

# CURRICULUM FOR EXCELLENCE STREAMLINED

All the Experiences & Outcomes (Es&Os) and Principles & Practice material from the original document, redesigned to a third of the length with key organisers clearly displayed over facing pages

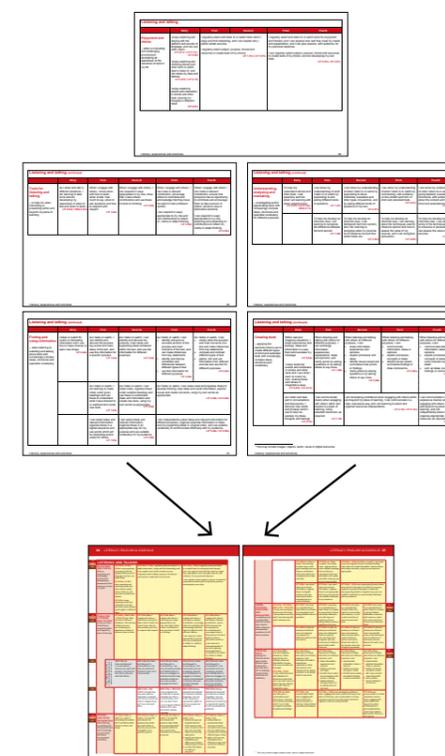


The version of *Curriculum for Excellence* which is most used by teachers in Scotland today is the 313-page PDF (or the excerpts from it for particular curriculum areas) which is available at [https://education.gov.scot/scottish-education-system/policy-for-scottish-education/policy-drivers/cfe-\(building-from-the-statement-appendix-incl-btc1-5\)/Experiences%20and%20Outcomes](https://education.gov.scot/scottish-education-system/policy-for-scottish-education/policy-drivers/cfe-(building-from-the-statement-appendix-incl-btc1-5)/Experiences%20and%20Outcomes)<sup>1</sup>. It is almost identical<sup>2</sup> to a printed version originally distributed by Learning & Teaching Scotland, in a ring-binder 8½cm thick.

The PDF is particularly poorly designed, with its Microsoft Word default table settings and insufficient use of colour. It lacks the grace and usability of the print version, which uses vivid colour-coding<sup>3</sup> and features cheerful pictures of happy learners spread across the tabbed dividers.

However, the pagination in both is massively sub-optimal, as it causes Experiences and Outcomes which should be clearly grouped under their 'organisers' to be spread across several pages.

For example, the 'Es & Os' for Listening and Talking in Literacy are spread across five pages. This version decreases the font size and margin width, reduces cell padding, uses a slightly thinner font, and eliminates unnecessary labelling<sup>4</sup> to get this organiser into a neat double-page spread:



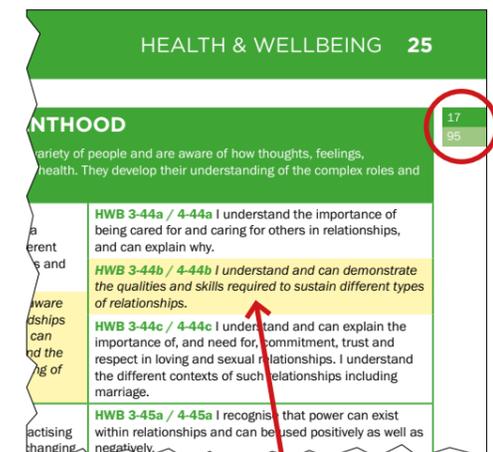
In addition, this version reduces unnecessary duplication of Es & Os which sometimes appear in nearly identical forms several times throughout the document. For example, the Es & Os in the example above appear:

- ▶ on pages 25-29, as part of Literacy across learning: Responsibility of all
- ▶ on pages 130-134, in Literacy & English
- ▶ on pages 154-159, in the nearly identical (except for 5 additional Es & Os) section for Literacy & Gàidhlig.

In the example given here, removing this triplication reduces 17 pages of the document to just 2. Overall, removing repetition in both the Principles & Practice and Experiences & Outcomes sections reduces a 313-page behemoth to a just over a third of the size (112 pages).

Furthermore, combining parts of the document such as Literacy, Literacy & English and Literacy & Gàidhlig makes it a huge amount easier to compare the minor differences between these very similar sections.

