2 Week Independent Learning plan **Weeks 11 and 12**

Monday June 8th to Friday June 19th

Select your set (ctrl + click) or scroll down for lessons:

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| Group  | Teacher | Support contact details  |
| [Set 1](#Set1) | Dr Parsons | sparsons@Waseleyhills.worcs.sch.uk |
| Clicking Images, Stock Photos & Vectors | Shutterstock[Set 2](#Set2) | Mr Watkins | h2watkins@Waseleyhills.worcs.sch.uk |
| [Set 3](#Set3) | Miss Davies | cdavies@Waseleyhills.worcs.sch.uk |
| [Set 4](#Set4) | Miss Purewal | spurewal@Waseleyhills.worcs.sch.uk |
| [Set 5](#Set5) | Mr Desai | ddesai@Waseleyhills.worcs.sch.uk |
|  |  | ???????@Waseleyhills.worcs.sch.uk |



Three stages to online learning

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| **Stage One – Reading Task** | **Stage Two – Completing Tasks** | **Stage Three – Assessing your learning and feedback** |
| Read the lessons in the table below. Think about what you need to learn from the task. It may help to look at the other lessons too as this will show you where your learning is heading.  | Find the resources you need. In some instances you may need to log into HomeAccess+ and find the file on the coursework drive (S). Login with your normal school username and password. Use the resource as described to complete the suggested task. Reflect on the teacher’s question.Click here for HomeAccess+ drive | At the end of the two weeks you will be set a task by your teacher on Show My Homework. This is submitted in SMHWK. This task will assess your learning and allow us to give you feedback.These assessment tasks are optional but submitting them is very helpful for you and your teacher to understand what you have learnt. |



We are here to help you within school opening hours:

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| **Email your teacher** | **Join your teacher for a support chat session** | **Ring school reception** |
| You can now email your teacher using your Office 365 email address. You can also email Mr Baker or the Subject Leader using the contact info above. |  You will also receive an invite during the two week period to join an online support chat with your teacher. | Call 0121 4535211 within school hours. They will email your teacher and ask them to contact you. |

SET 5 Year: 10 Topic/theme:

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| **Lesson**  | **Aim:**What you need to take from this lesson  | **Resource(s) to use:**Hyperlinks to videos etcHomeAccess+ file location | **Suggested task:** |
| 1 | In this lesson you will learn how to find the volume of a cuboid | Description of resources:View video 355 onhttps://corbettmaths.com/contents/Worksheet exercise:Workout questions 1,2,3,4 and 5Location:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10 \Lessons 26-30\Set 5 Mr DesaiFile Name:Volume of a cuboid | Description of what you need to do (step by step):Watch the video.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.A question your teacher would have asked you at the end of this lesson is: Find the volume of a cuboid of dimensions 5cm, 8cm and 10cm? |
| 2 | In this lesson you will learn how to find the volume of a prism | Description of resources:View video 356 onhttps://corbettmaths.com/contents/Worksheet exercise:Workout questions 1 and 2Location:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10 \Lessons 26-30\Set 5 Mr DesaiFile Name:Volume of a prism | Description of what you need to do (step by step):Watch the video.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.A question your teacher would have asked you at the end of this lesson is: Find the volume of a prism of area of front face 40cm squared and a depth of 5cm? |
| 3 | In this lesson you will learn how to find the volume of a cylinder | Description of resources:View video 357 onhttps://corbettmaths.com/contents/Worksheet exercise:Workout questions 1,2 and 3Location:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10 \Lessons 26-30\Set 5 Mr Desai File Name:Volume of a cylinder | Description of what you need to do (step by step):Watch the video.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.A question your teacher would have asked you at the end of this lesson is: Find the volume of a cylinder of a radius 3cm and height of 7cm? |
| 4 | In this lesson you will learn how to find the volume of an L shape prism | Description of resources:View video 358 onhttps://corbettmaths.com/contents/Worksheet exercise:Workout questions 1, 2 and 3Location:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10 \Lessons 26-30\Set 5 Mr Desai File Name:Volume of an L shape prism | Description of what you need to do (step by step):Watch the video.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.A question your teacher would have asked you at the end of this lesson is: Draw any L shape with dimensions with a volume of 100 cm cubed? |
| 5 | In this lesson you will learning how to find the volume of a cone | Description of resources:View video 359 onhttps://corbettmaths.com/contents/Worksheet exercise:Workout questions 1,2,3 and 4Location:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10 \Lessons 26-30\Set 5 Mr Desai File Name:Volume of a cone | Description of what you need to do (step by step):Watch the video.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.A question your teacher would have asked you at the end of this lesson is: Find the volume of a cone of radius 3cm and a vertical height of 10cm? |
| **Need help?**HomeAccess+ https://facility.waseley.networcs.net/HAP/login.aspx?ReturnUrl=%2fhap (use your normal school username and password).Pupil and parent help page: https://www.waseleyhills.worcs.sch.uk/coronavirus-independent-learning/help-for-parents-and-pupils | **How will we assess you learning?**Exit ticket task on SMHWK after each two weeks of lessons. |

