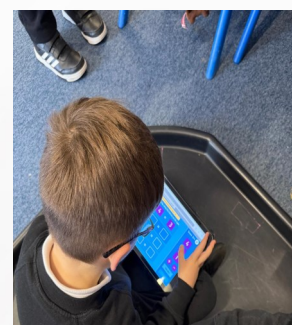
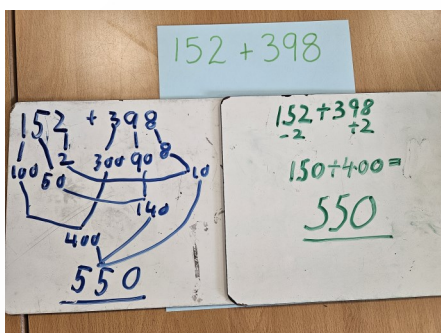
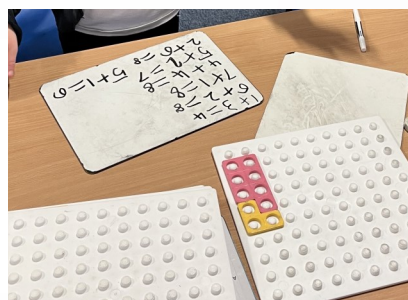
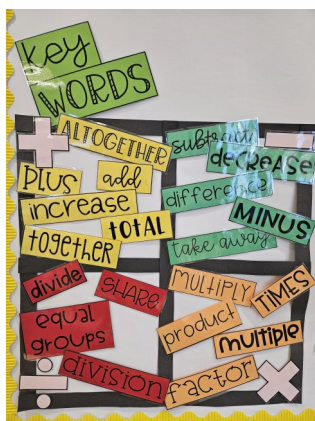




Crawforddyke Primary School

Numeracy and Mathematics Policy



"Numeracy is a skill for life, learning and work. Having well-developed numeracy skills allows young people to be more confident in social settings and enhances enjoyment in a large number of leisure activities. For these and many other reasons, all teachers have important parts to play in enhancing the numeracy skills of all children and young people."

(Curriculum for Excellence: Principles and Practice, Scottish Government, 2009)

At Crawforddyke Primary, we strive for children to become Confident Individuals, Responsible Citizens, Successful Learners and Effective Contributors. Our curriculum seeks to ensure we meet the principles of Curriculum for Excellence: challenge and enjoyment, breadth, progression, depth, personalisation and choice, relevance and coherence. We use a range of assessments to identify progress and achievement and the next steps for each individual learner. Learners receive regular feedback to help them understand what they need to do to improve. We prioritise the mental and emotional wellbeing of our pupils through a nurturing, all-inclusive approach to allow them to access their learning and be the best they can be.



We want our learners to be safe and happy while believing that with practise, perseverance and effort they can achieve, learn and grow. We promote a positive ethos and a shared approach to learning. Our vision supports our school motto 'Be Diligent' and encourages our pupils to keep on developing their growth mindset.


Successful Learners Effective Contributors Responsible Citizens Confident Individuals

Ethos and Life of the School

Crawforddyke School promotes a culture of respect, trust, and inclusivity, focusing on children's rights, wellbeing, and growth mindset. Pupils are encouraged to take on leadership roles and participate in extracurricular activities to help shape the school community. The school fosters a strong sense of identity and belonging, with pupils actively engaging in local events and traditions. A love of reading is emphasised, with pupils sharing their passion and achievements both within the school and the wider community. Partnerships and outreach efforts support literacy and reinforce the school's role as a hub of learning and inspiration.

Crawforddyke Primary

Our Curriculum




"We want our learners to be safe and happy while believing that with practice, perseverance and effort they can achieve, learn and grow."

Curriculum

At Crawforddyke, all learners receive a broad general education across eight curricular areas, designed to build on prior knowledge and deepen understanding. The school focuses on raising attainment in literacy and numeracy, providing targeted support and integrating these skills throughout learning. The eight key areas are: Language and Literacy, Numeracy and Mathematics, Health and Wellbeing, Social Studies, Expressive Arts, Religious and Moral Education, ICT and Technology, and Science. Staff prioritise closing the attainment gap by embedding literacy and numeracy in both individual subjects and interdisciplinary learning. A progressive, inclusive approach ensures all pupils gain confidence, skills, and success across their education.

