# Maths - Week beginning 11 ${ }^{\text {th }}$ May 2020 

## Year 6

This week we are working through the lessons on Oak National
Academy - Coordinates and Shapes - here is the link:
https://www.thenational.academy/online-classroom/year-6/maths\#subjects
Every day we will add an explanation and notes for that lesson.

## Monday 11th May 2020 Coordinates in all 4 Quadrants

Start with the quiz. There are 5 multiple choice questions. Check your score. Have a pencil and paper ready. If you'd like to work on a coordinates grid, there's one in the attachments below to print out (it's called "4 quadrant grid").
Watch the lesson video, pausing where Miss Parsons tells you to pause to complete an activity. Mark your work when she shows you the correct answers. The first "Do Now" activity is about the vocabulary for this topic:
coordinate, point, plot, axis / axes, quadrant, position.
The second one asks you to find Marianne's errors.
In the final activity about shapes you will need to remember some of the important properties of particular shapes - a rectangle, square and isosceles triangle. We're sure you can describe the properties of squares and rectangles but just in case you've forgotten what an isosceles triangle is - here's some hints: it has two equal angles, two sides of equal length and one line of symmetry. This is a good website for more about different types of triangle:
https://www.mathsisfun.com/triangle.html
We have also added more MyMaths tasks linked to this topic.

## Tuesday 12th May 2020 To Translate Simple Shapes

Lesson 2 : https://www.thenational.academy/year-6/maths/to-translate-simple-shapes-year-6-wk4-2
For the quiz you will need to remember how to measure co-ordinates. Remember along the corridor and up the stairs. You will need to measure the position across the $x$-axis first, followed by the position either up or down the $y$-axis afterwards.
The video then talks you through how to describe translations by using the language up/down and left/right. You will need the quadrant that you used yesterday.
At 16 minutes 47 seconds, the video will ask you to pause. You will need to the complete the Independent Task, which you don't need to print. Just 'Close Video' and click 'Next Activity'. Complete the independent tasks by clicking the right arrow or choosing the next slide from the drop-down list. There are 5 questions to complete. You should note down your answers on a piece of paper and use the quadrant print out if it helps you. When you have completed all of the questions, click
'Resume Video' and each question will then be explained. Work your way through the questions and correct any errors.
When you have marked the tasks, close the video and click 'Next Activity' to complete the Exit Quiz. It might be helpful to use the quadrant grid on the final question.

## Wednesday 13th May 2020 To Reflect Simple Shapes <br> Lesson 3: https://www.thenational.academy/year-6/maths/to-reflect-simple-shapes-year-6-wk4-3

In this lesson, Miss Parsons teaches you about the mirror line and using what you know about the four quadrants to correctly identify new coordinates of reflected shapes. You will become more familiar with terms such as the "top left quadrant" and the "bottom right quadrant" etc and will know which of the coordinates is negative due to the quadrant it is in. Miss Parsons uses the terms 'original' and 'post-reflection': 'original' means the first shape when we only had one version of it; 'post' means 'after' so here she is talking the new shape, in a different position having been reflected. Look at Miss Parson's annotations and listen to her thinking as she solves problems.
In the final quiz, question 5 uses unlabelled axes. This is like the most challenging questions on coordinates on SATs papers and is worth persevering with. Remember you can draw the problem on squared paper or on a four-quadrant grid you have printed from the attachments and use annotations like Miss Parsons.

## Thursday 14th May 2020 To Solve Practical Coordinate Problems

Lesson 4: https://www.thenational.academy/year-6/maths/to-solve-practical-coordinate-problems-year-6-wk4-4
In this lesson, Miss Parsons looks for patterns to help her solve problems. She uses her knowledge to find missing coordinates: for example, she knows that points on the same horizontal line have the same $y$ coordinate and points on the same vertical line have the same x coordinate.
In the Independent Task, you are asked to find the missing coordinates from a square; Miss Parsons uses the 'diagonals' of the shape to help her solve this. If you'd like to know more about diagonals here are two websites you could visit: https://www.theschoolrun.com/what-is-diagonal
https://www.splashlearn.com/math-vocabulary/geometry/diagonal
She also talks about an 'isosceles trapezium'; this is a trapezium which has two identical base angles and one line of symmetry.
You will also learn that you can have a decimal coordinate e.g. (1.5, 4).

## Friday 15th May 2020 Arithmetic Day

Go to Corbett Maths 5 A Day Primary and work through the 4 tests so that you have completed 20 questions. Bronze is the easiest and Platinum the hardest. The four for Friday 15th May are also below as attachments.

## Year 5

For maths this week we will be using Oak National Academy to learn how to convert units of measurement. Here is the link:
https://www.thenational.academy/online-classroom/year-5/maths\#subjects

You will need to have a pencil and paper ready for the start of the lesson as there will be lots of jottings and bar models needed if you are to be successful. I really do mean this, please don't feel you have to solve everything in your head! Listen to the questions carefully, sometimes the teacher will ask you what unit of measurement you are using or to draw a bar model, they may not be asking you for a numerical answer to the problem. Make sure you pause the video when asked and allow yourself time to solve the problems fully before moving on as the questions get progressively harder.

Lesson one uses a a 24 hour digital clock format so you might like to do the task below to jog your memory on this before starting the lesson.

In lesson 3 the independent task may look overwhelming but you have all the knowledge and skills you need to be able to complete the table. Make sure that you watch all of the guidance the teacher gives you before attempting the task alone. One step at a time, you will be able to solve it.

Don't forget regular Times Table Rock Star practice too!

Four Quadrant Grid

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I can convert 12 -hour times into 24 -hour times and vice versa.

1) Complete the charts, changing 12 -hour digital times into 24 -hour times and 24 -hour times into 12 -hour digital times.


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## 15th May



Find the value of $w$ in this equation

$$
6 w-3=33
$$

Here is a trapezium with a height of 7 cm .
The parallel sides are 8.5 cm and 12.5 cm long-

Find the area of the trapezium


George makes a sequence of numbers. He chooses a starting number and then adds equal amounts each time.

The fourth number in his sequence is -7 The seventh number in his sequence is 32

What is the second number in the $\square$


