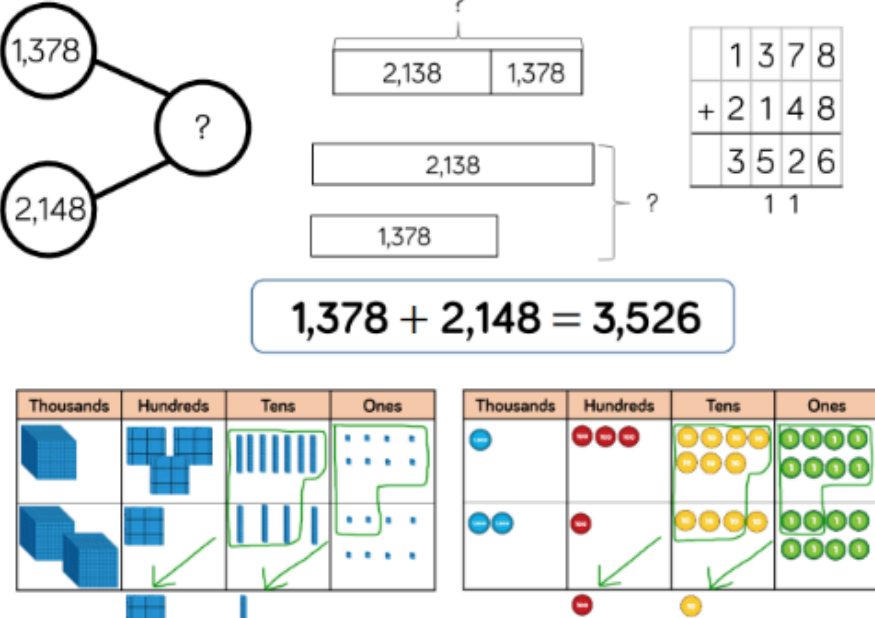
- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

**It is expected that pupils will know times tables to 12 x 12 and the related division facts by the end of Year 4. These must be practiced regularly at home so that children become fluent and can recall any fact within 3 seconds.**

