Name_____
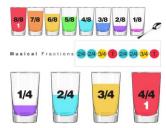
Year 8 Mathematics
Number - Report Guidelines

Topic: Operations with Fractions.

Due Date: 30/03/2022

You are to create and present a report on the topic of "Fractions". This should be in the form of an A5 booklet explaining how to add, subtract, multiply and divide **fractions with different denominators.** You must start all examples with fractions that are in their simplest form (lowest terms).

It should contain material that you have **written** yourself, labelled **diagrams** and **drawings**. Useful sources of information are books, encyclopaedias, the library, and the internet. Please **do not just print off Wikipedia articles** and hand them in as your own work, or have your mum or dad do the work for you. Please present your work on the white A5 paper booklet given you, with your name clearly shown on the front cover. You should use at least 2 A5 pages for each section.

Plenty of time will be allocated in class for work on this project (about 5 full periods total, or one week of lessons), and it expected that research will also be done in homework time. However, the booklet itself will only be done at school. It will be kept at school.

To obtain a passing mark it is expected that you give a simple and accurate explanation for each operation, and show some simple and accurate example including correct cancelling (simplification/ reducing), all neatly presented.

To obtain full marks it would be expected that you would do all of the above, plus correctly explain why your method works and show several examples with full working for positive and negative fractions and for improper fractions.

Section				Marks available	Marks awarded
Addition	Explanation	Basic	How to do it, step by step	5	
		Advanced	Why does it work?	5	
	Example	Basic	Simple example, step by step	5	
		Advanced	Several examples showing full working - +ve, -ve, improper etc.	5	
			Presentation	5	
Subtraction	Explanation	Basic	How to do it, step by step	5	
		Advanced	Why does it work?	5	
	Example	Basic	Simple example, step by step	5	
		Advanced	Several examples showing full working - +ve, -ve, improper etc.	5	
			Presentation	5	
Multiplication	Explanation	Basic	How to do it, step by step	5	
		Advanced	Why does it work?	5	
	Example	Basic	Simple example, step by step	5	
		Advanced	Several examples showing full working - +ve, -ve, improper etc.	5	
			Presentation	5	
Division	Explanation	Basic	How to do it, step by step	5	
		Advanced	Why does it work?	5	
	Example	Basic	Simple example, step by step	5	
		Advanced	Several examples showing full working - +ve, -ve, improper etc.	5	
			Presentation	5	
				Total	

Resources:

My Website:
http://christopherpoole.weebly.com/index.html

Adding Fractions:
https://www.khanacademy.org/math/cc-fifth-grade-math/imp-fractions-3/imp-adding-and-subtracting-fractions-with-unlike-denominators/v/adding-small-fractions-with-unlike-denominators

Subtracting Fractions:
https://www.khanacademy.org/math/cc-fifth-grade-math/imp-fractions-3/imp-adding-and-subtracting-fractions-with-unlike-denominators/v/subtracting-small-fractions-with-unlike-denominators

Multiplying Fractions: https://www.khanacademy.org/math/cc-fifth-grade-math/5th-multiply-fractions/imp-multiplying-fractions/v/multiplying-fractions

Dividing Fractions:

https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-arithmetic-operations/cc-6th-dividing-fractions/v/conceptual-understanding-of-dividing-fractions-by-fractions

https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-arithmetic-operations/cc-6th-dividing-fractions/v/another-dividing-fractions-example

https://www.youtube.com/watch?v=tBxPYosbyWw