SET 4 Year: 10 Topic/theme:

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| **Lesson**  | **Aim:**What you need to take from this lesson  | **Resource(s) to use:**Hyperlinks to videos etcHomeAccess+ file location | **Suggested task:** |
| 1 | **In this lesson you will learn…**How to multiply over single brackets. | **Description of resource:** Worksheet on Location: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 4/lesson 1Video linkhttps://corbettmaths.com/2013/12/23/expanding-brackets-video-13/WorksheetLesson 1 – expanding single brackets | **Description of what you need to do (step by step):** - Watch the video for expanding single brackets - Please complete the worksheet provided. (Remember the rules for multiplying with negative numbers)- Check your answers with the answers provided.**A question your teacher would have asked you at the end of this lesson is:**  What is the answer to y + y compared to y x y ? |
| 2 | **In this lesson you will learn…**How to multiply double brackets. | **Description of resource:** Worksheet on Location: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 4/lesson 2Video linkhttps://corbettmaths.com/2013/12/23/expanding-two-brackets-video-14/WorksheetLesson 2 – expanding double brackets | **Description of what you need to do (step by step):*** Watch the video for expanding double brackets
* Please complete the worksheet provided.
* Check your answers with the answers provided.

**A question your teacher would have asked you at the end of this lesson is:** What is the FOIL method for multiplying double brackets? |
| 3 | **In this lesson you will learn…**How to factorise linear expressions. | **Description of resource:** Worksheet on Location: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 4/lesson 3Video link https://corbettmaths.com/2013/02/06/factorisation/WorksheetLesson 3 – factorising expressions | **Description of what you need to do (step by step):*** Watch the video for expanding double brackets
* Please complete the worksheet provided.
* Check your answers with the answers provided.

**A question your teacher would have asked you at the end of this lesson is:** How can you check whether you have factorised your expressions fully? (Hint think about Highest Common Factors) |
| 4 | **In this lesson you will learn…**How to factorise quadratic expressions. | **Description of resource:** Worksheet on Location: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 4/lesson 4Video link https://corbettmaths.com/2013/02/06/factorising-quadratics-1/WorksheetLesson 4 – factorising quadratic expressions | **Description of what you need to do (step by step):*** Watch the video for expanding double brackets
* Please complete the worksheet provided.
* Check your answers with the answers provided.

**A question your teacher would have asked you at the end of this lesson is:**If you had to describe a method for factorising quadratic expressions, how would you do it?  |
| 5 | **In this lesson you will learn…**How to solve factorise quadratic equations. | **Description of resource:** Worksheet on Location: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 4/lesson 5Video link https://corbettmaths.com/2013/05/03/solving-quadratics-by-factorising/WorksheetLesson 5 – solving quadratic equations | **Description of what you need to do (step by step):*** Watch the video for expanding double brackets
* Please complete the worksheet provided.
* Check your answers with the answers provided.