Throughout the book, small numbered tabs at the sides of the page indicate the original page numbers from the PDF<sup>5</sup>.



Es & Os which are the 'Responsibility of all' are presented in italics in a way which will be familiar to users of the original edition. To ensure that they are easy to pick out now that they aren't excerpted in their abbreviated form at the start of the document, they also appear on a yellow background.

I am a firm believer that *Curriculum for Excellence* still has a lot to offer both learners and practitioners in Scotland, and it is my hope that this leaner and more attractive version will enable many of us to see both the wood and the trees of the curriculum with fresh eyes.

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mail@seehearteach.com  
Dundee, January 2018

<sup>1</sup> Retrieved for the purposes of creating this edition on 27 August 2017.  
<sup>2</sup> The page numbers differ, with the ring-binder numbering restarting from 1 at the start of each section.  
<sup>3</sup> The colour coding in this edition corresponds with that found in the CfE ring-binder, with the exception that all parts of the Language curriculum area use the same shade of red.  
<sup>4</sup> Most examples of this will pass unnoticed. However, the section headings in Principles & Practice documents have mostly been rephrased from being questions to much shorter headings which also facilitate scanning and skim-reading. So, for example, "How will we build on children and young people's prior learning in the expressive arts?" becomes, in the Expressive Arts section, just "Building on prior learning".  
<sup>5</sup> If you are wanting to cite Curriculum for Excellence, it is recommended that you use the original PDF version to source your quotations, particularly for the Principles and Practice sections where some minor rewording and reordering has taken place in Health & Wellbeing and Languages as part of the de-duplication.

**SUBSTANCE MISUSE [AND EMERGENCIES]<sup>1</sup>**

Learners develop their understanding of the use and misuse of a variety of substances including over the counter and prescribed medicines, alcohol, drugs, tobacco and solvents. They explore and develop their understanding of the impact of risk-taking behaviour on their life choices. The experiences and outcomes will enable learners to make informed personal choices with the aim of promoting healthy lifestyles.

<b>HWB 0-38a</b> I understand there are things I should not touch or eat and how to keep myself safe, and I am learning what is meant by medicines and harmful substances.	<b>HWB 1-38a</b> I know that there are medicines and some other substances that can be used in a safe way to improve health and I am becoming aware of how choices I make can affect my health and wellbeing.	<b>HWB 2-38a</b> I understand the effect that a range of substances including tobacco and alcohol can have on the body.	<b>HWB 3-38a / 4-38a</b> I understand the positive effects that some substances can have on the mind and body but I am also aware of the negative and serious physical, mental, emotional, social and legal consequences of the misuse of substances.
		<b>HWB 2-39a / 3-39a</b> I know that popular culture, the media and peer groups as well as my own attitudes and values can influence how I feel about substance use and recognise the impact this may have on my actions.	<b>HWB 4-39a</b> Through investigation, I can explain how images of substance use and misuse can influence people's behaviour.
		<b>HWB 2-40a</b> I know that alcohol and drugs can affect people's ability to make decisions.	<b>HWB 3-40a / 4-40a</b> I am developing a range of skills which can support decision making about substance use. I can demonstrate strategies for making informed choices to maintain and improve my health and wellbeing and can apply these in situations that may be stressful or challenging, or involve peer pressure. <b>HWB 3-40b / 4-40b</b> I know how to access information and support for substance-related issues.
		<b>HWB 2-41a</b> I can identify the different kinds of risks associated with the use and misuse of a range of substances.	<b>HWB 3-41a / 4-41a</b> After assessing options and the consequences of my decisions, I can identify safe and unsafe behaviours and actions. <b>HWB 3-41b / 4-41b</b> I know that the use of alcohol and drugs can affect behaviour and the decisions that people make about relationships and sexual health.
<b>HWB 0-42a</b> I can show ways of getting help in unsafe situations and emergencies.	<b>HWB 1-42a</b> I know how to react in unsafe situations and emergencies.	<b>HWB 2-42a</b> I know of actions I can take to help someone in an emergency.	<b>HWB 3-42a / 4-42a</b> I know the action I should take in the management of incidents and emergencies related to substance misuse.
		<b>HWB 2-43a</b> I understand the impact that misuse of substances can have on individuals, their families and friends.	<b>HWB 3-43a / 4-43a</b> I understand the impact that ongoing misuse of substances can have on a person's health, future life choices and options. <b>HWB 3-43b</b> Through investigating substance misuse in my local community I can reflect on specific issues, and discuss how they are being addressed. <b>HWB 4-43b</b> By researching the impact of substance misuse nationally and internationally I can explain similarities and differences among communities. <b>HWB 4-43c</b> I understand the local, national and international impact of substance misuse.

