

# Year 10 Maths Oak Academy Work – Spring Term 1

## FOUNDATION:

Unit: FSSM1	
Plans and elevations	<a href="http://corbettmaths.com/2014/01/16/views-and-elevations/">http://corbettmaths.com/2014/01/16/views-and-elevations/</a>
Nets	<a href="https://classroom.thenational.academy/lessons/nets-of-cubes-crtp4d">https://classroom.thenational.academy/lessons/nets-of-cubes-crtp4d</a>
Parallel lines and angles	<a href="https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-one-transversal-cgukgt">https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-one-transversal-cgukgt</a>
	<a href="https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-two-transversals-6ww66t">https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-two-transversals-6ww66t</a>
Angles in a triangle, quadrilateral, straight lines and points	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-around-a-point-and-on-a-straight-line-c9k32c">https://classroom.thenational.academy/lessons/find-missing-angles-around-a-point-and-on-a-straight-line-c9k32c</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-triangle-6cvk4t">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-triangle-6cvk4t</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-quadrilateral-6gukar">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-quadrilateral-6gukar</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-special-quadrilateral-6gtk4d">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-special-quadrilateral-6gtk4d</a>
Properties of shapes	<a href="https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee">https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee</a>
	<a href="https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c">https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c</a>
	<a href="https://classroom.thenational.academy/lessons/classifying-triangles-6rv3cc">https://classroom.thenational.academy/lessons/classifying-triangles-6rv3cc</a>

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	<a href="https://classroom.thenational.academy/lessons/comparing-quadrilaterals-cmt66t">https://classroom.thenational.academy/lessons/comparing-quadrilaterals-cmt66t</a>
	<a href="https://classroom.thenational.academy/lessons/internal-angles-in-a-quadrilateral-cguk8t">https://classroom.thenational.academy/lessons/internal-angles-in-a-quadrilateral-cguk8t</a>
Solving equations in angle and shape problems	<a href="http://corbettmaths.com/2013/04/20/forming-equations-involving-perimeter-or-angles/">http://corbettmaths.com/2013/04/20/forming-equations-involving-perimeter-or-angles/</a>
Angles in regular polygons	<a href="https://classroom.thenational.academy/lessons/find-missing-exterior-angles-cgu64e">https://classroom.thenational.academy/lessons/find-missing-exterior-angles-cgu64e</a>
	<a href="https://classroom.thenational.academy/lessons/solve-problems-involving-exterior-angles-6wrkgd">https://classroom.thenational.academy/lessons/solve-problems-involving-exterior-angles-6wrkgd</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-exterior-angles-of-polygons-64t38r">https://classroom.thenational.academy/lessons/find-missing-exterior-angles-of-polygons-64t38r</a>
	<a href="https://classroom.thenational.academy/lessons/finding-the-sum-of-interior-angles-in-a-polygon-ctk30e">https://classroom.thenational.academy/lessons/finding-the-sum-of-interior-angles-in-a-polygon-ctk30e</a>
Measuring and drawing angles	<a href="https://classroom.thenational.academy/lessons/measuring-and-drawing-angles-cnk38d">https://classroom.thenational.academy/lessons/measuring-and-drawing-angles-cnk38d</a>
Scale drawings	<a href="http://corbettmaths.com/2013/11/13/maps-scales/">http://corbettmaths.com/2013/11/13/maps-scales/</a>

<b>Unit: FSSM2</b>	
Symmetries	<a href="https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee">https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee</a>
	<a href="https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c">https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c</a>
Translations	<a href="https://classroom.thenational.academy/lessons/translation-ccv30e">https://classroom.thenational.academy/lessons/translation-ccv30e</a>

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Rotations	<a href="https://classroom.thenational.academy/lessons/rotation-cgvk0t">https://classroom.thenational.academy/lessons/rotation-cgvk0t</a>
	<a href="https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-coordinate-6gr66r">https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-coordinate-6gr66r</a>
Reflections	<a href="https://classroom.thenational.academy/lessons/reflection-6gw38t">https://classroom.thenational.academy/lessons/reflection-6gw38t</a>
	<a href="https://classroom.thenational.academy/lessons/combining-reflections-c9j38c">https://classroom.thenational.academy/lessons/combining-reflections-c9j38c</a>
Enlargements	<a href="https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-c4v3gc">https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-c4v3gc</a>
	<a href="https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-from-a-given-coordinate-6rup8d">https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-from-a-given-coordinate-6rup8d</a>
Similar shapes	<a href="https://classroom.thenational.academy/lessons/identify-similar-shapes-and-show-shapes-are-similar-6rtkgt">https://classroom.thenational.academy/lessons/identify-similar-shapes-and-show-shapes-are-similar-6rtkgt</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-separate-shapes-6wvk8c">https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-separate-shapes-6wvk8c</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-shapes-which-have-sides-overlapping-ctjkac">https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-shapes-which-have-sides-overlapping-ctjkac</a>
Using congruent triangles	<a href="https://classroom.thenational.academy/lessons/identify-congruent-shapes-6mwkcc">https://classroom.thenational.academy/lessons/identify-congruent-shapes-6mwkcc</a>

<b>Unit: FSSM3</b>	
Metric Conversions	<a href="https://classroom.thenational.academy/lessons/convertng-between-metric-units-of-length-6cu3cc">https://classroom.thenational.academy/lessons/convertng-between-metric-units-of-length-6cu3cc</a>