**A question your teacher would have asked you at the end of this lesson is:** What are the steps for solving a quadratic equation? |
| **Need help?**HomeAccess+ https://facility.waseley.networcs.net/HAP/login.aspx?ReturnUrl=%2fhap (use your normal school username and password).Pupil and parent help page: https://www.waseleyhills.worcs.sch.uk/coronavirus-independent-learning/help-for-parents-and-pupils | **How will we assess you learning?**Exit ticket task on SMHWK after each two weeks oflessons. |

SET 3 Year: 10 Topic/theme:

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| **Lesson**  | **Aim:**What you need to take from this lesson  | **Resource(s) to use:**Hyperlinks to videos etcHomeAccess+ file location | **Suggested task:** |
| 1 | In this lesson you will learn how to simplify ratios to simplest form including involving decimals and units of measure. | Description of resource:View video 269 on <https://corbettmaths.com/contents/>Worksheet exerciseWorkout questions: 1, 2, 3 and 4Location:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10\Lessons 26-30\Set 3 Miss Davies File Name: simplifying-ratios | Description of what you need to do (step by step):Watch the video - shows how to simplify ratios to their lowest terms.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.Hints:You will need to find common times tables that numbers in the ratio belong to.When dealing with ratios involving decimals multiply both sides by the same power of 10 to make both sides whole numbers.When dealing with units of measure, they should all be converted to make sure that they are all the same unit.A question your teacher would have asked you at the end of this lesson is:Write down the first two lines of method for simplifying: 1.782 km : 0.3 km |
| 2 | In this lesson you will learn how to simplify ratios into unitary form. | Description of resource:View video 271c on <https://corbettmaths.com/contents/>Worksheet exerciseWorkout questions: 5 and 6Apply questions: AllLocation:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10\Lessons 26-30\Set 3 Miss Davies File Name: simplifying-ratios | Description of what you need to do (step by step):Watch the video - shows how to simplify ratios into unitary form.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.Hints:Show method fully and in clear steps - it makes work easier for you to check.When answering Apply questions make sure you label the numbers in the ratio in the same order mentioned in the question.The n can be left as a simplified fraction - to turn the fraction to a decimal just divide the top number by the bottom.A question your teacher would have asked you at the end of this lesson is:Write down the first line to write the ratio 42 : 15 into the form n : 1 |
| 3 | In this lesson you will learn how to represent ratios as fractions or percentages. | Description of resource:View video 269a on <https://corbettmaths.com/contents/>Worksheet exerciseWorkout questions: 1, 2, 3, 4, 5, 6, 7 and 8Location:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10\Lessons 26-30\Set 3 Miss Davies File Name: Expressing-a-ratio-as-a-fraction-or-percentage | Description of what you need to do (step by step):Watch the video - shows how to represent ratios as fractions and uses conversions between fractions and percentages.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.Hints:You can use bar modelling to help you if you wish - we used this in class.You may need to look into converting between fractions and percentages.Remember all numbers together in a ratio must represent one whole (for fractions) or 100% (for percentages).Set out your answers clearly - label each number in the ratio with the item it represents.A question your teacher would have asked you at the end of this lesson is:Write the ratio 8 : 14 as fractions and as percentages. |
| 4 | In this lesson you will learn how to use representing ratios as fractions and percentages as part of solving simple problems. | Description of resource:View video 269a on <https://corbettmaths.com/contents/>Worksheet exerciseWorkout questions: 9, 10, 11, 12, 13 and 14Apply questions: AllLocation:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10\Lessons 26-30\Set 3 Miss Davies File Name: Expressing-a-ratio-as-a-fraction-or-percentage  | Description of what you need to do (step by step):Watch the video - shows how to represent ratios as fractions and uses conversions between fractions and percentages.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.Hints:You can use bar modelling to help you if you wish - we used this in class.You may need to look into converting between fractions and percentages.Remember all numbers together in a ratio must represent one whole (for fractions) or 100% (for percentages).Set out your answers clearly - label each number in the ratio with the item it represents.A question your teacher would have asked you at the end of this lesson is:36% of a shape is shaded. Write the ratio representing shaded to un-shaded parts of the shape. |
| 5 | In this lesson you will learn how to use partial information from equivalent ratios to find other missing values. | Description of resource:View video 271 on <https://corbettmaths.com/contents/>Worksheet exerciseAll questions Location:HomeAccess+ \coursework drive(S)\maths\School Closure Work\Year 10\Lessons 26-30\Set 3 Miss Davies File Name: Given-one-value | Description of what you need to do (step by step):Watch the video - shows how to problem solve by using equivalent ratios to find missing values.Answer the given questions - show full method to help with flow of your answer.Self-mark your work - reflect and correct where possible.Hints:The way you lay out and label parts of your answer is important here - it communicates to the marker the flow and reasoning of your answer.Show your calculation methods - allocate a part of your page and label appropriately.You may need to use knowledge from other areas of maths learning.A question your teacher would have asked you at the end of this lesson is:The ratio of pairs of socks to ties in a drawer is 8 : 5. If there are 28 pairs of socks, how many ties are there? |
| **Need help?**HomeAccess+ https://facility.waseley.networcs.net/HAP/login.aspx?ReturnUrl=%2fhap (use your normal school username and password).Pupil and parent help page: https://www.waseleyhills.worcs.sch.uk/coronavirus-independent-learning/help-for-parents-and-pupils | **How will we assess you learning?**Exit ticket task on SMHWK after each two weeks oflessons. |

