Meden School Curriculum Planning							
Subject	Computing	**Year Group**	7	**Sequence No.**	MTP 3	**Topic**	Spreadsheet Modelling

Retrieval	Core Knowledge	Student Thinking
What do teachers need **retrieve** from students before they start teaching **new content**?	What **specific ambitious knowledge** do teachers need teach students in this sequence of learning?	What real life examples can be applied to this sequence of learning to **development of our students thinking, encouraging them to see the inequalities around them** and 'do something about them!'
The tasks in this unit assume that most pupils will have some experience of creating basic spreadsheets from Key Stage 2. Pupils' knowledge and experience is assessed during the first lesson of this unit so that teachers can adapt subsequent lessons accordingly. Review of KS2 Computing & Digital Literacy curriculum. Students should be able to do the following by the end of KS2: - select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that	The unit is subdivided into six learning hours that can be spread across six or more lessons in order to fit with most school timetables and the needs of different groups of pupils. It is a practical, skills-based unit covering the principles of creating and formatting basic spreadsheets to produce and use simple computer models. It is suitable for pupils who have a basic knowledge of spreadsheets including cell references, simple formulae and formatting, although these topics are revised in the first lesson, making it also suitable for pupils new to spreadsheets. Assessment will be by means of an Assessment Portfolio. **Knowledge in this unit** **At the end of this unit all pupils should understand the knowledge behind and be able to:** • Give examples of how **computer models** are used in the real world • Format a **simple spreadsheet model** • Use **simple formulae and functions** • Name **cells in a spreadsheet model**	The unit is centred around creating a financial model for a TV show. Pupils start by looking at different types of model and then use basic spreadsheet techniques to create and format a simple financial model to calculate the expected income from viewers' voting. The model is then extended to include sales from merchandising, with the introduction of "what if" scenarios. Pupils create a seating plan, book seats and calculate income from seat sales. Spreadsheet features covered include SUM, MAX, IF and COUNTIF functions, cell naming

accomplish given goals, including collecting, analysing, evaluating, and presenting data and information - use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	• Use a **simple spreadsheet mode**l to explore different "what if" scenarios • Create a **basic pie chart** to display results • Explain what is meant by a **financial model** • Explain the **advantages of naming cells in a spreadsheet model** • **Format, construct and manipulate a simple spreadsheet model** using formulae • Use **conditional functions in calculations** • Use **conditional formatting** • Use a **spreadsheet model to predict and test the outcomes for different scenarios** • **Justify the formatting** they have used in a spreadsheet model • **Present information** from a spreadsheet model in a variety of formats • Create a **macro** and assign it to a button on the spreadsheet • C**ustomise a char**t to present information effectively • Evaluate the **effectiveness of a computer model** **Tier 3 Vocab:** Model: an abstract mathematic representations of a real-world event, system, behavior, or natural phenomenon. Simulation: the process of mathematical modelling, performed on a computer,	for absolute referencing, conditional formatting, validation, charting and simple macros.

	Cell: a rectangular area formed by the intersection of a column and a row. Row: a row runs horizontally in the grid layout of a worksheet. Column: Columns are denoted and identified by a unique alphabetical header letter, which is located at the top of the worksheet. Format: arrange or put into a format. Decimal: a term that describes the base-10 number system Integer: whole numbers represented as binary values. Currency: monetary value assigned to data to identify its financial significance to an organization. Formula: an expression telling the computer what mathematical operation to perform upon a specific value. Relative reference: the reference is relative to the location of the cell. Absolute reference: An address or pointer that does not change. For example, in a spreadsheet, a cell with an absolute reference does not change even if copied elsewhere. Validation: an automatic computer check to ensure that the data entered is sensible and reasonable. Macro: any programming or user interface that, when used, expands into something larger. Pie chart: a type of graph that displays data in a circular graph	