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	<a href="https://classroom.thenational.academy/lessons/solving-problems-involving-converting-between-metric-units-of-length-cmwk6c">https://classroom.thenational.academy/lessons/solving-problems-involving-converting-between-metric-units-of-length-cmwk6c</a>
	<a href="https://classroom.thenational.academy/lessons/converting-between-units-of-metric-mass-6ww38d">https://classroom.thenational.academy/lessons/converting-between-units-of-metric-mass-6ww38d</a>
Perimeter	<a href="https://classroom.thenational.academy/lessons/perimeter-of-polygons-and-compound-shapes-65k3jt">https://classroom.thenational.academy/lessons/perimeter-of-polygons-and-compound-shapes-65k3jt</a>
Area of rectangle, triangle, parallelogram, trapezium	<a href="https://classroom.thenational.academy/lessons/area-of-rectangles-parallelograms-and-triangles-71jp8c">https://classroom.thenational.academy/lessons/area-of-rectangles-parallelograms-and-triangles-71jp8c</a>
	<a href="https://classroom.thenational.academy/lessons/area-of-a-trapezium-70r34c">https://classroom.thenational.academy/lessons/area-of-a-trapezium-70r34c</a>
Parts of a Circle	<a href="https://classroom.thenational.academy/lessons/parts-of-a-circle-cmwp8d">https://classroom.thenational.academy/lessons/parts-of-a-circle-cmwp8d</a>
Area and circumference of circles	<a href="https://classroom.thenational.academy/lessons/find-the-circumference-of-a-circle-c4tp6e">https://classroom.thenational.academy/lessons/find-the-circumference-of-a-circle-c4tp6e</a>
Properties of 3D shapes	<a href="https://classroom.thenational.academy/lessons/3-d-shapes-crw2c">https://classroom.thenational.academy/lessons/3-d-shapes-crw2c</a>
Surface area of prisms	<a href="https://classroom.thenational.academy/lessons/finding-the-surface-area-of-cubes-and-cuboids-6nh68c">https://classroom.thenational.academy/lessons/finding-the-surface-area-of-cubes-and-cuboids-6nh68c</a>
	<a href="https://classroom.thenational.academy/lessons/finding-the-surface-area-of-triangular-prisms-6dh3ae">https://classroom.thenational.academy/lessons/finding-the-surface-area-of-triangular-prisms-6dh3ae</a>
Volume of a cuboid, prism	<a href="https://classroom.thenational.academy/lessons/volume-of-cubes-and-cuboids-6hhk6r">https://classroom.thenational.academy/lessons/volume-of-cubes-and-cuboids-6hhk6r</a>

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	<a href="https://classroom.thenational.academy/lessons/finding-the-volume-of-triangular-prisms-6cukgd">https://classroom.thenational.academy/lessons/finding-the-volume-of-triangular-prisms-6cukgd</a>
Compound units	<a href="https://classroom.thenational.academy/lessons/use-and-apply-the-speed-formula-6xi3jd">https://classroom.thenational.academy/lessons/use-and-apply-the-speed-formula-6xi3jd</a>

Unit: FSSM4	
Pythagoras' theorem	<a href="https://classroom.thenational.academy/lessons/know-and-understand-pythagoras-theorem-70vp4t">https://classroom.thenational.academy/lessons/know-and-understand-pythagoras-theorem-70vp4t</a>
	<a href="https://classroom.thenational.academy/lessons/find-the-length-of-the-hypotenuse-6xgk6t">https://classroom.thenational.academy/lessons/find-the-length-of-the-hypotenuse-6xgk6t</a>
	<a href="https://classroom.thenational.academy/lessons/find-the-length-of-the-shorter-side-6ru6ce">https://classroom.thenational.academy/lessons/find-the-length-of-the-shorter-side-6ru6ce</a>
	<a href="https://classroom.thenational.academy/lessons/mixture-of-finding-a-missing-length-6mwp6r">https://classroom.thenational.academy/lessons/mixture-of-finding-a-missing-length-6mwp6r</a>
	<a href="https://classroom.thenational.academy/lessons/use-pythagoras-theorem-to-show-that-a-triangle-is-right-angled-6hhk4r">https://classroom.thenational.academy/lessons/use-pythagoras-theorem-to-show-that-a-triangle-is-right-angled-6hhk4r</a>
Calculating with column vectors	<a href="https://classroom.thenational.academy/lessons/write-a-column-vector-from-a-diagram-74tkce">https://classroom.thenational.academy/lessons/write-a-column-vector-from-a-diagram-74tkce</a>
	<a href="https://classroom.thenational.academy/lessons/add-two-column-vectors-including-diagrams-to-give-a-resultant-vector-6xgp2d">https://classroom.thenational.academy/lessons/add-two-column-vectors-including-diagrams-to-give-a-resultant-vector-6xgp2d</a>

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	<a href="https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-1-chjp2t">https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-1-chjp2t</a>
	<a href="https://classroom.thenational.academy/lessons/multiply-a-vector-by-a-scalar-64u3cr">https://classroom.thenational.academy/lessons/multiply-a-vector-by-a-scalar-64u3cr</a>
	<a href="https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-2-61k38e">https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-2-61k38e</a>

### CROSSOVER:

Unit: CSSM1	
Plans and elevations	<a href="http://corbettmaths.com/2014/01/16/views-and-elevations/">http://corbettmaths.com/2014/01/16/views-and-elevations/</a>
Parallel lines and angles	<a href="https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-one-transversal-cgukgt">https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-one-transversal-cgukgt</a>
	<a href="https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-two-transversals-6ww66t">https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-two-transversals-6ww66t</a>
Angles in a triangle, quadrilateral, straight lines and points	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-around-a-point-and-on-a-straight-line-c9k32c">https://classroom.thenational.academy/lessons/find-missing-angles-around-a-point-and-on-a-straight-line-c9k32c</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-triangle-6cvk4t">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-triangle-6cvk4t</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-quadrilateral-6gukar">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-quadrilateral-6gukar</a>

