# Maths - Week Beginning 1st June 2020

#### Year 6

(Mrs Martin's, Mrs Lewis's and Mrs Quantick's Year 6 pupils)

This week we have two lessons left from the Coordinates and Shapes unit and we will start a new fractions unit. All lessons can be found on Oaks National Academy <a href="https://www.thenational.academy/">https://www.thenational.academy/</a>

## Monday 1st June

Lesson 9 To illustrate and name parts of a circle

https://www.thenational.academy/year-6/maths/coordinates-and-shapes-to-illustrate-and-name-parts-of-a-circle-year-6-wk5-4

This lesson starts with a quiz which requires you to know a lot about 3-D shapes so you might want to revise this first. You will need to know about the properties of tetrahedrons, triangular prisms, pentagonal prisms and cylinders - look up images of these so you can visualise them.

For the main lesson you will need a ruler, something circular to draw around and a piece of string.

Miss Parsons tells you about the meanings of lots of mathematical vocabulary and reminds you about root words and prefixes - this is really useful SPaG revision and should make you think about other similarly constructed words like 'autograph' and 'telephone'. The word 'equidistant' might be new to you: the prefix 'equi' means 'equal' and 'distant' means 'far apart' so the word means 'having equal distance' or the same distance. Miss Parsons also uses the word 'boundary' to name the circumference of the circle; this is important because the radius of a circle is the measurement from the centre of a circle to the boundary - we can't call it an 'edge' because it is not a straight line.

## Tuesday 2nd June

Lesson 10 Coordinates and Shapes: To Solve Practical Problems involving circles <a href="https://www.thenational.academy/year-6/maths/coordinates-and-shapes-to-solve-practical-problems-involving-circles-year-6-wk5-5">https://www.thenational.academy/year-6/maths/coordinates-and-shapes-to-solve-practical-problems-involving-circles-year-6-wk5-5</a>

You will need string and a ruler again.

To solve the problems, you will need to make careful note of the facts given in the questions, for example - are measurements in mm or cm? Are the measurements the radius or the diameter? If you've been able to print the worksheets, you could use a highlighter to identify important information. With the dartboard question, annotation will be really helpful - you could sketch the dartboard if you can't print the worksheet.

This is a really useful lesson because it revises calculation methods (addition, multiplication and division) as well as building on previous learning about shapes.

#### Wednesday 3rd June

We are starting a new topic today: Fractions. Did you complete the last unit on fractions from Oak National Academy? (It is the first unit here

https://www.thenational.academy/online-classroom/year-6/maths#subjects) If not, you might want to do that instead - it will help you revise the basics such as equivalence and simplifying fractions.

Lesson 1 Fractions: To represent multiplication with proper fractions <a href="https://www.thenational.academy/year-6/maths/fractions-to-represent-multiplication-with-proper-fractions-year-6-wk6-1">https://www.thenational.academy/year-6/maths/fractions-to-represent-multiplication-with-proper-fractions-year-6-wk6-1</a>

Before you start the quiz, try to remember how we use a common denominator to compare fractions. You will need to use jottings in the quizzes so have a piece of paper ready. When Miss Parsons asks you to represent a calculation in different ways, don't rush this - the visualisation of different ways of representing fractions problems is really key to understanding what the calculations mean. Miss Parsons uses a lot of bar models to show her thinking - it is worth listening really carefully and even rewinding and listening again until you feel confident. You should also use bar models in your own jottings.

# Thursday 4th June

Lesson 2 Fractions: To multiply pairs of proper fractions <a href="https://www.thenational.academy/year-6/maths/fractions-to-multiply-pairs-of-proper-fractions-year-6-wk6-2">https://www.thenational.academy/year-6/maths/fractions-to-multiply-pairs-of-proper-fractions-year-6-wk6-2</a>

In this lesson you will be spotting patterns, revising how to express whole numbers as a fraction with a denominator of 1 and expressing fractions in their simplest form.

Miss Parsons talks about using a Factor Bug - here is extra support on this method: <a href="https://www.youtube.com/watch?v=PxztZliACUU">https://www.littlegreen.herts.sch.uk/2019/10/17/factor-bugs/</a> - this school even made their bugs - you could do this! This would be especially meaningful if you have younger siblings - make one with them and show them how they work.

#### Friday 5th June

You know the drill for Fridays! - TTRockstars (come on Year 6 - Year 5 are crushing you!!!), completing unfinished work and arithmetic:

Please 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 (see below). If you want to complete more, go ahead!

Parents - the answers can also be found on the website.

https://corbettmathsprimary.com/5-a-day/

If you made a factor bug, send us a photo!

