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**Knowledge Rich Curriculum Plan**

Year 8 - Topic 5: Real World Modelling



| **Lesson/Learning Sequence**  | **Intended Knowledge:***Students will know that… Students will know how to…* | **Tiered Vocabulary**  | **Prior Knowledge:***In order to know this… Students need to already know that…* | **Assessment**  |
| --- | --- | --- | --- | --- |
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| **1** | * To understand the following terms: cell, cell reference, column, row
* To understand the term formatting and why we apply these to spreadsheets
* To apply basic formatting techniques such as colour fill, font, border, merge and currency
* Add in a simple formula.
* Able to create a simple spreadsheet
 | ColumnRowAppearanceCurrencySpreadsheetFormatCellCell referenceFontMergeData type | * Why we would change the appearance of a document
* How to layout a table with headings
 | QuestioningWorksheet |
| **2** | * Enter data into a spreadsheet and identify cell references correctly
* Use different formulae for addition, subtraction, multiplication division
* Understand how to use brackets to change the order of calculation
 | CalculateColumnRowAddition Subtraction Multiply Divisio SpreadsheetCell referenceFormula | * Able to create a simple spreadsheet
* Apply some basic formatting to a spreadsheet.
* Format a spreadsheet appropriately including changing column widths, merge and center and currency formatting.
* Add in a simple formula.
 | QuestioningWorksheet |
| **3** | * Use the basic functions SUM, AVERAGE, MIN and MAX in a spreadsheet.
* Use all of the above formula and functions effectively.
* Use the COUNTA and TEXT functions.
 | AverageMinimum MaximumCalculateSpreadsheetFormulaFunctionCellAutofillSUMMINMAXCOUNTA | * Enter data into a spreadsheet and identify cell references correctly
* Use different formulae for addition, subtraction, multiplication division
* Understand how to use brackets to change the order of calculation
 | Retrieval TaskQuestioning Worksheet |
| **4** | * How to Sort a spreadsheet and apply a basic filter with help.
* Use the > and < operators in a formula correctly.
* Filter data by more than one criteria
 | SortFilterLess thanGreater thanCriteriaRange DataOperator | * Basic functions SUM, AVERAGE, MIN and MAX in a spreadsheet.
* COUNTA function to find any cells that contain data.
 | QuestioningWorksheet |
| **5** | * How to Create a bar and pie chart.
* Format the graphs appropriately and use data which is not next to each other on the spreadsheet.
* Create a spreadsheet and graph from scratch and use the graph to answer questions.
 | GraphAppearanceComparegraphSortPie chartLine graphBar chartDataFormatFormula  | * How to Sort a spreadsheet and apply a basic filter with help.
* Use the > and < operators in a formula correctly.
* Filter data by more than one criteria
 | QuestioningWorksheet |
| **6** | * Students will know how to answer the end of unit assessment using their prior knowledge.
* Students will know how to improve on their work from previous lessons in the unit.
 | Students will need to use all of the vocabulary from the previous lessons. | * Students need to know all of the intended knowledge from the previous lessons in the unit.
 | End of Unit Assessment |