

Meden School Curriculum Planning							
Subject	BTEC DIT	Year Group	10	Sequence No.	MTP 4	Topic	Component 2 Learning aim A

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!'
<p>In ICT / CS at Meden in KS3, pupils are taught to:</p> <ul style="list-style-type: none"> design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability understand a range of ways to use technology safely, 	<p>In this component, students will learn the different data manipulation tools that can be used to change the way that data is presented. They will provide clear summaries of the data and present them in a dashboard that will allow organisations to make effective decisions. They will learn the different presentation features that can be used to ensure that information is understood clearly in an objective way so that it is not misinterpreted. They will develop their understanding of how to represent information in different ways to give it more meaning.</p> <p>Learning outcome A: Understand how data is collected by organisations and its impact on individuals</p> <p>A1 Characteristics of data and information Learners will understand the concepts of data and that data is meaningless without converting it into information by adding structure and context.</p> <ul style="list-style-type: none"> Characteristics of data: <ul style="list-style-type: none"> o RAW data o no meaning o no structure o no context o unprocessed. 	<p>Searching and applying for jobs in ICT, IT and computing.</p> <p>Be able to plan a project and create smart goals and objectives.</p> <p>Students will be able to use spreadsheet software to design and analyse data.</p> <p>To create charts to analyse data.</p> <p>Challenge thinking How might these skills help you in later life?</p> <ul style="list-style-type: none"> Personal and professional development <p>Which groups in society are at risk of being digitally illiterate?</p> <ul style="list-style-type: none"> Homeless people Elderly people

<p>respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns</p>	<ul style="list-style-type: none"> ● Characteristics of information: <ul style="list-style-type: none"> o has meaning o has structure o has context o is processed. <p>A2 Representing information Learners will understand the different ways of representing information and will be able to explain situations where they would be used.</p> <ul style="list-style-type: none"> ● Text ● Numbers ● Tables ● Graphs/charts ● Sparklines ● Infographics. <p>A3 Ensuring data is suitable for processing Learners will understand the methods that can be used to ensure data input is suitable and within boundaries so that it is ready to be processed.</p> <ul style="list-style-type: none"> ● Validation methods: <ul style="list-style-type: none"> o range check o type check o presence check o length check. ● Verification methods: <ul style="list-style-type: none"> o proofreading o double entry 	<p>How might this impact upon their lives?</p> <ul style="list-style-type: none"> ● Unable to secure employment ● Risk of identity fraud
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	<p>A4 Data collection Learners will understand the different types of data collection methods, the strengths and weaknesses of each, how data collection features affect its reliability and how the collection of data could be improved.</p> <ul style="list-style-type: none"> ● Data collection methods: <ul style="list-style-type: none"> o Primary data – interviews – questionnaires – surveys o Secondary data – websites – books – journals – blogs – forums – booking systems – company internal documents. ● Data collection features: <ul style="list-style-type: none"> o size of sample o who was in the sample o where the data was collected o when the data was collected o methods used. <p>A5 Quality of information Learners will understand the factors that affect the quality of information.</p> <ul style="list-style-type: none"> ● Quality of information factors: <ul style="list-style-type: none"> o source/collection method o accuracy o age o completeness o amount of detail o format/presentation o volume. <p>A6 Sectors that use data modelling Learners will understand how different types of data are used by organisations for data modelling.</p> <ul style="list-style-type: none"> ● Types of sectors, to include: <ul style="list-style-type: none"> o transport 	
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	<ul style="list-style-type: none"> o education o retail o banking o entertainment o government o health care o construction o communication o health and safety o sport and fitness. <p>A7 Threats to individuals Learners will understand the different threats that face individuals who have data stored about them.</p> <ul style="list-style-type: none"> ● Threats to individuals, to include: <ul style="list-style-type: none"> o invasion of privacy o fraud o targeting vulnerable groups of people o inaccurate data could be stored. 	
<p>Vocab List:</p> <p>Data characteristics, meaning, structure, context, processed, text, numbers, tables, graphs, charts, sparklines, infographics, validation, verification, range check, type check, presence check, length check, proofreading, double entry, data collection, primary data, secondary data, interviews, questionnaires, surveys, websites, books, journals, blogs, forums, booking systems, company internal documents, samples size, accuracy, completeness, volume, sectors, transport, education, retail, banking, entertainment, government, health care, construction, communication, health and safety, sport and fitness, threats, invasion of privacy, fraud, vulnerable groups, inaccurate data.</p>		