Year 10 - Maths - Spring 2

| Unit 11 - loci |  |  |
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| No. | Question | Answer |
| 11.1 | The four tests for <br> congruence are | SSS <br> ASA <br> SAS <br> RASH |
| 11.2 | Triangles are <br> similar if... | All angles are the same (AAA) <br> They are an enlargement of <br> each other |


| Unit 10 - volume and surface area |  |  |
| :---: | :---: | :---: |
| No. | Question | Answer |
| 10.1 | What is the area of a rectangle? |  |
| 10.2 | What is the area of a triangle? | $=\frac{1}{2}$ base x perpendicular height |
| 10.3 | What is the area of a trapezium? | $\frac{1}{2}(a+b) \times h$ <br> "Half the sum of the parallel sides times the difference between them" |
| 10.4 | What is the area of a parallelogram? | =base x perpendicular height |
| 10.5 | What is a prism? | A 3D solid which has the same 2D shape running all the way through it |
| 10.6 | What is the volume of a prism? | Area of cross section x length |
| 10.7 | How do you find the surface area of a 3D solid? | The sum of the area of all the 2D faces |
| 10.8 | What is the volume of a cone? | $\frac{1}{3} \pi r^{2} h$ |
| 10.9 | How do you find the surface area of a cone? | $\pi r l+\pi r^{2}$ |
| 10.10 | How do you find the volume of a square based pyramid? | $=\frac{1}{3} \times \text { area of base } \times h$ |
| 10.11 | What is the volume of a sphere? | $\frac{4}{3} \pi r^{3}$ |
| 10.12 | What is the surface area of a sphere? | $4 \pi r^{2}$ |
| 10.13 | Area scale factor | $\mathrm{LSF}^{2}$ |
| 10.14 | Volume scale factor | LSF ${ }^{3}$ |


| Unit H12 - further trigonometry (HIGHER ONLY) |  |  |
| :---: | :--- | :---: |
| No. | Question | Answer |
| 12.1 | Cosine Rule | $\mathrm{a}^{2}=\mathrm{b}^{2}+\mathrm{c}^{2}-2 \mathrm{bc} \cos \mathrm{A}$ |
| 12.2 | Area of a <br> triangle | Area $=\frac{1}{2} \mathrm{absinC}$ |
| 12.3 | Sine Rule | $\frac{a}{\sin A}=\frac{b}{\sin B}=\frac{c}{\sin C}$ |


| Date (week commencing) | Numbers to learn |
| :--- | :--- |
| $25^{\text {th }}$ Feb | 9.1 |
| $4^{\text {th }}$ Mar | $10.1-10.7$ |
| $11^{\text {th }}$ Mar | $10.8-10.14$ |
| $18^{\text {th }}$ Mar | $10.8-11.2$ |
| $25^{\text {th }}$ Mar | $11.1-12.3$ |
| $1^{\text {st }}$ Apr | $9.1-12.3$ |