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	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-special-quadrilateral-6gtk4d">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-special-quadrilateral-6gtk4d</a>
Properties of shapes	<a href="https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee">https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee</a>
	<a href="https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c">https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c</a>
	<a href="https://classroom.thenational.academy/lessons/classifying-triangles-6rv3cc">https://classroom.thenational.academy/lessons/classifying-triangles-6rv3cc</a>
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Solving equations in angle problems	<a href="http://corbettmaths.com/2013/04/20/forming-equations-involving-perimeter-or-angles/">http://corbettmaths.com/2013/04/20/forming-equations-involving-perimeter-or-angles/</a>
Angles in regular polygons	<a href="https://classroom.thenational.academy/lessons/find-missing-exterior-angles-cgu64e">https://classroom.thenational.academy/lessons/find-missing-exterior-angles-cgu64e</a>
	<a href="https://classroom.thenational.academy/lessons/solve-problems-involving-exterior-angles-6wrkgd">https://classroom.thenational.academy/lessons/solve-problems-involving-exterior-angles-6wrkgd</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-exterior-angles-of-polygons-64t38r">https://classroom.thenational.academy/lessons/find-missing-exterior-angles-of-polygons-64t38r</a>
	<a href="https://classroom.thenational.academy/lessons/finding-the-sum-of-interior-angles-in-a-polygon-ctk30e">https://classroom.thenational.academy/lessons/finding-the-sum-of-interior-angles-in-a-polygon-ctk30e</a>
Using circle theorems	<a href="https://classroom.thenational.academy/lessons/circle-theorems-angle-at-the-centre-and-angle-at-the-circumference-70u66r">https://classroom.thenational.academy/lessons/circle-theorems-angle-at-the-centre-and-angle-at-the-circumference-70u66r</a>

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	<a href="https://classroom.thenational.academy/lessons/circle-theorems-angle-in-a-semicircle-is-90-degrees-68vkat">https://classroom.thenational.academy/lessons/circle-theorems-angle-in-a-semicircle-is-90-degrees-68vkat</a>
	<a href="https://classroom.thenational.academy/lessons/circle-theorems-angles-in-the-same-segment-c5gkad">https://classroom.thenational.academy/lessons/circle-theorems-angles-in-the-same-segment-c5gkad</a>
	<a href="https://classroom.thenational.academy/lessons/circle-theorems-angles-in-a-cyclic-quadrilateral-6xh6ar">https://classroom.thenational.academy/lessons/circle-theorems-angles-in-a-cyclic-quadrilateral-6xh6ar</a>
	<a href="https://classroom.thenational.academy/lessons/circle-theorems-a-tangent-and-radius-are-perpendicular-at-the-point-of-contact-cgwac">https://classroom.thenational.academy/lessons/circle-theorems-a-tangent-and-radius-are-perpendicular-at-the-point-of-contact-cgwac</a>
	<a href="https://classroom.thenational.academy/lessons/circle-theorems-the-perpendicular-from-the-centre-to-a-chord-bisects-the-chord-6rvk6c">https://classroom.thenational.academy/lessons/circle-theorems-the-perpendicular-from-the-centre-to-a-chord-bisects-the-chord-6rvk6c</a>
	<a href="https://classroom.thenational.academy/lessons/mixed-circle-theorem-problems-70r3et">https://classroom.thenational.academy/lessons/mixed-circle-theorem-problems-70r3et</a>
Alternate Segment Theorem	<a href="https://classroom.thenational.academy/lessons/circle-theorems-the-alternate-segment-theorem-74tkge">https://classroom.thenational.academy/lessons/circle-theorems-the-alternate-segment-theorem-74tkge</a>
Scale drawings	<a href="http://corbettmaths.com/2013/11/13/maps-scales/">http://corbettmaths.com/2013/11/13/maps-scales/</a>

Unit: CSSM2	
Translations	<a href="https://classroom.thenational.academy/lessons/translation-ccv30e">https://classroom.thenational.academy/lessons/translation-ccv30e</a>
Rotations	<a href="https://classroom.thenational.academy/lessons/rotation-cgvk0t">https://classroom.thenational.academy/lessons/rotation-cgvk0t</a>



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Transformations - Combined	<a href="https://classroom.thenational.academy/lessons/mixed-transformations-cmrk6t">https://classroom.thenational.academy/lessons/mixed-transformations-cmrk6t</a>
	<a href="https://classroom.thenational.academy/lessons/combining-translations-and-reflections-74tk0c">https://classroom.thenational.academy/lessons/combining-translations-and-reflections-74tk0c</a>
Similar shapes	<a href="https://classroom.thenational.academy/lessons/identify-similar-shapes-and-show-shapes-are-similar-6rtkgt">https://classroom.thenational.academy/lessons/identify-similar-shapes-and-show-shapes-are-similar-6rtkgt</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-separate-shapes-6wvk8c">https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-separate-shapes-6wvk8c</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-shapes-which-have-sides-overlapping-ctjkac">https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-shapes-which-have-sides-overlapping-ctjkac</a>

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Unit: CSSM3	
Metric Conversions	<a href="https://classroom.thenational.academy/lessons/converting-between-metric-units-of-length-6cu3cc">https://classroom.thenational.academy/lessons/converting-between-metric-units-of-length-6cu3cc</a>
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Perimeter	<a href="https://classroom.thenational.academy/lessons/perimeter-of-polygons-and-compound-shapes-65k3jt">https://classroom.thenational.academy/lessons/perimeter-of-polygons-and-compound-shapes-65k3jt</a>
Area of rectangle, triangle, parallelogram, trapezium	<a href="https://classroom.thenational.academy/lessons/area-of-rectangles-parallelograms-and-triangles-71jp8c">https://classroom.thenational.academy/lessons/area-of-rectangles-parallelograms-and-triangles-71jp8c</a>
	<a href="https://classroom.thenational.academy/lessons/area-of-a-trapezium-70r34c">https://classroom.thenational.academy/lessons/area-of-a-trapezium-70r34c</a>
Area of compound shapes	<a href="https://classroom.thenational.academy/lessons/area-of-compound-shapes-65k64c">https://classroom.thenational.academy/lessons/area-of-compound-shapes-65k64c</a>
	<a href="https://classroom.thenational.academy/lessons/calculate-area-of-compound-shapes-with-circles-68r34d">https://classroom.thenational.academy/lessons/calculate-area-of-compound-shapes-with-circles-68r34d</a>
Area and circumference of circles including answers in terms of Pi	<a href="https://classroom.thenational.academy/lessons/find-the-circumference-of-a-circle-c4tp6e">https://classroom.thenational.academy/lessons/find-the-circumference-of-a-circle-c4tp6e</a>
Surface area of prisms	<a href="https://classroom.thenational.academy/lessons/finding-the-surface-area-of-cubes-and-cuboids-6nh68c">https://classroom.thenational.academy/lessons/finding-the-surface-area-of-cubes-and-cuboids-6nh68c</a>