SET 2 Year: 10 Topic/theme:

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| **Lesson**  | **Aim:**What you need to take from this lesson  | **Resource(s) to use:**Hyperlinks to videos etcHomeAccess+ file location | **Suggested task:** |
| 1 | In this lesson you will learn…Revise ordering numbers, including negative values | Description of resource:Worksheet on ordering numbersLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 2 Mr Watkins/ ordering-numbers-pdf1Video link<http://corbettmaths.com/2013/06/06/ordering-numbers-including-negatives/> | Description of what you need to do (step by step):Watch the video and then answer all parts of all of the questions on the worksheetA question your teacher would have asked you at the end of this lesson is:Why do you think I set you this piece of revision at the start of this series of lessons? |
| 2 | In this lesson you will learn…Revise addition and subtraction involving negative numbers | Description of resource:Worksheet on addition and subtraction involving negative numbersLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 2 Mr Watkins/Negatives-addition-and-subtractionVideo link<https://corbettmaths.com/2013/06/08/negatives-addition-and-subtraction-2/> | Description of what you need to do (step by step):Watch the video and then answer the questions from the ‘Apply’ section of the worksheetA question your teacher would have asked you at the end of this lesson is:Why does subtracting a negative number have the same effect as adding that number on? |
| 3 | In this lesson you will learn…Revise multiplication and division with negative numbers | Description of resource:Worksheet on area of a trapeziumLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 2 Mr Watkins/Negatives-multiplication-and-division-pdf1Video link<https://corbettmaths.com/2012/08/20/multiplying-negative-numbers/>and<https://corbettmaths.com/2012/08/20/dividing-involving-negatives/> | Description of what you need to do (step by step):Watch the video and then answer all parts of questions 1 – 6 on the worksheetA question your teacher would have asked you at the end of this lesson is:If -2 x -3 = 6 what is –a x –b? |
| 4 | In this lesson you will learn…Revise harder questions involving multiplication and division involving negative numbers  | Description of resource:Worksheet on area of a trapeziumLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 2 Mr Watkins/Negatives-multiplication-and-division-pdf1Video link<https://corbettmaths.com/2012/08/20/multiplying-negative-numbers/>and<https://corbettmaths.com/2012/08/20/dividing-involving-negatives/> | Description of what you need to do (step by step):Watch the video and then answer the questions from the ‘Apply’ section of the worksheetA question your teacher would have asked you at the end of this lesson is:Why are written questions harder? |
| 5 | In this lesson you will learn…Answer questions on real life situations where negative numbers are used | Description of resource:Worksheet on area of a trapeziumLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 2 Mr Watkins/real-life-negatives-pdf1Video link<https://corbettmaths.com/2013/05/15/negative-numbers-temperature/> | Description of what you need to do (step by step):If you need to, watch the video again, then answer all of the questions on the worksheetA question your teacher would have asked you at the end of this lesson is:How could you come up with a way of making sure that you can remember the method for this? |
| **Need help?**HomeAccess+ https://facility.waseley.networcs.net/HAP/login.aspx?ReturnUrl=%2fhap (use your normal school username and password).Pupil and parent help page: https://www.waseleyhills.worcs.sch.uk/coronavirus-independent-learning/help-for-parents-and-pupils | **How will we assess you learning?**Exit ticket task on SMHWK after each two weeks oflessons. |

