

<p>Number Strategies</p> <p>Level 5 Strand: Number and Algebra Time: 3 Weeks</p>		
<p>Key Competencies:</p>	<p>Achievement Objectives:</p>	<p>Learning Outcomes:</p>
<p>Thinking</p> <ul style="list-style-type: none"> • Problem solving using Order of Operations • Investigating a sequence of numbers to find a rule or an application. 	<p>Number and Algebra</p> <ul style="list-style-type: none"> • Know commonly used fraction, decimal and percentage conversions. • Generalise the properties of operations with fractional numbers and integers. 	<p>Specific Strategies Resources</p> <ul style="list-style-type: none"> • Numeracy project activities • Ten ticks activities as listed below
<p>Literacy: using language, symbols and texts:</p> <ul style="list-style-type: none"> • Apply basic calculation operations in context. • Translate a quantity into another form (eg from or to decimal, percentage, fraction, etc) 	<p>Purpose</p> <ul style="list-style-type: none"> • To use order of operations correctly. • To develop number knowledge, recognising value and equivalence of a number in decimal, percentage and fraction form. • To be able to solve simple number calculations in a variety of situations. 	<p>Relevant tasks/activities/content</p> <ul style="list-style-type: none"> • Investigation using number, generalising with algebraic expressions for extension. • Apply mathematical operations to a variety of practical situations. • To be able to recognise and to express a value in a variety of forms.
<p>Relating to others:</p> <ul style="list-style-type: none"> • Formulating and describing a technique used to solve a problem 		

Key Vocabulary:

Fraction, Decimal, Percentage, Integer, Whole Number, Natural Number, Rational Number, Real Number, Operation, Addition, Subtraction, Multiplication, Division

Assessment:

Diagnostic What do they know? What can they know?	Formative What are they learning? What do they need to learn?	Summative What have they learned? Can students articulate how they learned it? Student evaluation/reflection
<ul style="list-style-type: none">• Numeracy Project Testing• knowledge Pre-testing, e-AsTTle	<ul style="list-style-type: none">• Small, regular, marked activities within the unit providing regular individual feedback.	<ul style="list-style-type: none">• E-AsTTle retesting• Class summative topic activity

Suggested Teaching Order:

1. The number line, adding and subtracting, referring to integers particularly
2. Products and factors
3. Prime numbers
4. Order of operations
5. Number investigations

Extension:

Parallel techniques used with number to those used in algebra

Extra Help:

Numeracy project activities

Extra 10ticks concept development activities such as add-on-agons