



Lowerhouse Junior School Computing Overview Sheet



Year 6 – Spreadsheets

National
Centre for
Computing
Education

Rationale: This unit introduces the learners to spreadsheets. They will be supported in organising data into columns and rows to create their own data set. Learners will be taught the importance of formatting data to support calculations, while also being introduced to formulas and will begin to understand how they can be used to produce calculated data. Learners will be taught how to apply formulas that include a range of cells, and apply formulas to multiple cells by duplicating them. Learners will use spreadsheets to plan an event and answer questions. Finally, learners will create graphs and charts, and evaluate their results in comparison to questions asked.

Progression: This unit progresses students' knowledge and understanding of data, and teaches them how to organise and modify data within spreadsheets.

Overview:

Lesson 1: To identify questions which can be answered using data
Lesson 2: To explain that objects can be described using data
Lesson 3: To explain that formulas can be used to produce calculated data
Lesson 4: To apply formulas to data, including duplicating
Lesson 5: To create a spreadsheet to plan an event
Lesson 6: To choose suitable ways to present data

Subject Knowledge

Lesson 1: During this lesson learners will understand that a spreadsheet is a computer application which allows users to organise, analyse, and store data in a table. They will begin to realise the importance of data headings. Learners will answer questions about a spreadsheet, and then create their own questions that can be answered using a given set of data.

Lesson 2: During this lesson learners will be taught that objects can be described using data. They will build a data set (a collection of related data that can be manipulated using a computer) within a spreadsheet application, and apply appropriate number formats to cells.

Lesson 3: During this lesson learners will begin to use formulas to produce calculated data. They will understand that the type of data in a cell is important (e.g. numbers can be used in calculations whereas words cannot). Learners will create formulas to use in their spreadsheet using cell references and identify that changing inputs will change the output of the calculation.

Lesson 4: During this lesson learners will recognise that data can be calculated using different operations: multiplication, subtraction, division, and addition. They will use these operations to create formulas in a spreadsheet. Learners will then begin to understand the importance of creating formulas that include a range of cells

Lesson 5: During this lesson learners will plan and calculate the cost of an event using a spreadsheet. They will use a predefined list to choose what they would like to include in their event, and use their spreadsheet to answer questions on the data they have selected. Learners will be reminded of the importance of organising data and will then create a spreadsheet using formulas to work out costs for their event.

Lesson 6: During this lesson learners will acquire the skills to create charts in Google Sheets. They will evaluate results based on questions asked using the chart that they have created. Finally, learners will outline their understanding that there are different software tools available within spreadsheet applications to present data.

Assessment/Key Skills

Summative assessment

Please see the assessment question and answer documents for this unit.