Grade 6 Mathematics Planner

Term: 2 | **Strand:** Number and Algebra | **Week:** 2

Year Level Indicators	Statement:	Elaborations:
Level 5	**Describe, continue and create patterns with fractions, decimals** and whole numbers **resulting from addition and subtraction**	Using the number line or diagrams to create patterns involving fractions or decimals
Level 6	They describe rules used in sequences involving whole numbers, fractions and decimals	Investigating additive and multiplicative patterns such as the number of tiles in a geometric pattern, or the number of dots or other shapes in successive repeats of a strip or border pattern looking for patterns in the way the numbers increase/decrease
Level 7	Introduce the concept of variables as a way of representing numbers using letters Calculate mean, median, mode and range for sets of data. Describe and interpret data displays using median, mean and range	Understanding that arithmetic laws are powerful ways of describing and simplifying calculations and that using these laws leads to the generality of algebra Understanding that summarizing data by calculating measures of centre and spread can help make sense of the data Using mean and median to compare data sets and explaining how outliers may affect the comparison

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Monday	Learning Intention: To be able to analyse and compare sets of data by using the mean, median and mode Summary: Students use peer generated visual representations describing their similarities and differences. They identify the mean, median and mode, commenting on the usefulness of each definition			
Tuesday Rotation	**Learning Intention:** List the algebraic conventions. Understand that algebra is based on agreed conventions. (Listed on p252 Pearson 7) **Summary:** Students record conventions then apply to worded examples. C to the power of 4 = cxcxcxc	**Learning Intention:** They describe rules used in sequences involving whole numbers, fractions and decimals **Summary:** FRACTIONS-DECIMALS-AND-PERCENTS-1-1p59zel.ppt Part 1 Relationships between fractions, decimals and percentage. Introductory lesson	**Learning Intention:** To recognise and understand the different terms associated with rules and patterns within numbers, shapes and objects. **Summary:** equations, expressions, patterns, term, common difference are just some of the terms students need to identify and know. **Refer to Rules and patterns PDF**	**Learning Intention:** Revise fractions and their conversion to decimals. **Summary:** Using fraction wall made last week convert fractions to decimals. Demonstrate method. Using pages 19 and 20 of Mathletics to define tenths and hundredths.
Wednesday Rotation	**Learning Intention**: It is much quicker to write rules using algebra than in words. A table of values is an effective way to prove algebraic rules. **Summary:** Using Rules Students are given a list of rules and required to complete a table to show given values. Y=x+2 To find y, double x X | 2.3 | 4.78 | 11 | 16.896 Y |					**Learning Intention:** They describe rules used in sequences involving whole numbers, fractions and decimals **Summary:** FRACTIONS-DECIMALS-AND-PERCENTS-1-1p59zel.ppt Part 2 Which rules are required to change fractions into decimals? Complete the problems in the presentation	**Learning Intention:** To identify patterns within numbers and locate terms, the common difference and formulating rules **Summary:** Students complete the multiple choice sheet then working in pairs locate terms, common difference and rules from questions written on the board. **Finding Patterns PDF**	**Learning Intention:** Locating fractions and decimals on a number line. **Summary:** *Use the video to explain fractions on a number line.* *http://www.khanacademy.org/math/cc-third-grade-math/cc-3rd-fractions-topic/cc-3rd-fractions-meaning/v/fractions-on-a-number-line Follow up with Fractions on the number line 1 and 2.* *Use the video to explain decimals on a number line.* *http://www.khanacademy.org/math/arithmetic/decimals/decimals-on-number-line/v/decimals-on-a-number-line Do Decimals on the number line 1 and 2.*
Thursday Independent	**Learning Intention**: Solve worded equations, considering BODMAS, using pronumerals **Summary:** Students complete recall 5, page 250 Pearson 7. (Consolidation of interpreting worded problems into algebraic equations)	**Learning Intention**: They describe rules used in sequences involving whole numbers, fractions and decimals **Summary:** See attached worksheet. Converting fractions, decimals and percentages	**Learning Intention:** Students can confidently solve patterns and rules involving terms, common difference, expressions within tables , number lines and worded problems. **Summary:** See attached worksheet: **Rules and Patterns PDF – Test Yourself**	**Learning Intention:** Revise the placement of fractions and decimals on a number line. **Summary:** Follow up games to prac placing decimals and fractions on a number line. The link is in each Grade's folder on student files called Decimal Games There are also two study ladder activities to complete.