## Year 10 Maths Oak Academy Work – Spring Term 1

	<a href="https://classroom.thenational.academy/lessons/finding-the-surface-area-of-triangular-prisms-6dh3ae">https://classroom.thenational.academy/lessons/finding-the-surface-area-of-triangular-prisms-6dh3ae</a>
Volume of a cuboid, prism	<a href="https://classroom.thenational.academy/lessons/volume-of-cubes-and-cuboids-6hhk6r">https://classroom.thenational.academy/lessons/volume-of-cubes-and-cuboids-6hhk6r</a>
	<a href="https://classroom.thenational.academy/lessons/finding-the-volume-of-triangular-prisms-6cukgd">https://classroom.thenational.academy/lessons/finding-the-volume-of-triangular-prisms-6cukgd</a>
Surface area and volume of Spheres, Pyramids, Cones	<a href="https://classroom.thenational.academy/lessons/volume-further-problem-solving-with-spheres-cones-and-pyramids-cgup4d">https://classroom.thenational.academy/lessons/volume-further-problem-solving-with-spheres-cones-and-pyramids-cgup4d</a>
	<a href="https://classroom.thenational.academy/lessons/surface-area-and-volume-of-a-hemisphere-6nh3ce">https://classroom.thenational.academy/lessons/surface-area-and-volume-of-a-hemisphere-6nh3ce</a>
	<a href="https://classroom.thenational.academy/lessons/surface-area-further-problem-solving-6mt3ed">https://classroom.thenational.academy/lessons/surface-area-further-problem-solving-6mt3ed</a>
Compound units	<a href="https://classroom.thenational.academy/lessons/use-and-apply-the-speed-formula-6xj3jd">https://classroom.thenational.academy/lessons/use-and-apply-the-speed-formula-6xj3jd</a>

<b>Unit: CSSM4</b>	
Pythagoras' theorem	<a href="https://classroom.thenational.academy/lessons/know-and-understand-pythagoras-theorem-70vp4t">https://classroom.thenational.academy/lessons/know-and-understand-pythagoras-theorem-70vp4t</a>
	<a href="https://classroom.thenational.academy/lessons/find-the-length-of-the-hypotenuse-6xgk6t">https://classroom.thenational.academy/lessons/find-the-length-of-the-hypotenuse-6xgk6t</a>

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	<a href="https://classroom.thenational.academy/lessons/find-the-length-of-the-shorter-side-6ru6ce">https://classroom.thenational.academy/lessons/find-the-length-of-the-shorter-side-6ru6ce</a>
	<a href="https://classroom.thenational.academy/lessons/mixture-of-finding-a-missing-length-6mwp6r">https://classroom.thenational.academy/lessons/mixture-of-finding-a-missing-length-6mwp6r</a>
	<a href="https://classroom.thenational.academy/lessons/use-pythagoras-theorem-to-show-that-a-triangle-is-right-angled-6hhk4r">https://classroom.thenational.academy/lessons/use-pythagoras-theorem-to-show-that-a-triangle-is-right-angled-6hhk4r</a>
Pythagoras in 3D	<a href="http://corbettmaths.com/2012/08/19/3d-pythagoras/">http://corbettmaths.com/2012/08/19/3d-pythagoras/</a>
Trigonometry - SOH CAH TOA	<a href="https://classroom.thenational.academy/lessons/know-tangent-sine-and-cosine-6mvk4d">https://classroom.thenational.academy/lessons/know-tangent-sine-and-cosine-6mvk4d</a>
	<a href="https://classroom.thenational.academy/lessons/use-tangent-to-find-a-length-c5gkge">https://classroom.thenational.academy/lessons/use-tangent-to-find-a-length-c5gkge</a>
	<a href="https://classroom.thenational.academy/lessons/use-sine-and-cosine-to-find-a-length-75hk0c">https://classroom.thenational.academy/lessons/use-sine-and-cosine-to-find-a-length-75hk0c</a>
	<a href="https://classroom.thenational.academy/lessons/applying-trigonometry-6mup2c">https://classroom.thenational.academy/lessons/applying-trigonometry-6mup2c</a>
	<a href="https://classroom.thenational.academy/lessons/use-trigonometry-to-find-the-perpendicular-height-of-a-triangle-c4v3ee">https://classroom.thenational.academy/lessons/use-trigonometry-to-find-the-perpendicular-height-of-a-triangle-c4v3ee</a>
	<a href="https://classroom.thenational.academy/lessons/solve-basic-trigonometry-equations-6cup6r">https://classroom.thenational.academy/lessons/solve-basic-trigonometry-equations-6cup6r</a>
	<a href="https://classroom.thenational.academy/lessons/use-inverse-functions-to-find-an-angle-61jp2d">https://classroom.thenational.academy/lessons/use-inverse-functions-to-find-an-angle-61jp2d</a>