**Responsibility of All** Es & Os in *italics* on a yellow background are the Responsibility of All practitioners.

<sup>1</sup> [The title in the Es & Os and Benchmarks is simply 'Substance misuse'. However, this understates the importance accorded to general emergencies at Early, First and Second Level (particularly in the Benchmarks), and to emergencies which fall under the remit of all of the emergency services.]

**RELATIONSHIPS, SEXUAL HEALTH AND PARENTHOOD**

Learners develop an understanding of how to maintain positive relationships with a variety of people and are aware of how thoughts, feelings, attitudes, values and beliefs can influence decisions about relationships, and sexual health. They develop their understanding of the complex roles and responsibilities of being a parent or carer.

<b>HWB 0-44a / 1-44a</b> I am aware of how friendships are formed and that likes, dislikes, special qualities and needs can influence relationships. <b>HWB 0-44b / 1-44b</b> I understand positive things about friendships and relationships but when something worries or upsets me I know who I should talk to.	<b>HWB 2-44a</b> I understand that a wide range of different kinds of friendships and relationships exist. <b>HWB 2-44b</b> I am aware that positive friendships and relationships can promote health and the health and wellbeing of others.	<b>HWB 3-44a / 4-44a</b> I understand the importance of being cared for and caring for others in relationships, and can explain why. <b>HWB 3-44b / 4-44b</b> I understand and can demonstrate the qualities and skills required to sustain different types of relationships. <b>HWB 3-44c / 4-44c</b> I understand and can explain the importance of, and need for, commitment, trust and respect in loving and sexual relationships. I understand the different contexts of such relationships including marriage.
<b>HWB 0-45a / 1-45a</b> I know that there are people in our lives who care for and look after us and I am aware that people may be cared for by parents, carers or other adults.	<b>HWB 2-45a</b> I am identifying and practising skills to manage changing relationships and I understand the positive impact this can have on my emotional wellbeing.	<b>HWB 3-45a / 4-45a</b> I recognise that power can exist within relationships and can be used positively as well as negatively.
<b>HWB 0-45b / 1-45b / 2-45b / 3-45b / 4-45b</b> I am aware of the need to respect personal space and boundaries and can recognise and respond appropriately to verbal and non-verbal communication.		
		<b>HWB 3-46a / 4-46a</b> I reflect on how my attitudes, beliefs, values and morality can influence my decisions about friendships, relationships and sexual behaviour. <b>HWB 3-46b / 4-46b</b> I know that popular culture, the media and peer pressure can influence how I feel about myself and the impact this may have on my actions. <b>HWB 3-46c / 4-46c</b> I am developing skills for making decisions about my relationships and sexual behaviour. I am able to apply these to situations that may be challenging or difficult.
<b>HWB 0-47a / 1-47a</b> I recognise that we have similarities and differences but are all unique. <b>HWB 0-47b / 1-47b</b> I am aware of my growing body and I am learning the correct names for its different parts and how they work. [See also <b>SCN 0-12a</b> ]	<b>HWB 2-47a</b> I recognise that how my body changes can affect how I feel about myself and how I may behave.	<b>HWB 3-47a / 4-47a</b> I understand my own body's uniqueness, my developing sexuality, and that of others. <b>HWB 3-47b / 4-47b</b> Using what I have learned I am able to make informed decisions and choices that promote and protect my own and others' sexual health and wellbeing.
<b>HWB 0-48a / 1-48a</b> I am learning what I can do to look after my body and who can help me.	<b>HWB 2-48a</b> I can describe the physical and emotional changes during puberty, understand why they are taking place and the importance of personal hygiene.	<b>HWB 3-48a / 4-48a</b> I know how to access services, information and support if my sexual health and wellbeing is at risk. I am aware of my rights in relation to sexual health including my right to confidentiality, and my responsibilities, including those under the law.
<b>HWB 0-49a / 1-49a</b> I am learning about respect for my body and what behaviour is right and wrong. I know who I should talk to if I am worried about this.	<b>HWB 2-49a</b> I know that all forms of abuse are wrong and I am developing the skills to keep myself safe and get help if I need it.	<b>HWB 3-49a / 4-49a</b> I know how to manage situations concerning my sexual health and wellbeing and am learning to understand what is appropriate sexual behaviour. <b>HWB 3-49b / 4-49b</b> I know where to get support and help with situations involving abuse and I understand that there are laws which protect me from different kinds of abuse.
<b>HWB 0-50a / 1-50a</b> I am learning about where living things come from and about how they grow, develop and are nurtured.	<b>HWB 2-50a</b> I am able to describe how human life begins and how a baby is born.	
<b>HWB 0-51a / 1-51a</b> I am able to show an awareness of the tasks required to look after a baby.	<b>HWB 2-51a</b> I can describe the role of a parent/ carer and the skills, commitment and qualities the role requires.	<b>HWB 3-51a / 4-51a</b> I can explain the importance and the enduring and complex responsibility of being a parent/ carer, and the impact on life choices and options. <b>HWB 3-51b</b> I can explain the support and care necessary to ensure a child is nurtured through the different stages of childhood. <b>HWB 4-51b</b> Through investigation I can explain the support available for parents and carers looking after babies and bringing up children.