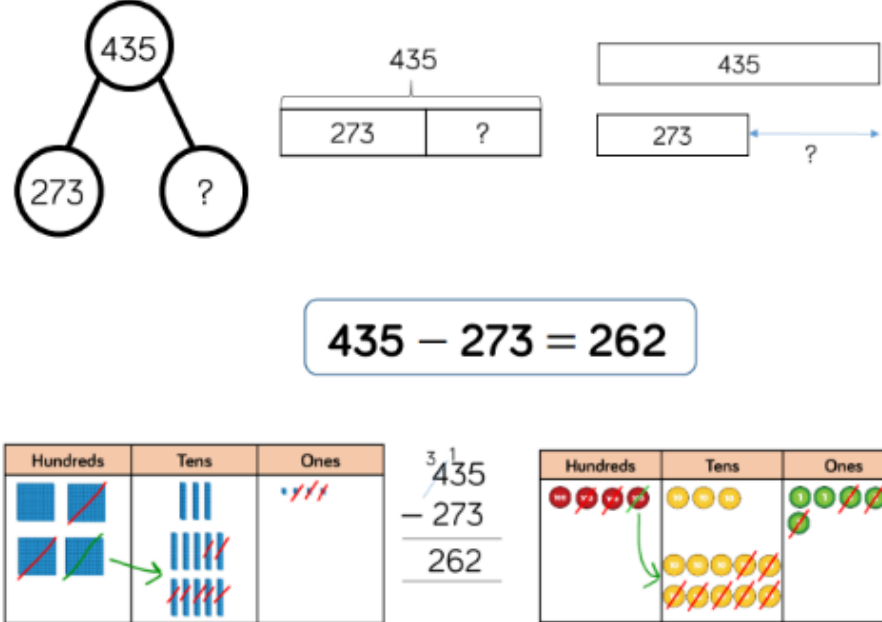


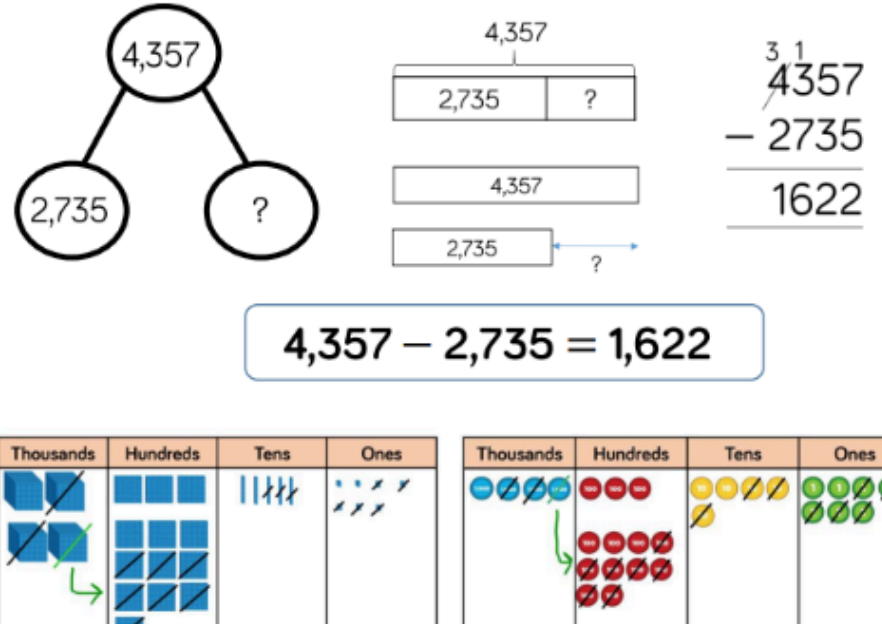
# Addition Strategies from Y3-4

| Skill: Add numbers with up to 3 digits  | Year: 3   |
|---|---|
|  <p><b>265 + 164 = 429</b></p> | <p>Base 10 and place value counters are the most effective manipulatives when adding numbers with up to 3 digits.</p> <p>Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.</p> <p>Plain counters on a place value grid can also be used to support learning.</p> |

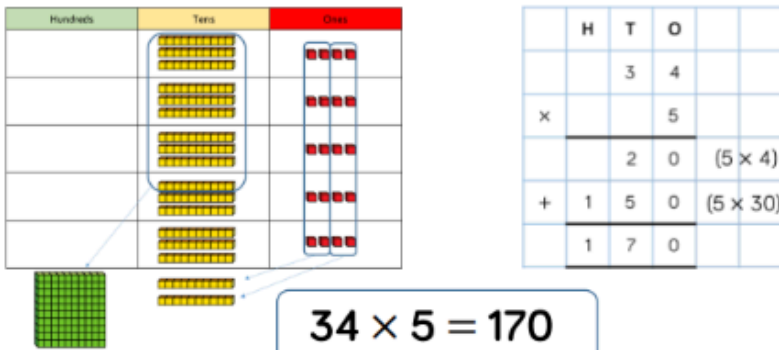

| Skill: Add numbers with up to 4 digits   | Year: 4   |
|--|---|
|  <p><b>1,378 + 2,148 = 3,526</b></p> | <p>Base 10 and place value counters are the most effective manipulatives when adding numbers with up to 4 digits.</p> <p>Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.</p> <p>Plain counters on a place value grid can also be used to support learning.</p> |

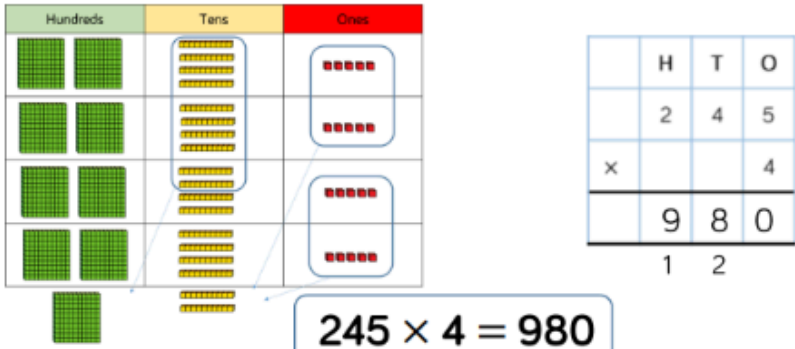
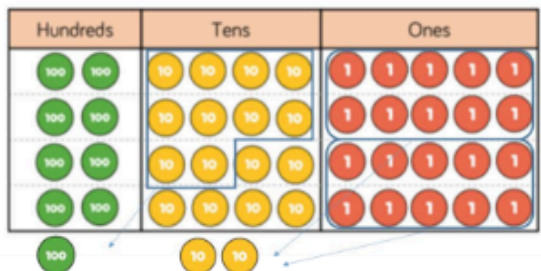
# Subtraction Strategies from Y3-4

