

For each lesson please follow the link to Oak National Academy and watch the video, complete any worksheets and exit quiz.

Year 7

Week 1 – Maths Geometry Classifying 2-d shapes

# JOURNEYS

Journey; a passage through life, changing and developing over time.

Life is a journey filled with lessons, hardships, heartaches, joys, celebrations and special moments. Enjoy the ride, not just the destination. Cherish each time and don't wish it away.

**Monday**

## Lesson 1 Rotational Symmetry

In this lesson you will learn what rotational symmetry is and also the way to work out the order of rotational symmetry for a given shape.

<https://classroom.thenational.academy/lessons/rotational-symmetry-ccrkee>

**TASKS: -**

1. Watch the video of the lesson
2. Download the worksheet and complete the tasks
3. What have you learnt? Complete the exit quiz

**Tuesday**

## Lesson 2 – Lines of Symmetry

In this lesson you will learn about lines of symmetry and the way to determine how many lines of symmetry a shape has.

<https://classroom.thenational.academy/lessons/lines-of-symmetry-6rtk2c>

**TASKS: -**

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

**Wednesday**

## Lesson 3 – Classifying Triangles

In this lesson you learn how to describe the properties of scalene, isosceles and equilateral triangles. You will also learn how to identify and classify triangles inscribed in circles.

<https://classroom.thenational.academy/lessons/classifying-triangles-6rv3cc>

**TASKS: -**

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

**Thursday**

## Lesson 4 – Angles in Triangles

In this lesson, you will understand that the interior angles in a triangle sum to  $180^\circ$ . Solve problems involving unknown angles in triangles.

<https://classroom.thenational.academy/lessons/angles-in-a-triangle-6gv38d>

**TASKS: -**

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

**Friday**

## Lesson 5 – Comparing quadrilaterals

In this lesson, you will recap your knowledge on quadrilaterals and compare quadrilaterals by comparing symmetry, side length, parallel sides and angles.

<https://classroom.thenational.academy/lessons/comparing-quadrilaterals-cmt66t>

**TASKS: -**

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

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Year 7

Week 2 – Maths Geometry Classifying 2-d shapes

# JOURNEYS

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**Monday**

## Lesson 6 – Diagonals in quadrilaterals

In this lesson, you will compare the properties of diagonals in quadrilaterals.

<https://classroom.thenational.academy/lessons/diagonals-in-quadrilaterals-64u3ac>

**TASKS: -**

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

**Tuesday**

## Lesson 7 Internal angles in a quadrilateral

In this lesson, you will be able to use triangles to deduce the sum of the interior angles in a quadrilateral. You will also be able to find unknown angles in quadrilaterals

<https://classroom.thenational.academy/lessons/internal-angles-in-a-quadrilateral-cguk8t>

**TASKS: -**

1. Complete the introduction quiz
2. Watch the video of the lesson
3. Download the worksheet and complete the tasks
4. What have you learnt? Complete the exit quiz

**Wednesday**

## Lesson 8 – Tessellating quadrilaterals

In this lesson, you will use the properties of triangles and quadrilaterals to create and describe tessellation patterns.

<https://classroom.thenational.academy/lessons/tessellating-quadrilaterals-6tgp6t>

**TASKS: -**

1. Begin with introduction quiz
2. Watch the video lesson
3. Download the worksheet and complete the tasks
4. Complete the exit quiz

**Thursday**

## Consolidation of the topic classifying 2d shapes

**TASKS: -**

1. Choose at least 3 tasks for the list below.  
quadrilaterals task <https://nrich.maths.org/962/index>  
Nin pin triangles <https://nrich.maths.org/2852>  
Estimating angles <https://nrich.maths.org/1235>  
Tessellation polygon rings <https://nrich.maths.org/polygonrings>  
Tessellating triangles <https://nrich.maths.org/11504>  
Tessellating quadrilaterals <https://nrich.maths.org/11505>  
Tessellating hexagons <https://nrich.maths.org/4831>

**Friday**

## Fun task for a Friday

Read the instructions in the '[t totals introduction](#)' pdf file.

1. Start with a 9 x 9 grid. Draw 5 different T shapes and find their totals. Put your results in a table.
2. Can you find a pattern? If not, draw some more T shapes. Be systematic...start in the top left hand corner of the grid and move the T shape by one square each time.
3. Now move on to an 8 x 8 grid and repeat the same steps. Now try a 7 x 7 grid.
4. Can you link your answers for the different sized grids that you've investigated so far?
5. Task: Can you find a general rule for the t-total given any t number?

**Have a go at at least 2 of these online quizzes**

Quadrilaterals <https://www.educationquizzes.com/ks3/maths/level-3-4-shapes---quadrilaterals/>

Symmetry <https://www.educationquizzes.com/ks3/maths/level-3-4-shapes---symmetry/>

Angles in a triangle

[https://www.transum.org/software/SW/Starter\\_of\\_the\\_day/Students/AnglesInTriangle/Quiz.asp](https://www.transum.org/software/SW/Starter_of_the_day/Students/AnglesInTriangle/Quiz.asp)

Tessellations activity <https://www.transum.org/software/Investigations/tessellation.asp>