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	<a href="https://classroom.thenational.academy/lessons/solve-problems-mixing-angles-and-sides-6djk2e">https://classroom.thenational.academy/lessons/solve-problems-mixing-angles-and-sides-6djk2e</a>
Sine and cosine rules	<a href="https://classroom.thenational.academy/lessons/use-the-sine-rule-to-find-a-missing-length-cmup4c">https://classroom.thenational.academy/lessons/use-the-sine-rule-to-find-a-missing-length-cmup4c</a>
	<a href="https://classroom.thenational.academy/lessons/use-the-sine-rule-to-find-a-missing-angle-6rvkjd">https://classroom.thenational.academy/lessons/use-the-sine-rule-to-find-a-missing-angle-6rvkjd</a>
	<a href="https://classroom.thenational.academy/lessons/use-the-cosine-rule-to-find-a-missing-length-cmwk6c">https://classroom.thenational.academy/lessons/use-the-cosine-rule-to-find-a-missing-length-cmwk6c</a>
	<a href="https://classroom.thenational.academy/lessons/use-the-cosine-rule-to-find-a-missing-angle-6thk8t">https://classroom.thenational.academy/lessons/use-the-cosine-rule-to-find-a-missing-angle-6thk8t</a>
Areas of triangles using $\frac{1}{2}ab\sin C$	<a href="http://corbettmaths.com/2012/08/02/area-of-a-triangle-sinetrigonometry/">http://corbettmaths.com/2012/08/02/area-of-a-triangle-sinetrigonometry/</a>
Calculations with column vectors	<a href="https://classroom.thenational.academy/lessons/write-a-column-vector-from-a-diagram-74tkce">https://classroom.thenational.academy/lessons/write-a-column-vector-from-a-diagram-74tkce</a>
	<a href="https://classroom.thenational.academy/lessons/add-two-column-vectors-including-diagrams-to-give-a-resultant-vector-6xgp2d">https://classroom.thenational.academy/lessons/add-two-column-vectors-including-diagrams-to-give-a-resultant-vector-6xgp2d</a>
	<a href="https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-1-chjp2t">https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-1-chjp2t</a>
	<a href="https://classroom.thenational.academy/lessons/multiply-a-vector-by-a-scalar-64u3cr">https://classroom.thenational.academy/lessons/multiply-a-vector-by-a-scalar-64u3cr</a>
	<a href="https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-2-61k38e">https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-2-61k38e</a>

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Calculations with vectors using algebra	<a href="https://classroom.thenational.academy/lessons/find-the-length-of-a-column-vector-6cu38r">https://classroom.thenational.academy/lessons/find-the-length-of-a-column-vector-6cu38r</a>
Vectors and ratio problems	<a href="https://classroom.thenational.academy/lessons/vector-diagrams-involving-ratios-6gv3ad">https://classroom.thenational.academy/lessons/vector-diagrams-involving-ratios-6gv3ad</a>

### HIGHER:

Unit: HSSM1	
Plans and elevations	<a href="http://corbettmaths.com/2014/01/16/views-and-elevations/">http://corbettmaths.com/2014/01/16/views-and-elevations/</a>
Parallel lines and angles	<a href="https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-one-transversal-cgukgt">https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-one-transversal-cgukgt</a>
	<a href="https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-two-transversals-6ww66t">https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-two-transversals-6ww66t</a>
Angles in a triangle, quadrilateral, straight lines and points	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-around-a-point-and-on-a-straight-line-c9k32c">https://classroom.thenational.academy/lessons/find-missing-angles-around-a-point-and-on-a-straight-line-c9k32c</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-triangle-6cvk4t">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-triangle-6cvk4t</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-quadrilateral-6gukar">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-quadrilateral-6gukar</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-special-quadrilateral-6gtk4d">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-special-quadrilateral-6gtk4d</a>

## Year 10 Maths Oak Academy Work – Spring Term 1

Properties of shapes	<a href="https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee">https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee</a>
	<a href="https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c">https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c</a>
	<a href="https://classroom.thenational.academy/lessons/classifying-triangles-6rv3cc">https://classroom.thenational.academy/lessons/classifying-triangles-6rv3cc</a>
	<a href="https://classroom.thenational.academy/lessons/comparing-quadrilaterals-cmt66t">https://classroom.thenational.academy/lessons/comparing-quadrilaterals-cmt66t</a>
	<a href="https://classroom.thenational.academy/lessons/internal-angles-in-a-quadrilateral-cguk8t">https://classroom.thenational.academy/lessons/internal-angles-in-a-quadrilateral-cguk8t</a>
Solving equations in angle problems	<a href="http://corbettmaths.com/2013/04/20/forming-equations-involving-perimeter-or-angles/">http://corbettmaths.com/2013/04/20/forming-equations-involving-perimeter-or-angles/</a>
Angles in regular polygons	<a href="https://classroom.thenational.academy/lessons/find-missing-exterior-angles-cgu64e">https://classroom.thenational.academy/lessons/find-missing-exterior-angles-cgu64e</a>
	<a href="https://classroom.thenational.academy/lessons/solve-problems-involving-exterior-angles-6wrkgd">https://classroom.thenational.academy/lessons/solve-problems-involving-exterior-angles-6wrkgd</a>  <a href="https://classroom.thenational.academy/lessons/find-missing-exterior-angles-of-polygons-64t38r">https://classroom.thenational.academy/lessons/find-missing-exterior-angles-of-polygons-64t38r</a>  <a href="https://classroom.thenational.academy/lessons/finding-the-sum-of-interior-angles-in-a-polygon-ctk30e">https://classroom.thenational.academy/lessons/finding-the-sum-of-interior-angles-in-a-polygon-ctk30e</a>
Bearings (not including trigonometry)	<a href="https://classroom.thenational.academy/lessons/bearings-with-angle-facts-cdjpad">https://classroom.thenational.academy/lessons/bearings-with-angle-facts-cdjpad</a>
Using circle theorems	<a href="https://classroom.thenational.academy/lessons/circle-theorems-angle-at-the-centre-and-angle-at-the-circumference-70u66r">https://classroom.thenational.academy/lessons/circle-theorems-angle-at-the-centre-and-angle-at-the-circumference-70u66r</a>
	<a href="https://classroom.thenational.academy/lessons/circle-theorems-angle-in-a-semicircle-is-90-degrees-68vkat">https://classroom.thenational.academy/lessons/circle-theorems-angle-in-a-semicircle-is-90-degrees-68vkat</a>