| Skill: Subtract numbers with up to 3 digits   | Year: 3   |
|---|---|
|  <p><math>435 - 273 = 262</math></p> | <p>Base 10 and place value counters are the most effective manipulative when subtracting numbers with up to 3 digits.</p> <p>Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.</p> <p>Plain counters on a place value grid can also be used to support learning.</p> |

| Skill: Subtract numbers with up to 4 digits  | Year: 4  |
|--|--|
|  <p><math>4,357 - 2,735 = 1,622</math></p> | <p>Base 10 and place value counters are the most effective manipulatives when subtracting numbers with up to 4 digits.</p> <p>Ensure children write out their calculation alongside any concrete resources so they can see the links to the written column method.</p> <p>Plain counters on a place value grid can also be used to support learning.</p> |


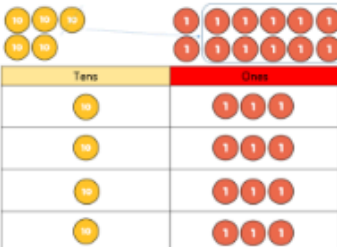
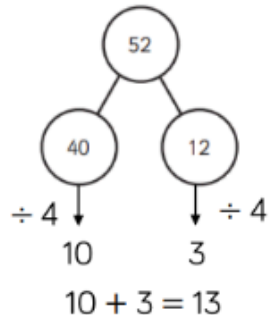
# Multiplication Strategies from Y3-4


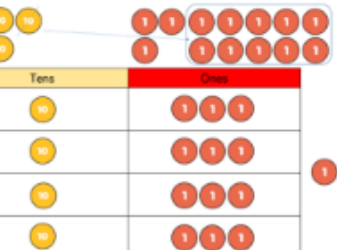
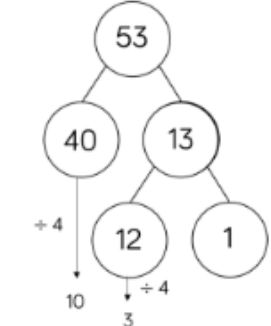
| Skill: Multiply 2-digit numbers by 1-digit numbers  | Year: 3/4 |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
|---|-----------|---|---|---|--|--|---|---|---|--|--|---|--|--|---|---|---|---|---|---|--|---|---|---|--|---|---|---|--|--|---|---|---|--|--|---|--|--|---|---|---|---|---|---|--|---|---|---|--|
|  <p>Base 10 blocks representing 34 x 5 = 170. The number 34 is represented by 3 tens rods and 4 ones units. Multiplying by 5 results in 15 tens rods and 20 ones units. The 20 ones units are exchanged for 2 tens rods, resulting in 17 tens rods and 0 ones units, which is 170.</p> <table border="1" data-bbox="798 380 1061 638"> <thead> <tr> <th></th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>3</td> <td>4</td> </tr> <tr> <td>x</td> <td></td> <td></td> <td>5</td> </tr> <tr> <td></td> <td></td> <td>2</td> <td>0</td> </tr> <tr> <td>+</td> <td>1</td> <td>5</td> <td>0</td> </tr> <tr> <td></td> <td>1</td> <td>7</td> <td>0</td> </tr> </tbody> </table> <p><math>34 \times 5 = 170</math></p> <table border="1" data-bbox="359 750 646 1019"> <thead> <tr> <th></th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>3</td> <td>4</td> </tr> <tr> <td>x</td> <td></td> <td></td> <td>5</td> </tr> <tr> <td></td> <td></td> <td>2</td> <td>0</td> </tr> <tr> <td>+</td> <td>1</td> <td>5</td> <td>0</td> </tr> <tr> <td></td> <td>1</td> <td>7</td> <td>0</td> </tr> </tbody> </table>  <p>Base 10 blocks representing 245 x 4 = 980. The number 245 is represented by 2 hundreds flats, 4 tens rods, and 5 ones units. Multiplying by 4 results in 8 hundreds flats, 16 tens rods, and 20 ones units. The 20 ones units are exchanged for 2 tens rods, and the 16 tens rods are exchanged for 1 hundred flat and 6 tens rods, resulting in 9 hundreds flats, 8 tens rods, and 0 ones units, which is 980.</p> |           | H | T | O |  |  | 3 | 4 | x |  |  | 5 |  |  | 2 | 0 | + | 1 | 5 | 0 |  | 1 | 7 | 0 |  | H | T | O |  |  | 3 | 4 | x |  |  | 5 |  |  | 2 | 0 | + | 1 | 5 | 0 |  | 1 | 7 | 0 | <p>Teachers may decide to first look at the expanded column method before moving on to the short multiplication method.</p> <p>The place value counters should be used to support the understanding of the method rather than supporting the multiplication, as children should use times table knowledge.</p> |
|   | H         | T | O |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
|   |           | 3 | 4 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
| x   |           |   | 5 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
|   |           | 2 | 0 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
| +   | 1         | 5 | 0 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
|   | 1         | 7 | 0 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
|   | H         | T | O |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
|   |           | 3 | 4 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
| x   |           |   | 5 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
|   |           | 2 | 0 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
| +   | 1         | 5 | 0 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |
|   | 1         | 7 | 0 |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |   |   |   |  |  |   |   |   |  |  |   |  |  |   |   |   |   |   |   |  |   |   |   |  |

