**Key skills – Level 2**

**Number**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Topic | Video | Task |
| Standard Form | Convert from ordinary numbers to standard form | <https://www.youtube.com/watch?time_continue=428&v=iY-fARuYciI&feature=emb_logo> | [Large numbers](https://www.transum.org/software/SW/Starter_of_the_day/Students/Standard_FormB.asp?Level=4)[Small numbers](https://www.transum.org/software/SW/Starter_of_the_day/Students/Standard_FormB.asp?Level=5)[Mixture](https://www.transum.org/software/SW/Starter_of_the_day/Students/Standard_FormB.asp?Level=6) |
| Convert from standard form to ordinary numbers  | <https://www.youtube.com/watch?time_continue=428&v=iY-fARuYciI&feature=emb_logo> | [Large numbers](https://www.transum.org/software/SW/Starter_of_the_day/Students/Standard_Form.asp?Level=1)[Small numbers](https://www.transum.org/software/SW/Starter_of_the_day/Students/Standard_Form.asp?Level=2)[Mixture](https://www.transum.org/software/SW/Starter_of_the_day/Students/Standard_Form.asp?Level=3) |
| Multiply and divide standard form | <https://www.youtube.com/watch?v=-stF6pUCckA&feature=emb_logo> | [Multiply](https://www.mathsworkout.co.uk/topics/standardform/multiplying/index.php)[Divide](https://www.mathsworkout.co.uk/topics/standardform/dividing/index.php)  |
| Add and subtract in standard form  | <https://www.youtube.com/watch?v=osuaAyyg1bY&feature=emb_title> | [Add](https://www.mathsworkout.co.uk/topics/standardform/adding/index.php) [Subtract](https://www.mathsworkout.co.uk/topics/standardform/subtracting/index.php) |
| Bounds | Bounds | <https://www.youtube.com/watch?v=t1Ze9RvxWP0> | [Level 3](https://www.transum.org/Maths/Exercise/Bounds.asp?Level=3)[Level 4](https://www.transum.org/Maths/Exercise/Bounds.asp?Level=4)[Level 5](https://www.transum.org/Maths/Exercise/Bounds.asp?Level=5)[Exam Questions](https://www.transum.org/Maths/Exam/Online_Exercise.asp?NaCu=102) |
| Surds | Simplify surds and multiply | <https://www.youtube.com/watch?v=ndU_cCbPAm4&feature=emb_logo> | [Simplify](https://www.mathsworkout.co.uk/topics/surds1.php)Target 2 and Target 3 |
| Add and subtract surds | <https://www.youtube.com/watch?v=KGEt3H06L4g&feature=emb_logo> | [Add and subtract](https://www.mathsworkout.co.uk/topics/surds1.php) - Target 4 |
| Expand brackets with surds | <https://www.youtube.com/watch?v=n5dlWeOZh0Q&feature=emb_logo> | [Brackets](https://www.mathsworkout.co.uk/topics/surds1.php) - Target 5 |
| Rationalise denominator  | <https://www.youtube.com/watch?v=96SwZpRvhwY&feature=emb_logo> | [Level 1](https://www.mathsworkout.co.uk/topics/surds2.php) - Target 2[Level 2](https://www.mathsworkout.co.uk/topics/surds2.php) - Target 4[Level 3](https://www.mathsworkout.co.uk/topics/surds2.php) - Target 5 |

**Algebra**

|  |  |  |  |
| --- | --- | --- | --- |
| Quadratics | Expanding double brackets | “[How we do Maths’](How%20we%20do%20Maths.docx) video available  | [Level 1](https://www.transum.org/software/SW/Starter_of_the_day/Students/Brackets.asp?Level=6)[Level 2](https://www.transum.org/software/SW/Starter_of_the_day/Students/Brackets.asp?Level=7)[Level 3](https://www.transum.org/software/SW/Starter_of_the_day/Students/Brackets.asp?Level=8) |
| Factorising quadratics | “[How we do Maths’](How%20we%20do%20Maths.docx) video available  | [Factorise](https://www.transum.org/software/SW/Starter_of_the_day/Students/Factorising.asp?Level=7)  |
| Solve by factorising  | “[How we do Maths’](How%20we%20do%20Maths.docx) video available | [Solve by factorising](https://www.transum.org/software/SW/Starter_of_the_day/Students/Quadratic.asp?Level=3)  |
| Use quadratic formula | <https://www.youtube.com/watch?v=3J0ccr74LcU&feature=emb_logo> | [Solve using quadratic formula](https://www.transum.org/software/SW/Starter_of_the_day/Students/Quadratic.asp?Level=4)  |

**Data handling**

|  |  |  |  |
| --- | --- | --- | --- |
| Averages | Averages from tables | “[How we do Maths’](How%20we%20do%20Maths.docx) video available  | [Frequency tables](https://www.transum.org/software/SW/Starter_of_the_day/Students/Averages.asp?Level=5)[Grouped frequency tables](https://www.transum.org/software/SW/Starter_of_the_day/Students/Averages.asp?Level=6) |

**Space shape and Measure**

|  |  |  |  |
| --- | --- | --- | --- |
| Circles | Area & circumference | Area <https://www.youtube.com/watch?v=Of8p1SfOcR0&feature=emb_logo>Circumference<https://www.youtube.com/watch?v=GColEqg8E9Q&feature=emb_logo> | [Circumference 1](https://www.transum.org/software/SW/Starter_of_the_day/Students/Circles.asp?Level=1)[Circumference 2](https://www.transum.org/software/SW/Starter_of_the_day/Students/Circles.asp?Level=2)[Area 1](https://www.transum.org/software/SW/Starter_of_the_day/Students/Circles.asp?Level=3)[Area 2](https://www.transum.org/software/SW/Starter_of_the_day/Students/Circles.asp?Level=4) |
| Arcs and sectors | Area of sector:<https://www.youtube.com/watch?v=jmFw7xZNZ_I&feature=emb_logo>Perimeter/Arc length:<https://www.youtube.com/watch?v=XGhc_4ilUko&feature=emb_logo> | [Sectors](https://www.transum.org/software/SW/Starter_of_the_day/Students/Circles.asp?Level=5)  |
| Application |  | [Real life problems](https://www.transum.org/software/SW/Starter_of_the_day/Students/Circles.asp?Level=6) |
| Angles | Parallel lines | <https://www.youtube.com/watch?v=mM-PU6hmkrg&feature=emb_logo> | [Alternate angles](https://www.transum.org/software/SW/Starter_of_the_day/Students/AngleParallel.asp?Level=1)[Corresponding angles](https://www.transum.org/software/SW/Starter_of_the_day/Students/AngleParallel.asp?Level=2)[Mixed](https://www.transum.org/software/SW/Starter_of_the_day/Students/AngleParallel.asp?Level=3)  |
| Polygons  | <https://www.youtube.com/watch?v=gVo8ZrtlSp0&feature=emb_logo> | [Interior and exterior](https://www.mathsworkout.co.uk/topics/anglesinapolygon.php)  |