

## **Pythagoras and Trigonometry**

## **MATHS**

Pythagoras: **Identify Right** Tilted >>>> ·>>>> **Pythagoras** Finding a missing angle Triangle Squares side Problem solving 1111 using Tangent Pythagoras ASSESSMENT ((( Ratio alculating the gradient Using the gradient to find missing sides Introducing Labelling tangent function >>>>> >>>>> triangles to apply ratio value Inverse Tangent 11111 functions Trigonometric 111114 Investigating Ratio other ratios Which Ratio? Finding a missing >>>>>> Unit Circle Mixed Practice >>>>>>>> side/angle

Learning Pythagoras and Trigonometry serves multiple purposes that extend beyond the classroom. Firstly, these mathematical concepts have practical applications in real life. Understanding Pythagoras' theorem allows us to calculate distances, such as determining the length of a diagonal or the height of a building. Trigonometry, on the other hand, helps us solve problems related to angles and distances, making it useful in fields like engineering, architecture, and navigation.

Pythagoras and trigonometry form the foundation for advanced mathematical concepts. They provide the building blocks for higher-level mathematical study, such as calculus and physics. Proficiency in these subjects opens up doors to various rewarding careers, such as engineering, architecture, surveying, astronomy, and computer graphics.

The skills you will develop this half term are not only valuable in the field of mathematics but also in everyday life situations. They contribute to better decision-making, analytical thinking, and the ability to approach complex problems systematically.



## **VOCABULARY:**

Hypotenuse, Adjacent, Opposite

Tangent, Pythagoras

## **TUDOR HABITS AND VALUES**

Through studying Pythagoras and Trigonometry this half term, you will develop develop perseverance, patience, and problem-solving skills. You will learn to pay extra attention to details, be organized, and think logically. These skills are valuable for success in various areas of life.