| Skill: Multiply 3-digit numbers by 1-digit numbers   | Year: 3/4 |   |   |   |  |   |   |   |   |  |  |   |  |   |   |   |   |
|--|-----------|---|---|---|--|---|---|---|---|--|--|---|--|---|---|---|---|
|  <p>Base 10 blocks representing 245 x 4 = 980. The number 245 is represented by 2 hundreds flats, 4 tens rods, and 5 ones units. Multiplying by 4 results in 8 hundreds flats, 16 tens rods, and 20 ones units. The 20 ones units are exchanged for 2 tens rods, and the 16 tens rods are exchanged for 1 hundred flat and 6 tens rods, resulting in 9 hundreds flats, 8 tens rods, and 0 ones units, which is 980.</p> <table border="1" data-bbox="853 1310 1069 1556"> <thead> <tr> <th></th> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td></td> <td>2</td> <td>4</td> <td>5</td> </tr> <tr> <td>x</td> <td></td> <td></td> <td>4</td> </tr> <tr> <td></td> <td>9</td> <td>8</td> <td>0</td> </tr> </tbody> </table> <p><math>245 \times 4 = 980</math></p>  <p>Base 10 blocks representing 245 x 4 = 980. The number 245 is represented by 2 hundreds flats, 4 tens rods, and 5 ones units. Multiplying by 4 results in 8 hundreds flats, 16 tens rods, and 20 ones units. The 20 ones units are exchanged for 2 tens rods, and the 16 tens rods are exchanged for 1 hundred flat and 6 tens rods, resulting in 9 hundreds flats, 8 tens rods, and 0 ones units, which is 980.</p> |           | H | T | O |  | 2 | 4 | 5 | x |  |  | 4 |  | 9 | 8 | 0 | <p>When moving to 3-digit by 1-digit multiplication, encourage children to move towards the short, formal written method.</p> <p>Base 10 and place value counters continue to support the understanding of the written method. Limit the number of exchanges needed in the questions and move children away from resources when multiplying larger numbers.</p> |
|  | H         | T | O |   |  |   |   |   |   |  |  |   |  |   |   |   |   |
|  | 2         | 4 | 5 |   |  |   |   |   |   |  |  |   |  |   |   |   |   |
| x  |           |   | 4 |   |  |   |   |   |   |  |  |   |  |   |   |   |   |
|  | 9         | 8 | 0 |   |  |   |   |   |   |  |  |   |  |   |   |   |   |



