

Teaching and Learning Content: Mathematics
Year Group: 11 Foundation
Spring Term – Half Term 4



Topics:

Gaps teaching from papers 1, 2 & 3 (class specific)
 Geometry – Pythagoras Theorem and Trigonometry

Home Learning:

Students are expected to complete one piece of home learning every week as well as addressing areas that they have recorded as requiring further attention via their Personal Learning Checklist. The PLC links to corresponding MathsWatch clips and practice questions

Key Questions:

- Have you reviewed areas of underperformance in your exams? Can you now answer exam style questions on these topics?
- What is the longest side of a right-angle triangle known as?
- A girl guide ties a wire to a flag pole to secure it. The flag pole is 7m long and she is to anchor it 4.5m away from the base of the flag pole. How long must the wire be for her to do this?
- A ladder that is 6m long is placed against a wall. It makes a 34° angle with the wall.
Find
 - a) How high up the wall it reaches
 - b) The distance of the base of the ladder from the wall

Diagnosis

- 10 question diagnosis tests for each half term
- Retrieval activities from knowledge organisers like starter quizzes
- Mini whiteboard activities

Students will:

- Use their QLA and PLCs to address areas that need to develop
- To know what Pythagoras' theorem is
- To calculate the length of the hypotenuse in a right-angled triangle
- To calculate the length of a shorter side in a right-angled triangle
- To solve problems using Pythagoras' theorem
- To define, understand and use the three trigonometric ratios
- To use trigonometric ratios to calculate a length in a right-angled triangle
- To solve practical problems using trigonometry
- To use trigonometry to solve problems involving isosceles triangles
- To solve problems using an angle of elevation or an angle of depression.
- To work out and remember trigonometric values for angles of 30° , 45° , 60° and 90°

Therapy

- Sharing model responses (teacher/student led feedback)
- DIRT tasks
- Peer to peer support in lessons
- Specific highlighted lessons for students

Testing

- Students will complete an assessment each half term from which they will receive a detailed QLA to continue to highlight areas of weakness into the next half term.