25 130 154	<b>LISTENING AND TALKING</b>					
<p><b>ENJOYMENT AND CHOICE</b></p> <p>within a motivating and challenging environment, developing an awareness of the relevance of texts in my life</p>	<p><b>LIT 0-01a / 0-11a / 0-20a</b> I enjoy exploring and playing with the patterns and sounds of language, and can use what I learn.</p> <p><b>LIT 0-01b / 0-11b</b> I enjoy exploring and choosing stories and other texts to watch, read or listen to, and can share my likes and dislikes.</p> <p><b>LIT 0-01c</b> I enjoy exploring events and characters in stories and other texts, sharing my thoughts in different ways.</p>	<p><b>LIT 1-01a / 2-01a</b> I regularly select and listen to or watch texts which I enjoy and find interesting, and I can explain why I prefer certain sources.</p> <p>I regularly select subject, purpose, format and resources to create texts of my choice.</p>	<p><b>LIT 3-01a / 4-01a</b> I regularly select and listen to or watch texts for enjoyment and interest, and I can express how well they meet my needs and expectations, and I can give reasons, with evidence, for my personal response.</p> <p>I can regularly select subject, purpose, format and resources to create texts of my choice, and am developing my own style.</p>			
<p><b>TOOLS FOR LISTENING AND TALKING</b></p> <p>to help me when interacting or presenting within and beyond my place of learning</p>	<p><b>LIT 0-02a / ENG 0-03a / GAI 0-03a</b> As I listen and talk in different situations, I am learning to take turns and am developing my awareness of when to talk and when to listen.</p>	<p><b>LIT 1-02a</b> When I engage with others, I know when and how to listen, when to talk, how much to say, when to ask questions and how to respond with respect.</p>	<p><b>LIT 2-02a</b> When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking.</p>	<p><b>LIT 3-02a</b> When I engage with others, I can make a relevant contribution, encourage others to contribute and acknowledge that they have the right to hold a different opinion.</p> <p>I can respond in ways appropriate to my role and use contributions to reflect on, clarify or adapt thinking.</p>	<p><b>LIT 4-02a</b> When I engage with others I can make a relevant contribution, ensure that everyone has an opportunity to contribute and encourage them to take account of others' points of view or alternative solutions.</p> <p>I can respond in ways appropriate to my role, exploring and expanding on contributions to reflect on, clarify or adapt thinking.</p>	
<p><b>FINDING AND USING INFORMATION</b></p> <p>when listening to, watching and talking about texts with increasingly complex ideas, structures and specialist vocabulary</p>	<p><b>LIT 0-04a</b> I listen or watch for useful or interesting information and I use this to make choices or learn new things.</p>	<p><b>LIT 1-04a</b> As I listen or watch, I can identify and discuss the purpose, key words and main ideas of the text, and use this information for a specific purpose.</p>	<p><b>LIT 2-04a</b> As I listen or watch, I can identify and discuss the purpose, main ideas and supporting detail contained within the text, and use this information for different purposes.</p>	<p><b>LIT 3-04a</b> As I listen or watch, I can:</p> <ul style="list-style-type: none"> <li>▶ identify and give an accurate account of the purpose and main concerns of the text, and can make inferences from key statements</li> <li>▶ identify and discuss similarities and differences between different types of text</li> <li>▶ use this information for different purposes.</li> </ul>	<p><b>LIT 4-04a</b> As I listen or watch, I can:</p> <ul style="list-style-type: none"> <li>▶ clearly state the purpose and main concerns of a text and make inferences from key statements</li> <li>▶ compare and contrast different types of text</li> <li>▶ gather, link and use information from different sources and use this for different purposes.</li> </ul>	