Interdisciplinary Learning

Our curriculum emphasises interdisciplinary Learning (IDL), providing pupils with meaningful opportunities to connect different subject areas through a structured rolling programme. This approach is aligned with local and national contexts and includes events like P7 Transition activities and a whole-school sustainability topic. We've recently audited our IDL programme to ensure it covers all Experiences and Outcomes from Curriculum for Excellence, ensuring consistency and progression. Staff collaborate to plan high-quality, challenging, and enriching IDL experiences, allowing pupils to apply their learning creatively. The "say, write, make, do" approach encourages diverse methods of demonstrating understanding, fostering deeper engagement and critical thinking skills.



Opportunities for Personal Achievement

At Crawforddyke, every pupil has a Learning Journey profile that includes a Personal Learning Plan to track progress in literacy, numeracy, and health and wellbeing. Pupils reflect on their personal achievements, linking them to the four capacities of Curriculum for Excellence. Our approach focuses on equity and inclusion, offering targeted support through Nurture and PEF-funded interventions, along with a multi-agency approach to meet additional needs. Personal achievement is celebrated within the school culture, with regular opportunities for pupils to share their successes. Daily recognition and assemblies highlight achievements like Star Writer, Star Reader, and the Four Capacities, ensuring that all efforts are acknowledged.

Kind Caring Respectful Self-Confidence Courage Determination

Numeracy and Mathematics—A Curriculum for Excellence

"To face the challenges of the 21st century, each young person needs to have confidence in using mathematical skills, and Scotland needs both specialist mathematicians and a highly numerate population." (Building the Curriculum 1)

Numeracy and Mathematics is much more than just being able to solve written calculations. "Being able to think mathematically and apply mathematical skills involves; logical reasoning, investigation, discovery, invention, creation and modelling. It also develops the ability to hypothesise, justify and prove findings. Applying these skills to unfamiliar or complex problems helps build resilience in our learners as they can use their prior learning to break a problem down into simpler steps." (Framework for Numeracy and Mathematics)

Within our Numeracy and Mathematics curriculum, Curriculum for Excellence has outlined 3 key aspects within Numeracy and Mathematics which will be taught to children throughout their time at Primary school.

These are:

- Number, money and measure
- Shape, pattern and movement
- Information handling

Each area is then split into subcategories as follows:

Number, money and measure

- Estimating and Rounding
- Number and Number Processes
- Multiples, Factors and Primes
- Fractions, Decimal Fractions and Percentages
- Money
- Time
- Measurement
- Maths—It's impact on the world, past, present and future
- Patterns and Relationships
- Expressions and Equations

Shape, Position and Movement

- Properties of 2D shapes and 3D objects
- Angles, Symmetry and Transformation

Information Handling

- Data and Analysis
- Ideas of Chance and Uncertainty



Numeracy and Maths Curriculum Design

Mental Agility

At Crawforddyke Primary School, we believe that children should have daily opportunities to develop their mental agility using a range of different strategies. We do this through giving pupils the opportunity to participate in 15 minutes of Number Talks activities each day. During this time, teachers will demonstrate, model and provide opportunities for pupils to learn a range of different strategies as detailed in Appendix 1.

During a Number Talks session:

- The teacher will present pupils with a problem, usually differentiated through the use of a Chilli Challenge.
- Pupils will then have the opportunity to solve the problem mentally.
- Pupils show a visual cue (Appendix 2) when they have solved the problem using one strategy and encouraged to find another strategy whilst allowing pupils the appropriate think time to answer a question.
- The teacher asks for answers and records the correct and incorrect responses.
- Pupils share strategies and justifications for their answers with their peers.

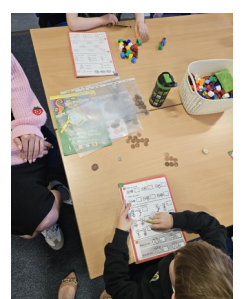
Core Numeracy and Mathematics

Pupil will engage in purposeful and meaningful Numeracy and Mathematics experiences 5 times per week. These lessons are based on the Curriculum for Excellence Experiences and Outcomes using South Lanarkshire Council's Progression Pathway. The progression pathway allows staff to plan and deliver lessons which meet national expectations. Teacher's take into account children's abilities and levels that they have achieved, through tracking and monitoring and pupils are grouped into ability groupings.