If you did fabulous jottings and annotations, send us a photo!

#### Year 5

(Miss Wood's and Mrs Quantick's Year 5 pupils)

This week we will start a new unit looking at the transformation of shapes – this means the moving, enlarging, reducing or reflecting of a shape on a grid – and how we describe this in mathematical terms. All lessons can be found on Oaks National Academy <a href="https://www.thenational.academy/">https://www.thenational.academy/</a>

#### For each lesson:

- Start with the Introductory Quiz
- Follow the video lesson paying close attention to the information and demonstrations from the teacher
- Complete the independent activities when asked to do so (pausing the video to give yourself as much time as you need)
- Finish with the Exit Quiz.

For every lesson you will need a piece of paper or an exercise book, a sharp pencil and a ruler. There is printable grid paper available on the internet, if you need it. You can also print off the independent tasks from the lessons.

## Monday 1st June

To describe translations between points

https://www.thenational.academy/year-5/maths/an-introduction-to-translation-year-5-wk1-1#slide-1

In today's lesson, Mr Barton will recap some basics that you learned in Year 4 and look at grids, coordinates and how to describe and translate single points. Listen carefully to refamiliarise yourself with key language and concepts.

## Remember:

- Coordinates describe a precise point on a grid.
- Always work along the x-axis first and then work along the y-axis.
- Put your coordinates in a bracket and separate with a comma.
- A translation will move a point up, down or from side to side but will not change its appearance in any other way.

Please make sure that you write out your translation sentences in full in the independent activity.

# Tuesday 2<sup>nd</sup> June

To describe the position of a shape following a translation <a href="https://www.thenational.academy/year-5/maths/describing-translations-year-5-wk1-2">https://www.thenational.academy/year-5/maths/describing-translations-year-5-wk1-2</a>

Today you will be translating shapes – this means that you will need to carefully move multiple coordinates (the vertices of the shape).

#### Remember:

- Pick one vertex to move first
- Carefully count your units
- Repeat the process for the other vertices

- Be careful with your left and right
- Use labels and annotations to help you
- Always use a ruler to join up the coordinates to draw your shapes

Use Mr Barton's stem sentence, "The\_\_\_\_has moved\_\_units \_\_\_\_" and make sure that you write out all the translation sentences in full in the independent tasks.

Mathematical vocabulary – Mr Barton uses the word congruent to describe a shape before and after its translation. This means that the shape has remained the same: it hasn't got bigger or smaller, rotated or changed in any way other than its position on the grid.

## Wednesday 3rd June

To describe positions on a grid as coordinates <a href="https://www.thenational.academy/year-5/maths/describing-positions-and-coordinates-year-5-wk1-3">https://www.thenational.academy/year-5/maths/describing-positions-and-coordinates-year-5-wk1-3</a>

Today you are carefully translating single coordinates and then accurately describing their new position. Think back to Monday's lesson and remember:

- Always work along the x-axis first and then work along the y-axis.
- · Be careful with your left and right
- Carefully count your units
- Use labels and annotations to help you (if you need them)
- Put your coordinates in a bracket and separate with a comma.

Be sure to write Mr Barton's stem sentence out in full in the directed and independent tasks.

# Thursday 4th June

To use coordinates to describe position following a translation <a href="https://www.thenational.academy/year-5/maths/describe-position-after-translation-year-5-wk1-4">https://www.thenational.academy/year-5/maths/describe-position-after-translation-year-5-wk1-4</a>

Today you will extend your x-axis and y-axis to include negative numbers. This means that you will create and use four quadrants on the grid for your translations and the coordinates of your points may include negative numbers. Watch Mr Barton's introduction carefully to help you understand fully before your start your tasks.

Today's independent exercise is quite complicated but take it slowly and carefully and you will be fine. If you are unsure of what to do, go back and watch the support lesson and tasks again first.

## Friday 5<sup>th</sup> June

If you have struggled with any of this week's lessons, go back and try them again.

Please go to Corbett Maths 5 A Day Primary and work through today's 4 tests in order. Miss Wood's set, you should be able to complete Bronze and Silver, you can then try Gold. Ms Quantick's set, you should go as far as you can, aiming to complete at least Bronze, Silver and Gold and can then try Platinum. If you want to complete the exercises from other days this week, go ahead!

Parents - the answers can also be found on the website. https://corbettmathsprimary.com/5-a-day/

TTRockstars Year 5 you were amazing in the last Tournament – scoring almost 28,000 (to Year 6's 9,000). Keep up the practise so you're ready for the next competition when it comes. Remember, you can challenge each other to a one-to-one Rock Slam whenever you like.