# Division Strategies from Y3-4

| Skill: Divide 2-digits by 1-digit (sharing with exchange)   | Year: 3/4 |      |    |   |    |   |    |   |    |   |   |   |   |   |   |
|---|-----------|------|----|---|----|---|----|---|----|---|---|---|---|---|---|
| <br><table border="1" data-bbox="239 488 654 716"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr><td>50</td><td>2</td></tr> <tr><td>50</td><td>2</td></tr> <tr><td>50</td><td>2</td></tr> <tr><td>50</td><td>2</td></tr> </tbody> </table><br><div style="text-align: center;"> <math>52</math><br/> <table border="1" style="margin: auto;"> <tr><td>?</td><td>?</td><td>?</td><td>?</td></tr> </table> </div><br><div style="text-align: center;"> <math>52 \div 4 = 13</math> </div><br><br> | Tens      | Ones | 50 | 2 | 50 | 2 | 50 | 2 | 50 | 2 | ? | ? | ? | ? | <p>When dividing numbers involving an exchange, children can use Base 10 and place value counters to exchange one ten for ten ones. Children should start with the equipment outside the place value grid before sharing the tens and ones equally between the rows.</p> <p>Flexible partitioning in a part-whole model supports this method.</p> |
| Tens  | Ones      |      |    |   |    |   |    |   |    |   |   |   |   |   |   |
| 50  | 2         |      |    |   |    |   |    |   |    |   |   |   |   |   |   |
| 50  | 2         |      |    |   |    |   |    |   |    |   |   |   |   |   |   |
| 50  | 2         |      |    |   |    |   |    |   |    |   |   |   |   |   |   |
| 50  | 2         |      |    |   |    |   |    |   |    |   |   |   |   |   |   |
| ?   | ?         | ?    | ?  |   |    |   |    |   |    |   |   |   |   |   |   |

| Skill: Divide 2-digits by 1-digit (sharing with remainders)  | Year: 3/4 |      |    |   |    |   |    |   |    |   |    |    |    |    |   |  |
|--|-----------|------|----|---|----|---|----|---|----|---|----|----|----|----|---|--|
| <br><table border="1" data-bbox="239 1382 654 1610"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr><td>50</td><td>3</td></tr> <tr><td>50</td><td>3</td></tr> <tr><td>50</td><td>3</td></tr> <tr><td>50</td><td>3</td></tr> </tbody> </table><br><div style="text-align: center;"> <math>53</math><br/> <table border="1" style="margin: auto;"> <tr><td>13</td><td>13</td><td>13</td><td>13</td><td>1</td></tr> </table> </div><br><div style="text-align: center;"> <math>53 \div 4 = 13 \text{ r}1</math> </div><br><br> | Tens      | Ones | 50 | 3 | 50 | 3 | 50 | 3 | 50 | 3 | 13 | 13 | 13 | 13 | 1 | <p>When dividing numbers with remainders, children can use Base 10 and place value counters to exchange one ten for ten ones. Starting with the equipment outside the place value grid will highlight remainders, as they will be left outside the grid once the equal groups have been made.</p> <p>Flexible partitioning in a part-whole model supports this method.</p> |
| Tens   | Ones      |      |    |   |    |   |    |   |    |   |    |    |    |    |   |  |
| 50   | 3         |      |    |   |    |   |    |   |    |   |    |    |    |    |   |  |
| 50   | 3         |      |    |   |    |   |    |   |    |   |    |    |    |    |   |  |
| 50   | 3         |      |    |   |    |   |    |   |    |   |    |    |    |    |   |  |
| 50   | 3         |      |    |   |    |   |    |   |    |   |    |    |    |    |   |  |
| 13   | 13        | 13   | 13 | 1 |    |   |    |   |    |   |    |    |    |    |   |  |

# Division Strategies from Y3-4

| Skill: Divide 2-digits by 1-digit (grouping)                   | Year: 4/5  |
|--|--|
| <p style="text-align: center;"><math>52 \div 4 = 13</math></p> | <p>When using the short division method, children use grouping. Starting with the largest place value, they group by the divisor.</p> <p>Language is important here. Children should consider 'How many groups of 4 tens can we make?' and 'How many groups of 4 ones can we make?'</p> <p>Remainders can also be seen as they are left ungrouped.</p> |

| Skill: Divide 3-digits by 1-digit (sharing)   | Year: 4  |
|---|--|
| <p style="text-align: center;"><math>844 \div 4 = 122</math></p> <p style="text-align: center;"><math>844 \div 4 = 122</math></p> | <p>Children can continue to use place value counters to share 3-digit numbers into equal groups. Children should start with the equipment outside the place value grid before sharing the hundreds, tens and ones equally between the rows. This method can also help to highlight remainders. Flexible partitioning in a part-whole model supports this method.</p> |

