## Year 9 Term 1

| Learning <br> Aim | Developing | Securing | Mastering |
| :---: | :---: | :---: | :---: |
| Number | Order decimals and negative integers Four operations, Rounding Prime, power, roots, HCF, LCM | Order mixed numbers <br> Solve complex problems (4 ops) <br> Estimating complex problems <br> Prime factorisation to work out HCF and LCM | Complex question that mix number type and extend in to BIDMAS <br> Understand error intervals <br> Apply and interpret limits of accuracy |
| Examples | Order 0.403, 0.4, 0.430, 0.04 $\frac{4}{5}+\frac{5}{8}=4.38 \times 36=-30+7=$ <br> Round 47523 to nearest 100 , Round 3.472 to 1 dp Write the first 5 prime numbers Write the HCF of 16 and 36 | Order the following numbers in ascending order $0.54, \frac{2}{3}, \frac{4}{5}, 1.5,0.3$ <br> Estimate $\frac{15.4 \times 38.9}{8.32-2.2^{2}}$ <br> Write the prime factorisation for 120 | $3 \frac{1}{4} \div 0.6 \times\left(3.8-1 \frac{1}{4}\right)=$ <br> A number has been rounded to 4.7, write the error interval |
| Area/ <br> Perimeter/ <br> Volume | Apply formula to trapezium. Calculate Volume and surface are of cuboids and prisms Problem solve compound shapes involving rectangles and triangles | Apply formula to calculate area and circumference of circle, volume and surface area of cylinder and all other prisms. Use M/D/V formula | Apply knowledge to functional skill questions. Area \& perimeter of sectors Area and perimeter of compound shapes with arcs. Bounds. |
| Examples | Given the surface area, find $x$ : <br> Q1) | The diagram below shows a section of a hosepipe with uniform radius. <br> a) Find the maximum volume of water that can fit in the section of hosepipe at once. | Find the sector area $(2 d p)$ : <br> Q1) |

## Extension opportunities

## 1/2absinC

## Bounds

Recurring decimals to fractions
Negative \& fractional indices

You can find practice on all the topics taught this term at Mathsworkout.co.uk. Login: sarum. Password: solid92

Go to Geometry; section 10.12 \& 13. Number; section 02,05,06,07,07,09,10,11, 12, 16 \& 20 Choosing the right level of difficulty for you within each topic area.

