



Seamer and Irton CP School

Progression of knowledge and skills in Computing


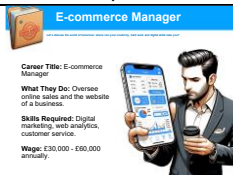
Data and Information: Spring 2



The Data and Information strand is again taught once a year, progressing in both skills and software. Key Stage 1 uses simplified age-appropriate software platforms, progressing to more industry focused software in upper Key Stage 2.

Throughout each half term, pupils are exposed to a range of computing careers linked directly to the cultural capital of our pupils and highlighting that computing can be aspirational and accessible to all. Visits by a diverse range of adults, based within the local community, will provide pupils with clear links to STEM career opportunities. Equity, diversity and inclusion are addressed through highlighting pioneers and influencers who represent a broad and inclusive range of characteristics, alongside those from differing socio-economic and cultural backgrounds, these are annually reviewed to ensure our pupils are exposed to relevant and meaningful experiences.

Data and Information: Spring 2	EYFS pupils are Introduced to basic concepts of data and information handling. Counting and Sorting Activities: Using simple games children practice counting and sorting items. Graphing Nature: Pupils will create simple graphs using data collected from nature walks or classroom observations.	Data and Information - Grouping Data Exploring object labels, then using them to sort and group objects by properties. No. of lessons: 6 Skills and Concept Progression Learning Graph	Data and information – Pictograms Collecting data in tally charts and using attributes to organise and present data on a computer. No. of lessons: 6 Skills and Concept Progression Learning Graph	Data and Informtaion - Branching Databases Branching databases Building and using branching databases to group objects using yes/no questions. No. of lessons: 6 Skills and Concept Progression Learning Graph	Data-and-information-data-logging (link below) Data logging Recognising how and why data is collected over time, before using data loggers to carry out an investigation, No. of lessons: 5 Data handling micro:bit	Data-and-information-flat-file-databases Flat-file databases Using a database to order data and create charts to answer questions. No. of lessons: 6 Skills and Concept Progression Learning Graph	Data-and-information-spreadsheets Introduction to spreadsheets Answering questions by using spreadsheets to organise and calculate data. No. of lessons: 6 Skills and Concept Progression Learning Graph
Vocabulary		object, label, group, search,	more than, less than, most, least,	text, images, advantages,	data, table, layout, input device,	database, data, information,	data, collecting, table, structure,

		image, property, colour, size, shape, value, data set, more, less, most, fewest, least, the same	common, popular, organise, data, object, tally chart, votes, total, pictogram, enter, data, compare, objects, count, explain, attribute, group, same, different, conclusion, block diagram, sharing	disadvantages, communicate, font, style, landscape, portrait, orientation, placeholder, template, layout, content, desktop publishing, copy, paste, purpose, benefits.	sensor, logger, logging, data point, interval, analyse, dataset, import, export, logged, collection, review, conclusion.	record, field, sort, order, group, search, value, criteria, graph, chart, axis, compare, filter, presentation.	spreadsheet, cell, cell reference, data item, format, formula, calculation, spreadsheet, input, output, operation, range, duplicate, sigma, propose, question, data set, organised, chart, evaluate, results, sum, comparison, software, tools.
Aspirational Careers Education Including links to Equity, Diversity and Inclusion			 <p>Data Scientist</p> <p>Career Title: Data Scientist</p> <p>What They Do: Analyse and interpret complex digital data to help companies make decisions.</p> <p>Skills Required: Statistics, programming, data visualisation.</p> <p>Wage: £40,000 - £90,000 annually.</p>	Careers in IT - BBC Bitesize Working with data - BBC Teach			 <p>E-commerce Manager</p> <p>Career Title: E-commerce Manager</p> <p>What They Do: Oversee online sales and the website of a business.</p> <p>Skills Required: Digital marketing, web analytics, customer service.</p> <p>Wage: £30,000 - £60,000 annually.</p>
Community experts (Visitors and visits) Supplemented by STEM ambassador visits and online opportunities linked to the termly focus as					Castle Group Ltd – UK Leader in Noise, Vibration, Environmental Measurement & Monitoring Technology, Training & Consultancy Scarborough based	Role models - TechSheCan Jaskiren – Data Analyst at Natwest (online)	

and when available							
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