These Gàidhlig Es & Os (0-02a to 4-02a) are additional to, not a replacement for, the row above

	<p><b>LIT 1-05a</b> As I listen or watch, I am learning to make notes under given headings and use these to understand what I have listened to or watched and create new texts.</p>	<p><b>LIT 2-05a</b> As I listen or watch, I can make notes, organise these under suitable headings and use these to understand ideas and information and create new texts, using my own words as appropriate.</p>	<p><b>LIT 3-05a / 4-05a</b> As I listen or watch, I can make notes and organise these to develop thinking, help retain and recall information, explore issues and create new texts, using my own words as appropriate.</p>		
	<p><b>LIT 1-06a</b> I can select ideas and relevant information, organise these in a logical sequence and use words which will be interesting and/or useful for others.</p>	<p><b>LIT 2-06a</b> I can select ideas and relevant information, organise these in an appropriate way for my purpose and use suitable vocabulary for my audience.</p>	<p><b>LIT 3-06a / 4-06a</b> can independently select ideas and relevant information for different purposes, organise essential information or ideas and any supporting detail in a logical order, and use suitable vocabulary to communicate effectively with my audience.</p>		
<p><b>UNDER-STANDING, ANALYSING AND EVALUATING</b></p> <p>investigating and/or appreciating texts with increasingly complex ideas, structures and specialist vocabulary for different purposes</p>	<p><b>LIT 0-07a / LIT 0-16a / ENG 0-17a / GAI 0-17a</b> To help me understand stories and other texts, I ask questions and link what I am learning with what I already know.</p>	<p><b>LIT 1-07a</b> I can show my understanding of what I listen to or watch by responding to and asking different kinds of questions.</p>	<p><b>LIT 2-07a</b> I can show my understanding of what I listen to or watch by responding to literal, inferential, evaluative and other types of questions, and by asking different kinds of questions of my own.</p>	<p><b>LIT 3-07a</b> I can show my understanding of what I listen to or watch by commenting, with evidence, on the content and form of short and extended texts.</p>	<p><b>LIT 4-07a</b> I can show my understanding of what I listen to or watch by giving detailed, evaluative comments, with evidence, about the content and form of short and extended texts.</p>
	<p><b>LIT 1-08a</b> To help me develop an informed view, I am learning to recognise the difference between fact and opinion.</p>	<p><b>LIT 2-08a</b> To help me develop an informed view, I can distinguish fact from opinion, and I am learning to recognise when my sources try to influence me and how useful these are.</p>	<p><b>LIT 3-08a</b> To help me develop an informed view, I am learning about the techniques used to influence opinion and how to assess the value of my sources, and I can recognise persuasion.</p>	<p><b>LIT 4-08a</b> To help me develop an informed view, I can identify some of the techniques used to influence or persuade and can assess the value of my sources.</p>	
<p><b>CREATING TEXTS</b></p> <p>applying the elements others use to create different types of short and extended texts with increasingly complex ideas, structures and vocabulary</p>	<p><b>LIT 0-09a</b> Within real and imaginary situations, I share experiences and feelings, ideas and information in a way that communicates my message.</p> <p><b>LIT 0-09b / LIT 0-31a</b> I enjoy exploring events and characters in stories and other texts and I use what I learn to invent my own, sharing these with others in imaginative ways.</p>	<p><b>LIT 1-09a</b> When listening and talking with others for different purposes, I can exchange information, experiences, explanations, ideas and opinions, and clarify points by asking questions or by asking others to say more.</p>	<p><b>LIT 2-09a</b> When listening and talking with others for different purposes, I can:</p> <ul style="list-style-type: none"> <li>▶ share information, experiences and opinions</li> <li>▶ explain processes and ideas</li> <li>▶ identify issues raised and summarise main points or findings</li> <li>▶ clarify points by asking questions or by asking others to say more.</li> </ul>	<p><b>LIT 3-09a</b> When listening and talking with others for different purposes, I can:</p> <ul style="list-style-type: none"> <li>▶ communicate information, ideas or opinions</li> <li>▶ explain processes, concepts or ideas</li> <li>▶ identify issues raised, summarise findings or draw conclusions.</li> </ul>	<p><b>LIT 4-09a</b> When listening and talking with others for different purposes, I can:</p> <ul style="list-style-type: none"> <li>▶ communicate detailed information, ideas or opinions</li> <li>▶ explain processes, concepts or ideas with some relevant supporting detail</li> <li>▶ sum up ideas, issues, findings or conclusions.</li> </ul>
	<p><b>LIT 0-10a</b> As I listen and take part in conversations and discussions, I discover new words and phrases which I use to help me express my ideas, thoughts and feelings.</p>	<p><b>LIT 1-10a</b> I can communicate clearly when engaging with others within and beyond my place of learning, using selected resources<sup>3</sup> as required.</p>	<p><b>LIT 2-10a / 3-10a</b> I am developing confidence when engaging with others within and beyond my place of learning. I can communicate in a clear, expressive way and I am learning to select and organise resources independently.</p>		<p><b>LIT 4-10a</b> I can communicate in a clear, expressive manner when engaging with others within and beyond my place of learning, and can independently select and organise appropriate resources as required.</p>