Through concept teaching, lessons will include valuable and direct high-quality teaching which includes key elements from South Lanarkshire Council's Pedagogy Palette. This will then lead to pupils engaging in tasks and activities suitable for their ability. Work will include a mix of verbal, concrete, pictorial, abstract, active, interactive and written activities where children should be encouraged to develop high order thinking, independence and confidence in their mathematical thinking.

At Crawforddyke Primary School we do not follow a specific scheme of work across the school, but rather adopt a variety of resources and strategies to deliver the Experiences and Outcomes of our Curriculum. Resources include:

- Scottish TeeJay
- Scottish Heinemann Maths
- Leckie and Leckie
- Numicon
- Sumdog
- Active and Interactive Games such as from Topmarks
- Teachers own resources
- The outdoor environment



Assessment, Tracking and Monitoring

Assessment in Numeracy is an integral part of teaching and learning. Future planning, teaching and reporting relies on the collection of robust evidence and data of progress in learning.

Formative assessment is embedded into the teaching and learning cycle at Crawforddyke Primary School. Children are informally assessed throughout the teaching process through effective questioning, Assessment is for Learning (AiFL) strategies and assessment of work produced using teacher, self and peer assessment. Summative assessment is used at the end of a concept to assess children's ability to understand, retain and apply concepts that have been taught. In May of each year, all children will complete a MALT assessment as well as P1,4 and 7 children completing SNSA's.

Assessment, tracking and monitoring will be gathered through a range of evidence:

- Oral questioning and dialogue
- Written work produced by the pupil in their jotter, worksheet or on a whiteboard
- Observation of practical activities
- Formal Assessments

Teachers track pupils progress through assessment grids in their forward plans and termly tracking and monitoring documents are completed alongside a meeting with the Senior Leadership to discuss progress and achievement. Parents/ guardians are informed of children's progress through parents evenings and formal written reports.

Support in Numeracy

Through ongoing tracking and monitoring of pupil's progress, learners may be identified who are in need of additional support in numeracy. This can be delivered in a range of ways. In the first instance, class teachers will deliver additional support through differentiated approaches, instruction and resources. Support may be given through the use of the additionality teacher or School Support Assistants (SSA). Additionally, 1-1 support may also be provided.

At Crawforddyke Primary School, we use the following resources to support numeracy:

- Maths Recovery Intervention Programme
- Numicon
- 5 Minute Number Box

At times, we may seek advice and support from our Specialist Support Teacher (SST) or our colleagues at Carluke High School.

If a child is deemed to require additional support in Numeracy using the above intervention programmes, parents/ guardians will be notified by the class teacher or a member of the Leadership Team.

Pupils' needs are met through the Staged Intervention process. (See Appendix 3)

Pupil's progress will continually be tracked, monitored and evaluated to ensure the appropriate support and challenge is in place and is having the desired impact.

Transition

Class teachers pass on information in June to new class teachers through transition notes, professional dialogue and tracking and monitoring documents which detail teacher professional judgement for each child along with their standardised score and maths age.

In Primary 1, information is passed on from our feeder early years establishments about a child. This helps to inform teaching experiences at the early stages of Primary 1. Support is given to families about our curriculum through the P1 Learning Together Padlet which signposts parents to useful resources which can develop children's mathematical knowledge and thinking. Parents are also invited to a P1 Curriculum Information Evening in September where the Senior Leadership Team and P1 teachers provide parents/ guardians with information about how Numeracy and Mathematics is taught in Primary 1 and what to expect from the curriculum. Parents and guardians are invited to a 6-week series of Family Learning Workshops in Term 1 called "Multiply (You + Me)". The programme is designed to increase parents number knowledge and support them to support their child's numeracy development through the early stages of Primary School. The programme consisted of 4 x 1 hour sessions with a mix of adult directed learning followed by 20 minutes where the children were invited in to work alongside their parents, developing their new skills

In Primary 7, information about the level in which a child has achieved is shared with the High School which they are transitioning to.



