

MATHEMATICS - GRADE 8 2017

| TOPIC | ASSESSMENT STANDARDS | PORTFOLIO ASSESSMENT TASKS |
|---|---|---|
| PHASE 1 (11 January 2016 – 31 March 2017) | | |
| Numbers, Operations and relationships | Multiples and factors | <p>☞ Task 1 Investigation – Fractions 6 – 10 Feb</p> <p>☞ Task 2 March control test: 22 – 31 March</p> |
| | Integers | |
| | Fractions | |
| | Additive and multiplicative inverses | |
| Techniques, Strategies in calculations | Exponents: laws, simple calculations, scientific notation | |
| | Calculator usage, rounding, estimation | |
| | Multiple operations | |
| Patterns, Functions, Algebra | Classification of like and unlike terms | |
| | Addition and subtraction | |
| PHASE 2 (18 April 2016 – 30 June 2017) | | |
| Patterns, Functions, Algebra | Multiplying and dividing monomials | <p>☞ Task 3 Investigation – Patterns, Functions and Algebra: 15 – 19 May</p> <p>☞ Task 4 June Exam: 19 – 30 Jun</p> |
| | Simplification with brackets | |
| | Expressions: simplification and combined operations | |
| Equations | Solving by: inspection, trial and improvement, algebra | |
| | Checking roots by substitution | |
| Space and shape: Geometry | Intersecting, parallel and perpendicular lines | |
| | Constructions (protractor techniques and constructing lines and angles) | |
| | Triangles: types and side and angle relationships | |
| | Theorem of Pythagoras | |
| PHASE 3 (24 July 2016 – 10 November 2017) | | |
| Space and shape: Lengths, perimeter and area | Triangles | <p>☞ Task 5 Project – data handling: 31 July – 4 Aug</p> <p>☞ Task 6 Controlled Test 11 – 15 Sept</p> <p>☞ Task 7 October Exam 30 Oct – 10 Nov</p> |
| | Quadrilaterals and other polygons | |
| | Circles | |
| | Estimation and calculators | |
| | Relevant unit conversions | |
| Graphs | Drawing graphs | |
| | Recognising linear vs non-linear and discrete vs continuous | |
| | Use of terms: maximum, minimum, increasing, decreasing | |
| Transformations | Defining: translation, rotation, reflection | |
| | Using symmetry to investigate geometric figures | |
| Financial calculations | Profit and loss | |
| | Simple interest, loans, hire-purchase | |
| Consolidation | Revision of all assessment standards | |