Responsibility of All

Es & Os in italics on a yellow background are the Responsibility of All practitioners.

<sup>3</sup> This may include images, objects, audio, visual or digital resources.

**NUMBER, MONEY AND MEASURE**

**ESTIMATION AND ROUNDING**

<b>E</b>	<p><b>MNU 0-01a</b> I am developing a sense of size and amount by observing, exploring, using and communicating with others about things in the world around me.</p>	<ul style="list-style-type: none"> <li>Recognises the number of objects in a group, without counting (subitising) and uses this information to estimate the number of objects in other groups.</li> <li>Checks estimates by counting.</li> <li>Demonstrates skills of estimation in the contexts of number and measure using relevant vocabulary, including less than, longer than, more than and the same.</li> </ul>
<b>1</b>	<p><b>MNU 1-01a</b> I can share ideas with others to develop ways of estimating the answer to a calculation or problem, work out the actual answer, then check my solution by comparing it with the estimate.</p>	<ul style="list-style-type: none"> <li>Uses strategies to estimate an answer to a calculation or problem, for example, doubling and rounding.</li> <li>Rounds whole numbers to the nearest 10 and 100 and uses this routinely to estimate and check the reasonableness of a solution.</li> </ul>
<b>2</b>	<p><b>MNU 2-01a</b> I can use my knowledge of rounding to routinely estimate the answer to a problem, then after calculating, decide if my answer is reasonable, sharing my solution with others.</p>	<ul style="list-style-type: none"> <li>Rounds whole numbers to the nearest 1000, 10 000 and 100 000.</li> <li>Rounds decimal fractions to the nearest whole number, to one decimal place and two decimal places.</li> <li>Applies knowledge of rounding to give an estimate to a calculation appropriate to the context.</li> </ul>
<b>3</b>	<p><b>MNU 3-01a</b> I can round a number using an appropriate degree of accuracy, having taken into account the context of the problem.</p>	<ul style="list-style-type: none"> <li>Rounds decimal fractions to three decimal places.</li> <li>Uses rounding to routinely estimate the answers to calculations.</li> </ul>
<b>4</b>	<p><b>MNU 4-01a</b> Having investigated the practical impact of inaccuracy and error, I can use my knowledge of tolerance when choosing the required degree of accuracy to make real-life calculations.</p>	<ul style="list-style-type: none"> <li>Rounds answers to a specified significant figure.</li> <li>Demonstrates that the context of the question needs to be considered when rounding.</li> <li>Demonstrates the impact of inaccuracy and error, for example, the impact of rounding an answer before the final step in a multi-step calculation.</li> <li>Uses a given tolerance to decide if there is an allowable amount of variation of a specified quantity, for example, dimensions of a machine part, 235 mm ± 1 mm.</li> </ul>