## Year 10 Maths Oak Academy Work – Spring Term 1

	<a href="https://classroom.thenational.academy/lessons/circle-theorems-angles-in-the-same-segment-c5gkad">https://classroom.thenational.academy/lessons/circle-theorems-angles-in-the-same-segment-c5gkad</a>  <a href="https://classroom.thenational.academy/lessons/circle-theorems-angles-in-a-cyclic-quadrilateral-6xh6ar">https://classroom.thenational.academy/lessons/circle-theorems-angles-in-a-cyclic-quadrilateral-6xh6ar</a>  <a href="https://classroom.thenational.academy/lessons/circle-theorems-a-tangent-and-radius-are-perpendicular-at-the-point-of-contact-cgwkac">https://classroom.thenational.academy/lessons/circle-theorems-a-tangent-and-radius-are-perpendicular-at-the-point-of-contact-cgwkac</a>  <a href="https://classroom.thenational.academy/lessons/circle-theorems-the-perpendicular-from-the-centre-to-a-chord-bisects-the-chord-6rvk6c">https://classroom.thenational.academy/lessons/circle-theorems-the-perpendicular-from-the-centre-to-a-chord-bisects-the-chord-6rvk6c</a>
	<a href="https://classroom.thenational.academy/lessons/mixed-circle-theorem-problems-70r3et">https://classroom.thenational.academy/lessons/mixed-circle-theorem-problems-70r3et</a>
Alternate Segment Theorem	<a href="https://classroom.thenational.academy/lessons/circle-theorems-the-alternate-segment-theorem-74tkge">https://classroom.thenational.academy/lessons/circle-theorems-the-alternate-segment-theorem-74tkge</a>
Plans and elevations	<a href="http://corbettmaths.com/2014/01/16/views-and-elevations/">http://corbettmaths.com/2014/01/16/views-and-elevations/</a>
Parallel lines and angles	<a href="https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-one-transversal-cgukgt">https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-one-transversal-cgukgt</a>
	<a href="https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-two-transversals-6ww66t">https://classroom.thenational.academy/lessons/angles-in-parallel-lines-with-two-transversals-6ww66t</a>
Angles in a triangle, quadrilateral, straight lines and points	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-around-a-point-and-on-a-straight-line-c9k32c">https://classroom.thenational.academy/lessons/find-missing-angles-around-a-point-and-on-a-straight-line-c9k32c</a>



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	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-triangle-6cvk4t">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-triangle-6cvk4t</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-angles-in-a-quadrilateral-6gukar">https://classroom.thenational.academy/lessons/find-missing-angles-in-a-quadrilateral-6gukar</a>

Unit: HSSM2	
Translations	<a href="https://classroom.thenational.academy/lessons/translation-ccv30e">https://classroom.thenational.academy/lessons/translation-ccv30e</a>
Rotations	<a href="https://classroom.thenational.academy/lessons/rotation-cgvk0t">https://classroom.thenational.academy/lessons/rotation-cgvk0t</a>
	<a href="https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-coordinate-6gr66r">https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-coordinate-6gr66r</a>
Reflections	<a href="https://classroom.thenational.academy/lessons/reflection-6gw38t">https://classroom.thenational.academy/lessons/reflection-6gw38t</a>
	<a href="https://classroom.thenational.academy/lessons/combining-reflections-c9j38c">https://classroom.thenational.academy/lessons/combining-reflections-c9j38c</a>
Enlargements	<a href="https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-c4v3gc">https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-c4v3gc</a>
	<a href="https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-from-a-given-coordinate-6rup8d">https://classroom.thenational.academy/lessons/enlarge-an-object-with-a-positive-scale-factor-from-a-given-coordinate-6rup8d</a>
Enlargement of negative scale factors	<a href="https://classroom.thenational.academy/lessons/enlargement-with-a-negative-scale-factor-69jp4d">https://classroom.thenational.academy/lessons/enlargement-with-a-negative-scale-factor-69jp4d</a>

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	<a href="https://classroom.thenational.academy/lessons/describe-an-enlargement-with-a-negative-scale-factor-69jk6d">https://classroom.thenational.academy/lessons/describe-an-enlargement-with-a-negative-scale-factor-69jk6d</a>
Invariant points	<a href="https://corbettmaths.com/2019/02/04/invariant-points-video/">https://corbettmaths.com/2019/02/04/invariant-points-video/</a>
Transformations - Combined	<a href="https://classroom.thenational.academy/lessons/mixed-transformations-cmrk6t">https://classroom.thenational.academy/lessons/mixed-transformations-cmrk6t</a>
	<a href="https://classroom.thenational.academy/lessons/combining-translations-and-reflections-74tk0c">https://classroom.thenational.academy/lessons/combining-translations-and-reflections-74tk0c</a>
Similar shapes	<a href="https://classroom.thenational.academy/lessons/identify-similar-shapes-and-show-shapes-are-similar-6rtkgt">https://classroom.thenational.academy/lessons/identify-similar-shapes-and-show-shapes-are-similar-6rtkgt</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-separate-shapes-6wvk8c">https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-separate-shapes-6wvk8c</a>
	<a href="https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-shapes-which-have-sides-overlapping-ctjkac">https://classroom.thenational.academy/lessons/find-missing-lengths-in-similar-shapes-which-have-sides-overlapping-ctjkac</a>
Similar shapes- area and volume scale factor problems	<a href="https://classroom.thenational.academy/lessons/enlargements-74vkjd">https://classroom.thenational.academy/lessons/enlargements-74vkjd</a>
	<a href="https://classroom.thenational.academy/lessons/enlargements-and-area-60wkjd">https://classroom.thenational.academy/lessons/enlargements-and-area-60wkjd</a> <a href="https://classroom.thenational.academy/lessons/find-areas-of-similar-shapes-given-corresponding-lengths-ccr6ae">https://classroom.thenational.academy/lessons/find-areas-of-similar-shapes-given-corresponding-lengths-ccr6ae</a> <a href="https://classroom.thenational.academy/lessons/find-volumes-of-similar-shapes-given-corresponding-lengths-70ukgt">https://classroom.thenational.academy/lessons/find-volumes-of-similar-shapes-given-corresponding-lengths-70ukgt</a>
Using congruent triangles	<a href="https://classroom.thenational.academy/lessons/identify-congruent-shapes-6mwkcc">https://classroom.thenational.academy/lessons/identify-congruent-shapes-6mwkcc</a>
Translations	<a href="https://classroom.thenational.academy/lessons/translation-ccv30e">https://classroom.thenational.academy/lessons/translation-ccv30e</a>

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Rotations	<a href="https://classroom.thenational.academy/lessons/rotation-cgvk0t">https://classroom.thenational.academy/lessons/rotation-cgvk0t</a>
	<a href="https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-coordinate-6gr66r">https://classroom.thenational.academy/lessons/rotate-an-object-around-a-given-coordinate-6gr66r</a>