SET 1 Year: 10 Topic/theme:

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| **Lesson**  | **Aim:**What you need to take from this lesson  | **Resource(s) to use:**Hyperlinks to videos etcHomeAccess+ file location | **Suggested task:** |
| 1 | In this lesson you will learn how work out the volume of a cylinder or one of its lengths | Description of resource: Worksheet on Volume of a cylinderLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 1/volume-of-a-cylinder-pdf1 Video link<https://corbettmaths.com/2013/02/15/volume-of-a-cylinder/> | Description of what you need to do (step by step):1. Watch the video
2. Answer the following questions

Q1 (a,e,f)Q2 (a,b,c)Q3 (a,b,c)Q4 (a,b)A question your teacher would have asked you at the end of this lesson is:Question 3 of the apply section at the end of the worksheet |
| 2 | In this lesson you will learn how work out the volume of a pyramid or one of its lengths | Description of resource: Worksheet on volume of a pyramidLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 1/Volume-of-a-Pyramid-pdfVideo link<https://corbettmaths.com/2013/03/05/volume-of-a-pyramid/> | Description of what you need to do (step by step):1. Watch the video
2. Answer the following questions

Q1 (a,b,c)Q2Q3Q4Q5Apply section Q3A question your teacher would have asked you at the end of this lesson is:Question 2 of the apply section at the end of the worksheet |
| 3 | In this lesson you will learn how to work out the volume of compound shapes and lengths from the volume of a pyramid | Description of resource: Worksheet on volume of a pyramidLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 1/ Volume-of-a-Pyramid-pdfVideo links<https://corbettmaths.com/2013/03/05/volume-of-a-pyramid/> | Description of what you need to do (step by step):1. Watch the video
2. Answer the following questions

Q6Q7(a,b)Q8Q9Apply section Q4 (volume of a sphere is 4/3 \* pi \* r^3 )A question your teacher would have asked you at the end of this lesson is:A square based pyramid has height of 9cm and a volume of 200cm3. Find the side length of the square to 2 d.p. |
| 4 | In this lesson you will learn how work out the volume of a cone or one of its lengths | Description of resource: Worksheet on volume of a coneLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 1/volume-of-a-cone-pdf2Video link<https://corbettmaths.com/2013/03/03/volume-of-a-cone/> | Description of what you need to do (step by step):1. Watch the video
2. Answer the following questions

Q1 (a,b)Q2(a,b)Q3(a,b)Q4(a,b)Apply section Q2 and Q4A question your teacher would have asked you at the end of this lesson is:Question 1 of the apply section at the end of the worksheet |
| 5 | In this lesson you will learn how to solve quadratics | Description of resource: Worksheet on volume of a sphereLocation: HomeAccess+/Coursework drive S/ Maths/School Closure work/Year 10/Lessons 26 -30/Set 1/volume-of-a-sphere-pdf1Video link<https://corbettmaths.com/2013/03/03/volume-of-a-sphere/> | Description of what you need to do (step by step):1. Watch the video
2. Answer the following questions

Q1(a,b,e)Q2(a,b)Q4(a,b)Q5(a)Apply section Q2 and Q3A question your teacher would have asked you at the end of this lesson is:Can you make up a question to do yourself?Q1 of the Apply section of the worksheet |
| **Need help?**HomeAccess+ https://facility.waseley.networcs.net/HAP/login.aspx?ReturnUrl=%2fhap (use your normal school username and password).Pupil and parent help page: https://www.waseleyhills.worcs.sch.uk/coronavirus-independent-learning/help-for-parents-and-pupils | **How will we assess you learning?**Exit ticket task on SMHWK after each two weeks of lessons. |