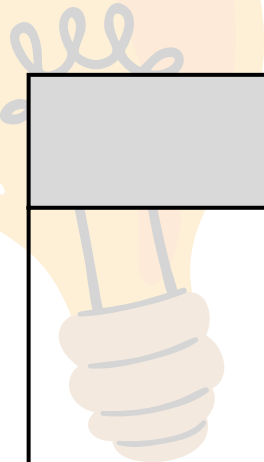
# Science

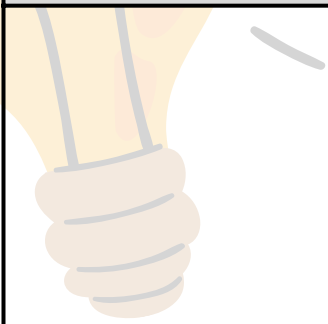
In the Primary Years Programme (PYP), science is viewed as the exploration of the biological, chemical and physical aspects of the natural world, and the relationships between them. Our understanding of science is constantly changing and evolving. The inclusion of science within the PYP leads learners to an appreciation and awareness of the world as it is viewed from a scientific perspective. It encourages curiosity and ingenuity and enables the student to develop an understanding of the world. Reflection on scientific knowledge also helps students to develop a sense of responsibility regarding the impact of their actions on themselves, others and their world. 'Working scientifically' is taught through all substantive science content in order to make it meaningful and to develop the skills required at each age group.

Where appropriate, science is taught as part of the Unit of Inquiry however it is supplemented with standalone lessons as recommended by IB.



# Year 4 Science Objectives

|   | Year 4   |
|---|--|
| <br><b>Working Scientifically</b> | <p><b>Planning Investigations</b><br/>- Plan different types of scientific enquiry</p> <p><b>Conducting experiments</b><br/>- Make systematic and careful observations using a range of equipment, including thermometers and data loggers</p> <p><b>Recording evidence</b><br/>- Use bar charts and tables to record findings<br/>- Use scientific language, labels and diagrams</p> <p><b>Reporting findings</b><br/>- Oral and written explanations<br/>- Use displays and presentations to report on findings</p> <p><b>Conclusions and predictions</b><br/>- Make predictions for new values and raise further questions</p>  |
| <b>Big Ideas and Key Objectives</b>   | <p><b>Living things can be classified according to observable features</b></p> <ul style="list-style-type: none"><li>• To recognise that living things can be grouped in a variety of ways</li><li>• To explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment</li></ul> <p><b>Habitats provide living things with what they need</b></p> <ul style="list-style-type: none"><li>• To recognise that environments can change and that this can sometimes pose dangers to living things.</li></ul> <p><b>The human body has a number of systems, each with its own function</b></p> <ul style="list-style-type: none"><li>• To describe the simple functions of the basic parts of the digestive system in humans</li><li>• To identify the different types of teeth in humans and their simple functions</li><li>• To construct and interpret a variety of food chains, identifying producers, predators and prey.</li></ul> <p><b>Materials can exist in different states and that these states can sometimes be changed</b></p> <ul style="list-style-type: none"><li>• To compare and group materials together, according to whether they are solids, liquids or gases</li><li>• To observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)</li><li>• To identify the part played by evaporation and condensation</li></ul> |



**Big Ideas and Key Objectives**

**Light & sound can be reflected & absorbed and enable us to see & hear**

- To identify how sounds are made, associating some of them with something vibrating
- To recognise that vibrations from sounds travel through a medium to the ear & find patterns between the pitch of a sound and features of the object that produced it
- To find patterns between the volume of a sound and the strength of the vibrations that produced it
- To recognise that sounds get fainter as the distance from the sound source increases

**Electricity can make circuits work and can be controlled to perform useful functions**

- To identify common appliances that run on electricity
- To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- To identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- To recognise some common conductors and insulators, and associate metals with being good conductors.





# Resources

**Below are websites that may support your child's learning at home.**

## Maths

<https://whiteroseeducation.com/parent-pupil-resources/maths/free-downloads>

<https://www.maths4mumsanddads.co.uk/everyday-maths/>

<https://home.oxfordowl.co.uk/maths/>

<https://www.topmarks.co.uk>

<https://mathszone.co.uk>

## English

<https://home.oxfordowl.co.uk>

[https://www.spellingcity.com/spelling\\_games-vocabulary\\_games.html](https://www.spellingcity.com/spelling_games-vocabulary_games.html)

<https://www.storynory.com>

## Science

<https://www.billnye.com>

<https://www.natgeokids.com/uk/parents/easy-science-experiments-to-do-at-home/>

<https://www.natgeokids.com/uk/teacher-category/science/>