**NUMBER AND NUMBER PROCESSES**

<b>E</b>	<p><b>MNU 0-02a</b> I have explored numbers, understanding that they represent quantities and I can use them to count, create sequences and describe order.</p> <p><b>MNU 0-03a</b> I use practical materials and can 'count on and back' to help me to understand addition and subtraction, recording my ideas and solutions in different ways.</p>	<ul style="list-style-type: none"> <li>Explains that zero means there is none of a particular quantity and is represented by the numeral 0.</li> <li>Recalls the number sequence forwards within the range 0 - 30, from any given number.</li> <li>Recalls the number sequence backwards from 20.</li> <li>Identifies and recognises numbers from 0 to 20.</li> <li>Orders all numbers forwards and backwards within the range 0 - 20.</li> <li>Identifies the number before, the number after and missing numbers in a sequence within 20.</li> <li>Uses one-to-one correspondence to count a given number of objects to 20.</li> <li>Identifies 'how many?' in regular dot patterns, for example, arrays, five frames, ten frames, dice and irregular dot patterns, without having to count (subitising).</li> <li>Groups items recognising that the appearance of the group has no effect on the overall total (conservation of number).</li> <li>Uses ordinal numbers in real life contexts, for example, 'I am third in the line'.</li> <li>Uses the language of before, after and in-between.</li> <li>Counts on and back in ones to add and subtract.</li> <li>Doubles numbers to a total of 10 mentally.</li> <li>When counting objects, understands that the number name of the last object counted is the name given to the total number of objects in the group.</li> <li>Partitions quantities to 10 into two or more parts and recognises that this does not affect the total.</li> <li>Adds and subtracts mentally to 10.</li> <li>Uses appropriately the mathematical symbols +, - and =.</li> <li>Solves simple missing number problems.</li> </ul>
<b>1</b>	<p><b>MNU 1-02a</b> I have investigated how whole numbers are constructed, can understand the importance of zero within the system and can use my knowledge to explain the link between a digit, its place and its value.</p> <p><b>MNU 1-03a</b> I can use addition, subtraction, multiplication and division when solving problems, making best use of the mental strategies and written skills I have developed.</p>	<ul style="list-style-type: none"> <li>Reads, writes, orders and recites whole numbers to 1000, starting from any number in the sequence.</li> <li>Demonstrates understanding of zero as a placeholder in whole numbers to 1000.</li> <li>Uses correct mathematical vocabulary when discussing the four operations including, subtract, add, sum of, total, multiply, product, divide and shared equally.</li> <li>Identifies the value of each digit in a whole number with three digits, for example, <math>867 = 800 + 60 + 7</math>.</li> <li>Counts forwards and backwards in 2s, 5s, 10s and 100s.</li> <li>Demonstrates understanding of the commutative law, for example, <math>6 + 3 = 3 + 6</math> or <math>2 \times 4 = 4 \times 2</math>.</li> <li>Applies strategies to determine multiplication facts, for example, repeated addition, grouping, arrays and multiplication facts.</li> <li>Solves addition and subtraction problems with three digit whole numbers.</li> <li>Adds and subtracts multiples of 10 or 100 to or from any whole number to 1000.</li> <li>Applies strategies to determine division facts, for example, repeated subtraction, equal groups, sharing equally, arrays and multiplication facts.</li> <li>Uses multiplication and division facts to solve problems within the number range 0 to 1000.</li> <li>Multiplies and divides whole numbers by 10 and 100 (whole number answers only).</li> <li>Applies knowledge of inverse operations (addition and subtraction; multiplication and division).</li> <li>Solves two step problems.</li> </ul>

