Year 8 ‘At home learning’ Resource 4

**Task: Aim to complete one activity a day to help support and further your revision and subject knowledge.**

**Useful websites**

To assist with your learning please use:

<https://vle.mathswatch.co.uk/vle/> (there is 10 hours’ worth of work on there too!)

Username: r23surnamef@rosebridge (e.g. r23banksk@rosebridge)

Password: same as your username (e.g. r23banksk@rosebridge)

<https://www.bbc.co.uk/bitesize>

<https://corbettmaths.com/>

<https://www.mathsgenie.co.uk/gcse.html>

**Key Topics to revise:**

Fractions: Four Operations and Mixed Numbers

Decimal: Multiplying, Dividing, adding, subtracting and rounding.

Algebra: Expanding and simplifying

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| Plan a ‘how to’ guide on multiplying a decimal by another decimal | Research the meanings of expressions, term and equation giving examples  | Write out 3 ACE questions to test a classes understanding of multiplying decimals | Write a mini 3 minute speech explaining to another Yr8 Pupil how divide fractions | Write out 3 ACE questions to test a classes understanding of dividing fractions | Research and practice examples of answering mathematical problem involving algebra. | Review how to multiply a whole number by a fraction | Create a poster to teach your parent/carer how to round decimals to 1 and 2 decimal places. |
| Create a multiple choice quiz on multiplying and dividing fractions | Write a poem/song/rap to remember how to divide fractions. | Create a revision poster to show how you divide a decimal by 10, 100 and 1000. | Research and practice examples of expanding and simplifying double brackets. | Revise expanding brackets. Make a list of 10 questions and answers. Include diagrams/pictures. Cut them out mix them up and see if you can match them up-Challenge a parent/career/friend to do so | Plan a ‘how to’ guide on multiplying a decimal by a whole number | Review how to simplify expression involving negative numbers  | Research the terms improper fractions and mixed numbers. Give examples to show the difference between the 2 terms |
| Create a step by step guide to explain how to multiply one decimal by another | Write out 3 ACE questions to test a classes understanding expanding single brackets | Illustrate 10 everyday ways in which we use decimals – list, draw or cut from papers or magazines eg the weather | Research and practice worded mathematical problems multiplying improper fractions | Create a revision poster to show what equivalent fractions are, designing a rule of how to form equivalent fractions | Write a mini 1 minute speech/Rap/poem to illustrate the difference between expressions and equations | Write out and explain the steps to collect like terms | Create a revision poster to on adding and subtracting fractions with the same denominator.  |
| Create revision cards covering Fractions - ((+/-/multiplying and dividing) | Write a lesson for an alien covering one example of expanding and simplifying expressions | Choose one aspect the topic Fractions and plan a lesson on it to teach a Year 7 student. | Create revision cards to explain how to divide fractions. | Create a quiz – 10 questions around the topic ‘algebra simplifying expressions’ | Write out 3 ACE questions to test a classes understanding of the difference between expanding and simplifying expressions. | Using the revision card s you have created to test yourself. If possible get someone to test you | From a shopping receipt round 10 items to 1 decimal place  |

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| Plan a ‘how to’ guide on how to divide one decimal by another decimal. | Create a revision poster to on adding and subtracting fractions with different denominator. | Create a mind map on algebra- include simplifying (+/-/multiplying and dividing), expanding brackets (single and double) | Write out a step by step explanation of how to expand and simplify double brackets | Write out 3 ACE questions to test a classes understanding of mixed numbers and improper fractions. | Create revision cards to explain how to multiply fractions. | Research and practice worded questions involving decimals | Revise fractions-4 operations ((+/-/multiplying and dividing) Make a list of 15 questions and answers. Cut them out mix them up and see if you can match them up-Challenge a parent/career/friend to d o so |
| Create a worksheet, with the answers on the back, covering the rules of how to simplify algebra involving +/-.  | Create a pictorial model, using number lines to explain how to round numbers to the nearest 10 and 100 | Revise Adding and Subtracting mixed numbers. Make a list of 10 questions and answers. Include pictures/diagrams. Cut them out mix them up and see if you can match them up-Challenge a parent/career/friend to do so | Create a multiple choice quiz – 10 questions on adding and subtracting fractions | Create a revision poster for rounding decimals to one, two and three decimal places | Create a poster showing how to perform the multiplication of a 2 digit decimal number by a 2 digit decimal number | Revise the topic decimals .Make a list of up to 10 questions and answers. Cut them out mix them up and see if you can match them up-Challenge a parent/career/friend to do so | Research and practice examples expanding and simplifying single brackets |
| Write 10 multiple choice questions covering fractions to test a Yr7 pupil on algebra. Answers on the back of the sheet | Write out a step by step guide of how to multiply decimals by 10, 100 and 1000 | From a shopping receipt order them from the smallest to the largest  | Create a revision poster to show how you multiply a decimal by 10, 100 and 1000. | Choose one aspect of the topic decimals and plan a lesson on it to teach a Yr7 pupil. | Write a mini 1 minute speech to remember how to simplify expressions. | Create a revision card s for the topic of multiplying and dividing decimals | Write out and explain the steps needed to divide one decimal by another decimal. |
| Create step by step guide to show how to divide fractions | Choose one aspect of the topic algebra and pan a lesson on it to teach a Yr7 pupil. | Write a 1 minute speech to tell a fellow pupil what the rules are for multiplying decimals |  Write a step by step guide of how to convert improper fractions to mixed numbers and vice versa. | Create a multiple choice quiz – 10 questions around topics of improper fractions and mixed numbers | Review how to divide a whole number by a fractions | Write out 3 ACE questions to test a classes understanding of each of the topics above(one for each so 3 in total) | Write out a step by step guide of how to divide decimals by 10. 100 and 1000 |