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| **Core Knowledge Map** |
| Subject: **Mathematics** | Year: 10 | Term: Autumn 1 |
| What are we learning? |
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| How will I be assessed  |
| Retrieval Tasks, Exit tickets, end of half-term test. |
| Big questions: |
| Can You….?* Describe the hypotenuse in a right-angled triangle.
* Without a calculator – what is the value of sin(60), tan(45), cos(60)?
* Calculate length x giving your answer to 1dp.

 * A window cleaner has a ladder which is 7m long. The window cleaner leans it against a wall so that the foot of the ladder is 3m from the wall. What angle does the ladder make with the wall?
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| How does this build on previous learning? | How will this link to my future learning? |
| * Using a calculator efficiently
* Rounding
* Substituting values into formula
* Rearranging formula
* Solving equations
* Use of surds
 | * Using both Pythgoras’ theorem and the trigonometric ratios in synoptic questions.
* Using trigonometry in non right angled triangles in Year 11
* Both are used extensively at A-Level
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| Core knowledge: | Key vocabulary: |
| * To recall and use the three main trigonometric ratios:

$sinθ= \frac{opp}{hyp}$, $cosθ= \frac{adj}{hyp}$ , $tanθ= \frac{opp}{adj}$* An **inverse** function ‘undoes’ the original function.
* A plane is a two dimensional space or flat surface.
* Exact values
 | TrigonometrySine, Cosine and TangentHypotenuseOppositeAdjacentTheoremSimilarInversePlaneElevationDepression |
| Need more help? Use the Sparx Independent Learning Codes above |