<p><b>MNU 2-02a</b> I have extended the range of whole numbers I can work with and having explored how decimal fractions are constructed, can explain the link between a digit, its place and its value.</p> <p><b>MNU 2-03a</b> Having determined which calculations are needed, I can solve problems involving whole numbers using a range of methods, sharing my approaches and solutions with others.</p> <p><b>MNU 2-03b</b> I have explored the contexts in which problems involving decimal fractions occur and can solve related problems using a variety of methods.</p>	<ul style="list-style-type: none"> <li>Reads, writes and orders whole numbers to 1 000 000, starting from any number in the sequence.</li> <li>Explains the link between a digit, its place and its value for whole numbers to 1 000 000.</li> <li>Reads, writes and orders sets of decimal fractions to three decimal places.</li> <li>Explains the link between a digit, its place and its value for numbers to three decimal places.</li> <li>Partitions a wide range of whole numbers and decimal fractions to three decimal places, for example, <math>3.6 = 3</math> ones and 6 tenths = 36 tenths.</li> <li>Adds and subtracts multiples of 10, 100 and 1000 to and from whole numbers and decimal fractions to two decimal places.</li> <li>Adds and subtracts whole numbers and decimal fractions to two decimal places, within the number range 0 to 1 000 000.</li> <li>Uses multiplication and division facts to the 10th multiplication table.</li> <li>Multiplies and divides whole numbers by multiples of 10, 100 and 1000.</li> <li>Multiplies and divides decimal fractions to two decimal places by 10, 100 and 1000.</li> <li>Multiplies whole numbers by two digit numbers.</li> <li>Multiplies decimal fractions to two decimal places by a single digit.</li> <li>Divides whole numbers and decimal fractions to two decimal places, by a single digit, including answers expressed as decimal fractions, for example, <math>43 \div 5 = 8.6</math>.</li> </ul>
<p><b>MTH 2-03c</b> Having explored the need for rules for the order of operations in number calculations, I can apply them correctly when solving simple problems.</p>	<ul style="list-style-type: none"> <li>Applies the correct order of operations in number calculations when solving multi-step problems.</li> </ul>
<p><b>MNU 2-04a</b> I can show my understanding of how the number line extends to include numbers less than zero and have investigated how these numbers occur and are used.</p>	<ul style="list-style-type: none"> <li>Identifies familiar contexts in which negative numbers are used.</li> <li>Orders numbers less than zero and locates them on a number line.</li> </ul>
<p><b>MNU 3-03a</b> I can use a variety of methods to solve number problems in familiar contexts, clearly communicating my processes and solutions.</p> <p><b>MNU 3-03b</b> I can continue to recall number facts quickly and use them accurately when making calculations.</p> <p><b>MNU 3-04a</b> I can use my understanding of numbers less than zero to solve simple problems in context.</p>	<ul style="list-style-type: none"> <li>Recalls quickly multiplication and division facts to the 10th multiplication table.</li> <li>Uses multiplication and division facts to the 12th multiplication table.</li> <li>Solves addition and subtraction problems working with whole numbers and decimal fractions to three decimal places.</li> <li>Solves addition and subtraction problems working with integers.</li> <li>Solves multiplication and division problems working with whole numbers and decimal fractions to three decimal places.</li> <li>Solves multiplication and division problems working with integers.</li> </ul>
<p><b>MNU 4-03a</b> Having recognised similarities between new problems and problems I have solved before, I can carry out the necessary calculations to solve problems set in unfamiliar contexts.</p> <p><b>MTH 4-03b</b> I have investigated how introducing brackets to an expression can change the emphasis and can demonstrate my understanding by using the correct order of operations when carrying out calculations.</p>	<ul style="list-style-type: none"> <li>Interprets and solves multi-step problems using the four operations.</li> <li>Applies the correct order of operations in all calculations, including those with brackets.</li> </ul>

**MULTIPLES, FACTORS AND PRIMES**

<p><b>No Experiences and Outcomes at Early or First Level</b></p>	
<p><b>MTH 2-05a</b> Having explored the patterns and relationships in multiplication and division, I can investigate and identify the multiples and factors of numbers.</p>	<ul style="list-style-type: none"> <li>Identifies multiples and factors of whole numbers and applies knowledge and understanding of these when solving relevant problems in number, money and measurement.</li> </ul>
<p><b>MTH 3-05a</b> I have investigated strategies for identifying common multiples and common factors, explaining my ideas to others, and can apply my understanding to solve related problems.</p> <p><b>MTH 3-05b</b> I can apply my understanding of factors to investigate and identify when a number is prime.</p>	<ul style="list-style-type: none"> <li>Identifies common multiples, including the lowest common multiple for whole numbers and can explain method used.</li> <li>Identifies common factors, including the highest common factor for whole numbers and can explain method used.</li> <li>Identifies prime numbers to 100 and can explain method used.</li> <li>Solves problems using multiples and factors.</li> <li>Writes a given number as a product of its prime factors.</li> </ul>
<p><b>No Experiences and Outcomes at Fourth Level</b></p>	