Unit: HSSM3	
Metric Conversions	<a href="https://classroom.thenational.academy/lessons/converting-between-metric-units-of-length-6cu3cc">https://classroom.thenational.academy/lessons/converting-between-metric-units-of-length-6cu3cc</a>
	<a href="https://classroom.thenational.academy/lessons/solving-problems-involving-converting-between-metric-units-of-length-cmwk6c">https://classroom.thenational.academy/lessons/solving-problems-involving-converting-between-metric-units-of-length-cmwk6c</a>
	<a href="https://classroom.thenational.academy/lessons/converting-between-units-of-metric-mass-6ww38d">https://classroom.thenational.academy/lessons/converting-between-units-of-metric-mass-6ww38d</a>
Perimeter	<a href="https://classroom.thenational.academy/lessons/perimeter-of-polygons-and-compound-shapes-65k3jt">https://classroom.thenational.academy/lessons/perimeter-of-polygons-and-compound-shapes-65k3jt</a>
Area of rectangle, triangle, parallelogram, trapezium	<a href="https://classroom.thenational.academy/lessons/area-of-rectangles-parallelograms-and-triangles-71jp8c">https://classroom.thenational.academy/lessons/area-of-rectangles-parallelograms-and-triangles-71jp8c</a>
	<a href="https://classroom.thenational.academy/lessons/area-of-a-trapezium-70r34c">https://classroom.thenational.academy/lessons/area-of-a-trapezium-70r34c</a>
Area of compound shapes	<a href="https://classroom.thenational.academy/lessons/area-of-compound-shapes-65k64c">https://classroom.thenational.academy/lessons/area-of-compound-shapes-65k64c</a>
	<a href="https://classroom.thenational.academy/lessons/calculate-area-of-compound-shapes-with-circles-68r34d">https://classroom.thenational.academy/lessons/calculate-area-of-compound-shapes-with-circles-68r34d</a>

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Area and circumference of circles including answers in terms of Pi	<a href="https://classroom.thenational.academy/lessons/find-the-circumference-of-a-circle-c4tp6e">https://classroom.thenational.academy/lessons/find-the-circumference-of-a-circle-c4tp6e</a>
Area and perimeter of sectors	<a href="https://classroom.thenational.academy/lessons/find-the-diameter-or-radius-when-given-the-circumference-68ukcc">https://classroom.thenational.academy/lessons/find-the-diameter-or-radius-when-given-the-circumference-68ukcc</a>
	<a href="https://classroom.thenational.academy/lessons/find-the-area-of-a-circle-60w36c">https://classroom.thenational.academy/lessons/find-the-area-of-a-circle-60w36c</a>
	<a href="https://classroom.thenational.academy/lessons/find-the-radius-and-diameter-when-given-the-area-6rv66c">https://classroom.thenational.academy/lessons/find-the-radius-and-diameter-when-given-the-area-6rv66c</a>
Surface area of prisms	<a href="https://classroom.thenational.academy/lessons/finding-the-surface-area-of-cubes-and-cuboids-6nh68c">https://classroom.thenational.academy/lessons/finding-the-surface-area-of-cubes-and-cuboids-6nh68c</a>
	<a href="https://classroom.thenational.academy/lessons/finding-the-surface-area-of-triangular-prisms-6dh3ae">https://classroom.thenational.academy/lessons/finding-the-surface-area-of-triangular-prisms-6dh3ae</a>
Volume of a cuboid, prism	<a href="https://classroom.thenational.academy/lessons/volume-of-cubes-and-cuboids-6hhk6r">https://classroom.thenational.academy/lessons/volume-of-cubes-and-cuboids-6hhk6r</a>
	<a href="https://classroom.thenational.academy/lessons/finding-the-volume-of-triangular-prisms-6cukgd">https://classroom.thenational.academy/lessons/finding-the-volume-of-triangular-prisms-6cukgd</a>
Surface area and volume of Spheres, Pyramids, Cones	<a href="https://classroom.thenational.academy/lessons/volume-further-problem-solving-with-spheres-cones-and-pyramids-cgup4d">https://classroom.thenational.academy/lessons/volume-further-problem-solving-with-spheres-cones-and-pyramids-cgup4d</a>
	<a href="https://classroom.thenational.academy/lessons/surface-area-and-volume-of-a-hemisphere-6nh3ce">https://classroom.thenational.academy/lessons/surface-area-and-volume-of-a-hemisphere-6nh3ce</a>
	<a href="https://classroom.thenational.academy/lessons/surface-area-further-problem-solving-6mt3ed">https://classroom.thenational.academy/lessons/surface-area-further-problem-solving-6mt3ed</a>

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Compound units	<a href="https://classroom.thenational.academy/lessons/use-and-apply-the-speed-formula-6xj3jd">https://classroom.thenational.academy/lessons/use-and-apply-the-speed-formula-6xj3jd</a>
Using density formula	<a href="https://classroom.thenational.academy/lessons/use-and-apply-the-density-formula-68u38t">https://classroom.thenational.academy/lessons/use-and-apply-the-density-formula-68u38t</a>
Problem solving with density	See using density formula

Unit: HSSM4	
Pythagoras' theorem	<a href="https://classroom.thenational.academy/lessons/know-and-understand-pythagoras-theorem-70vp4t">https://classroom.thenational.academy/lessons/know-and-understand-pythagoras-theorem-70vp4t</a>
	<a href="https://classroom.thenational.academy/lessons/find-the-length-of-the-hypotenuse-6xgk6t">https://classroom.thenational.academy/lessons/find-the-length-of-the-hypotenuse-6xgk6t</a>
	<a href="https://classroom.thenational.academy/lessons/find-the-length-of-the-shorter-side-6ru6ce">https://classroom.thenational.academy/lessons/find-the-length-of-the-shorter-side-6ru6ce</a>
	<a href="https://classroom.thenational.academy/lessons/mixture-of-finding-a-missing-length-6mwp6r">https://classroom.thenational.academy/lessons/mixture-of-finding-a-missing-length-6mwp6r</a>
	<a href="https://classroom.thenational.academy/lessons/use-pythagoras-theorem-to-show-that-a-triangle-is-right-angled-6hhk4r">https://classroom.thenational.academy/lessons/use-pythagoras-theorem-to-show-that-a-triangle-is-right-angled-6hhk4r</a>
Pythagoras in 3D	<a href="http://corbettmaths.com/2012/08/19/3d-pythagoras/">http://corbettmaths.com/2012/08/19/3d-pythagoras/</a>
Trigonometry - SOH CAH TOA	<a href="https://classroom.thenational.academy/lessons/know-tangent-sine-and-cosine-6mvk4d">https://classroom.thenational.academy/lessons/know-tangent-sine-and-cosine-6mvk4d</a>