Appendix 1

Addition

Adding Up in Chunks/Counting On $37 + 48$ 	Reordering $25 + 26 + 75$ $100 + 26 = 126$	Place Value - Partitioning $116 + 127$ $100 + 100 = 200$ $10 + 20 = 30$ $6 + 7 = 13$ $200 + 30 + 13 = 243$	Making Tens/Bridging through 10 $49 + 38$ $50 + 37 = 87$
Compensation $67 + 28$ $+2$ $67 + 30 = 97$ $97 - 2 = 95$	Doubles/Near Doubles $16 + 17$ $16 + 16 = 32$ $32 + 1 = 33$	Friendly Numbers $28 + 47$ $+2 \quad -2$ $30 + 45 = 75$	Bridging through 60 <p>How many minutes is it to the next hour?</p>





Subtraction

Removal or Counting Back $123 - 69$ $123 - (20 + 40 + 3 + 6)$ $123 - 20 = 103$ $103 - 40 = 63$ $63 - 3 = 60$ $60 - 6 = 54$	Reordering $25 - 6 - 5$ $20 - 6 = 14$	Place Value - Partitioning $367 - 154$ $367 - 100 = 267$ $267 - 50 = 217$ $217 - 4 = 213$ $367 - 100 - 50 - 4 = 213$	Adding Up/Bridging through 10 $23 - 16$ $16 + 4 = 20$ $20 + 3 = 23$
Place Value & Negative Numbers $399 - 254$ $(300 + 90 + 9) - (200 + 50 + 9)$ $300 + 90 + 9$ $- 200 + 50 + 4$ $100 + 40 + 5 = 145$	Adjusting for Easier Numbers $123 - 59$ $+1$ $123 - 60 = 63$ $63 + 1 = 64$	Keep a Constant Difference $151 - 98$ $(151 + 2) - (98 + 2)$ $153 - 100 = 53$ $151 - 98 = 53$	

Multiplication & Division

<p><u>Friendly Numbers</u></p> <p>9 × 15</p> <p>10 × 15 = 150 150 - 15 = 135</p> <p>Don't forget to 'undo' your change!</p>	<p><u>Repeated Addition</u></p> <p>6 × 15</p> <p>15+15+15+15+15+15 15 + 15 = 30 30 + 15 = 45 45 + 15 = 60 60 + 15 = 75 75 + 15 = 90</p>	<p><u>Partial Products</u></p> <p>6 × 125</p> <p>6 × (100 + 20 + 5) (6×100) + (6×20) + (6×5) 600 + 120 + 30 = 750</p>	<p><u>Doubling and Halving</u></p> <p>24 × 8 x2 +2 48 × 4 x2 +2 96 × 2 x2 +2 192</p>						
<p><u>Breaking Factors into Smaller Factors</u></p> <p>12 × 25</p> <p>2 × 6 2 × 25 = 50 50 × 6 = 300</p>	<p><u>Grid Method</u></p> <p>35 × 7</p> <table border="1"> <tr> <td>×</td> <td>30</td> <td>5</td> </tr> <tr> <td>7</td> <td>210</td> <td>35</td> </tr> </table> <p>210 + 35 = 245</p>	×	30	5	7	210	35	<p><u>Partial Quotients</u></p> <p>18 550 $\underline{-180}$ (10 × 18) 400 $\underline{-360}$ (20 × 18) 100 $\underline{-90}$ (5 × 18) 10 $\underline{-10}$ (1 × 18) 0</p>	<p><u>Multiplying Up</u></p> <p>72 ÷ 8</p> <p>8 × 5 = 40 8 × 4 = 32 (5 + 4) = (40 + 32) 8 × 9 = 72</p>
×	30	5							
7	210	35							
<p><u>Repeated Subtraction</u></p> <p>24 ÷ 6 24 - 6 - 6 - 6 - 6 <u>6 × 4 = 24 so 24 ÷ 6 = 4</u></p>									

Appendix 2

Number Talks Hand Signals	
Signal-	Meaning
 <p>The students hold their hand by their chest to show the signal so it doesn't distract from others.</p>	Thumb up "I've got the answer."
	Thumb sideways "No answer yet, but I've got a strategy."
	Forefinger and thumb "I have two strategies." If a student finds more than two strategies, then more fingers are up.
 <p>students shake hand back and forth</p>	Thumb and pinky finger "I agree."

Appendix 3

