

# KESTEVEN AND SLEAFORD HIGH SCHOOL



## Computing Scheme of Learning

### Year 7 – Topic 4 – Spreadsheet Modelling

#### Intent – Rationale

**Topic Intent:** *The aim of this unit is to develop students' knowledge of spreadsheets focusing on keywords and basic formatting, formulae, and functions*

**Curriculum Intent:** *Develop skills to support future study, work and life in the modern world*

**KS3 PoS:** *design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems*

Sequencing – what prior learning does this topic build upon?	Sequencing – what subsequent learning does this topic feed into?
<ul style="list-style-type: none"> <li>KS2 Computing (to varying degrees)</li> </ul>	<ul style="list-style-type: none"> <li>Y8 Topic 4– Spreadsheets (Cost of Living)</li> <li>Y9 Topic 6 – Core Office Skills</li> </ul>
What are the links with other subjects in the curriculum?	What are the links to SMSC, British Values and Careers?
<ul style="list-style-type: none"> <li>Mathematics: Averages, sum/product, BODMAS, charts &amp; graphs</li> </ul>	<ul style="list-style-type: none"> <li>GB4d and GB4e</li> </ul>
What are the opportunities for developing literacy skills and developing learner confidence and enjoyment in reading?	What are the opportunities for developing mathematical skills?
Directly linked to topic <ul style="list-style-type: none"> <li><a href="https://www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1">https://www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1</a></li> </ul> Wider Reading/Interest: <ul style="list-style-type: none"> <li><a href="https://thenewstack.io/how-visicalcs-spreadsheets-changed-the-world/">https://thenewstack.io/how-visicalcs-spreadsheets-changed-the-world/</a> and <a href="https://www.bbc.co.uk/news/business-47802280">https://www.bbc.co.uk/news/business-47802280</a></li> </ul>	<ul style="list-style-type: none"> <li>See curriculum links above</li> </ul>

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## Computing Scheme of Learning

### Year 7 – Topic 4 - Spreadsheets

#### Intent – Concepts

#### What knowledge will students gain and what skills will they develop as a consequence of this topic?

##### Know

- Understand the structure and key language of spreadsheet models
- Understand the purpose and use of common functions and formulae, including the importance of BODMAS and how to use cell references and cell ranges correctly
- Understand how to choose, create and interpret basic charts and graphs

##### Apply

- Develop skills using structured practice tasks with support/guidance
- Develop a party planning spreadsheet model that uses formatting, formulae, functions and charts to accurately calculate and present numeric information

##### Extend

- Investigate and use more advanced functions and conditional formatting in Excel

#### What subject specific language will be used and developed in this topic?

- *Workbook:* A spreadsheet file
- *Worksheet:* One page within a workbook
- *Column:* A vertical collection of cells identified by letter e.g. Column A
- *Row:* A horizontal collection of cells identified by number e.g. Row 1, Row 2
- *Cell:* The intersection of a Column and Row e.g. Cell A1, Cell B2
- *Formula:* Statement that uses standard mathematical operators (e.g. +, -, \*, /)
- *Function:* A predefined routine that performs common calculations (e.g. SUM)

#### What opportunities are available for assessing the progress of students?

- In-Lesson observation & feedback
- Homework #8 & #9
- Moodle onscreen assessment testing keyword knowledge, Excel knowledge, how to write functions/formulae, and how to interpret charts/graphs

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## Intent – Concepts

Lesson title	Learning challenge	Higher level challenge	Suggested activities and resources
1-2: Structure and basic Skills	Can I use basic formulae and functions	Can I improve my efficiency and use autofill	
3: Charts	Can I produce and format basic chart	Can I use more advanced chart formatting options	
4-5: Party Plan	Can I use my learned knowledge to create a costed party planner	Can I present my information clearly and accurately?	
6: Final improvements and Revision	Can I identify and address issues	Can I use more advanced formatting?	
7: Onscreen Assessment	Can I use spreadsheet functions and key terminology accurately?		<a href="http://moodle.kshs.uk">http://moodle.kshs.uk</a>
DiRT time in proceeding lesson (20 mins)			Booklets