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	<a href="https://classroom.thenational.academy/lessons/use-tangent-to-find-a-length-c5gkge">https://classroom.thenational.academy/lessons/use-tangent-to-find-a-length-c5gkge</a>
	<a href="https://classroom.thenational.academy/lessons/use-sine-and-cosine-to-find-a-length-75hk0c">https://classroom.thenational.academy/lessons/use-sine-and-cosine-to-find-a-length-75hk0c</a>
	<a href="https://classroom.thenational.academy/lessons/applying-trigonometry-6mup2c">https://classroom.thenational.academy/lessons/applying-trigonometry-6mup2c</a>
	<a href="https://classroom.thenational.academy/lessons/use-trigonometry-to-find-the-perpendicular-height-of-a-triangle-c4v3ee">https://classroom.thenational.academy/lessons/use-trigonometry-to-find-the-perpendicular-height-of-a-triangle-c4v3ee</a>
	<a href="https://classroom.thenational.academy/lessons/solve-basic-trigonometry-equations-6cup6r">https://classroom.thenational.academy/lessons/solve-basic-trigonometry-equations-6cup6r</a>
	<a href="https://classroom.thenational.academy/lessons/use-inverse-functions-to-find-an-angle-61jp2d">https://classroom.thenational.academy/lessons/use-inverse-functions-to-find-an-angle-61jp2d</a>
	<a href="https://classroom.thenational.academy/lessons/solve-problems-mixing-angles-and-sides-6dj2e">https://classroom.thenational.academy/lessons/solve-problems-mixing-angles-and-sides-6dj2e</a>
Exact values of Sin/Cos/Tan 0/30/45/60/90	<a href="https://classroom.thenational.academy/lessons/know-the-trigonometry-ratios-for-0-30-45-60-and-90-6nk3ee">https://classroom.thenational.academy/lessons/know-the-trigonometry-ratios-for-0-30-45-60-and-90-6nk3ee</a>
Trigonometry in 3D	<a href="https://classroom.thenational.academy/lessons/know-when-to-use-pythagoras-or-trigonometry-to-solve-problems-6wt3ac">https://classroom.thenational.academy/lessons/know-when-to-use-pythagoras-or-trigonometry-to-solve-problems-6wt3ac</a>
	<a href="http://corbettmaths.com/2013/12/07/3d-trigonometry/">http://corbettmaths.com/2013/12/07/3d-trigonometry/</a>
Sine and cosine rules	<a href="https://classroom.thenational.academy/lessons/use-the-sine-rule-to-find-a-missing-length-cmup4c">https://classroom.thenational.academy/lessons/use-the-sine-rule-to-find-a-missing-length-cmup4c</a>

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	<a href="https://classroom.thenational.academy/lessons/use-the-sine-rule-to-find-a-missing-angle-6rvkjd">https://classroom.thenational.academy/lessons/use-the-sine-rule-to-find-a-missing-angle-6rvkjd</a>
	<a href="https://classroom.thenational.academy/lessons/use-the-cosine-rule-to-find-a-missing-length-cmwk6c">https://classroom.thenational.academy/lessons/use-the-cosine-rule-to-find-a-missing-length-cmwk6c</a>
	<a href="https://classroom.thenational.academy/lessons/use-the-cosine-rule-to-find-a-missing-angle-6thk8t">https://classroom.thenational.academy/lessons/use-the-cosine-rule-to-find-a-missing-angle-6thk8t</a>
Areas of triangles using $\frac{1}{2}ab\sin C$	<a href="http://corbettmaths.com/2012/08/02/area-of-a-triangle-sinetrigonometry/">http://corbettmaths.com/2012/08/02/area-of-a-triangle-sinetrigonometry/</a>
Calculations with column vectors	<a href="https://classroom.thenational.academy/lessons/write-a-column-vector-from-a-diagram-74tkce">https://classroom.thenational.academy/lessons/write-a-column-vector-from-a-diagram-74tkce</a>
	<a href="https://classroom.thenational.academy/lessons/add-two-column-vectors-including-diagrams-to-give-a-resultant-vector-6xgp2d">https://classroom.thenational.academy/lessons/add-two-column-vectors-including-diagrams-to-give-a-resultant-vector-6xgp2d</a>
	<a href="https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-1-chjp2t">https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-1-chjp2t</a>
	<a href="https://classroom.thenational.academy/lessons/multiply-a-vector-by-a-scalar-64u3cr">https://classroom.thenational.academy/lessons/multiply-a-vector-by-a-scalar-64u3cr</a>
	<a href="https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-2-61k38e">https://classroom.thenational.academy/lessons/add-and-subtract-two-column-vectors-to-give-a-resultant-vector-part-2-61k38e</a>
Calculations with vectors using algebra	<a href="https://classroom.thenational.academy/lessons/find-the-length-of-a-column-vector-6cu38r">https://classroom.thenational.academy/lessons/find-the-length-of-a-column-vector-6cu38r</a>
Vectors and ratio problems	<a href="https://classroom.thenational.academy/lessons/vector-diagrams-involving-ratios-6gv3ad">https://classroom.thenational.academy/lessons/vector-diagrams-involving-ratios-6gv3ad</a>



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Proving vectors are parallel or on a line

<https://classroom.thenational.academy/lessons/vector-diagrams-involving-midpoints-68wp2d>