

Subject Overview: Computing

| | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 |
|--------|---|--|--|--|--|
| Year R | Online Safety and Wellbeing: R How can we stay safe and well when | Computing Systems and Networks: Digital Devices | Data and Information: Grouping How can objects be grouped? | Programming: Commands How can individual commands have | Creating Media: Imag How can I create som |
| | using digital technology? | How can digital devices be used? | | an output? | 29 |
| | Be Internet Sharp Be Internet Alert Be Internet Secure | | | A→B | Using digital devices |
| | Be Internet Kind Be Internet Brave emotion, feeling, positive, negative Be Internet Healthy | Using technology in different forms (chromebooks, IWB, iPad, talking tiles) and experience different inputs (keyboard, microphone). | Recognising that objects can be sorted in different ways according to their properties. | Giving different commands to a device and observing the outcome. | IWB/iPads, etc.) to cre |
| | | device | | | |
| Year 1 | Online Safety and Wellbeing: $\underline{1}$ | Computing Systems and Networks: Technology Around Us | Creating Media: Digital Painting | Programming: Moving a Robot | Data and Information Data |
| | How can we stay safe and well when using digital technology? | What is technology? | How can media be created digitally for a purpose? | How can individual and sequences of commands have an output? | How can information |
| | Be Internet Sharp personal information, public, private Be Internet Alert honest, unreliable, suspicious, trustworthy | Screen Keyboard Mouse or trackpad | | Right turn Image: Second s | |
| | Be Internet Secure password Be Internet Kind bullying | Recognising technology in school and using it responsibly. | Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally. | programs for floor robots, and predicting program outcomes. command, run, sequence, program | Exploring object labe them to sort and grou properties. |
| | Be Internet Brave emotion, feeling, positive, negative Be Internet Healthy | technology, computer mouse, keyboard, cursor | mark, line, shape | | information, label, gro |
| Year 2 | Online Safety and Wellbeing: 2 | Computing Systems and Networks: IT Around Us | Programming: Robot Algorithms | Data and Information: Pictograms | Creating Media: Mak |
| | How can we stay safe and well when using digital technology? | How is information technology used in the world around us? | What are algorithms? | How can data be collected and organised? | How can media be ad a purpose? |
| | Be Internet Sharp personal information, public, private Be Internet Alert honest, unreliable, suspicious, trustworthy | | Creating and debugging programs, | | |
| | Be Internet Secure password Be Internet Kind bullying Be Internet Brave | Identifying IT and how its responsible use improves our world in school and beyond. | and using logical reasoning to make predictions. algorithm, predict | Collecting data in tally charts and using attributes to organise and present data on a computer. | Using a computer as a rhythms and melodies a musical composition |
| | emotion, feeling, positive, negative Be Internet Healthy | information technology | | data, tally chart, attribute, pictogram, collect, present | |
| | | • | • | • | |

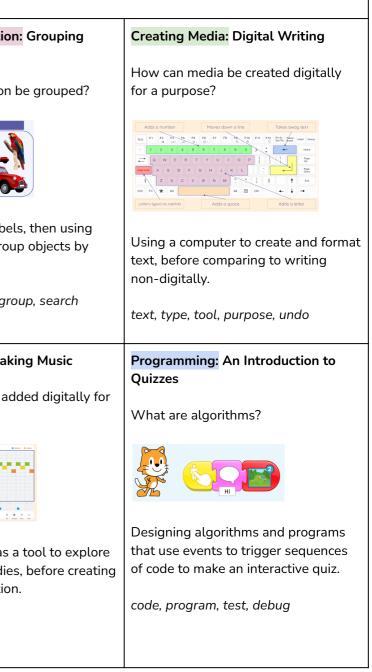


Summer 2

ages and Drawing

omething using a digital device?

es (iPads to take photos, paint on Chromebooks, drawing on create images.



| Year 3 | Online Safety and Wellbeing: 3 How can we stay safe and well when using digital technology? Be Internet Sharp personal boundaries Be Internet Alert fraud, phishing, scam, authentic, genuine Be Internet Secure privacy, security, hacker Be Internet Kind bystander, upstander, harassment, amplify, block Be Internet Brave age rating Be Internet Healthy screen time | Computing Systems and Networks: Connecting Computers What is a network? Marting a network? Mentifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks. input, process, output, digital devices, non-digital devices, computer networks, server, switch, access point, hardware, software, WiFi | Creating Media: Stop-Frame Animation How can media be combined for a purpose? Image Image | Programming: Sequencing Sounds How can I give a sequence of commands to multiple objects? Image: Command of the sequences of the sequence of | Data and Information: Branching Databases How can data be presented? $\qquad \qquad $ | Creating Media: Desktop Publishing How can media be combined for a purpose? Image: Im |
|--------|---|---|---|--|---|---|
| Year 4 | Online Safety and Wellbeing: 4 How can we stay safe and well when using digital technology? Be Internet Sharp personal boundaries Be Internet Alert fraud, phishing, scam, authentic, genuine Be Internet Secure privacy, security, hacker Be Internet Kind bystander, upstander, harassment, amplify, block Be Internet Brave age rating Be Internet Healthy screen time | Computing Systems and Networks: The Internet What is the internet? Connecting networks reverse to be internet? Recognising the internet as a network of networks including the WWW, and why we should evaluate online content. internet, World Wide Web (WWW), router, website, domain name, URL, web browser | Programming: Repetition in Shapes How can algorithms be used with repetition? TO triangle repeat 3 [fd 100 rt 120] END Using a text-based programming language to explore count-controlled loops when drawing shapes. repetition, loop, count-controlled loop, procedure, decompose | Data and Information: Data Logging How can data be collected over time and be used to answer questions? Image: Im | Creating Media: Photo Editing How is media evaluated to meet its purpose? Image: Provide the image is and provide the impact of changes and whether the required purpose is fulfilled. Photograph, edit, portrait, landscape, composition, retouching | Programming: Repetition in Games How can algorithms be used with repetition? <pre></pre> |

| Year 5 | Online Safety and Wellbeing: 5 How can we stay safe and well when using digital technology? Be Internet Sharp digital footprint, positive, negative, settings Be Internet Alert spear phishing, verifiable, deceptive, firewall, malware, encrypted Be Internet Secure two-step verification, security token Be Internet Kind bystander, upstander, harassment, amplify, block Be Internet Brave PEGI rating, app store rating Be Internet Healthy digital wellbeing | Computing Systems and Networks: Sharing Information How is information shared in systems? | Data and Information: Flat-File Databases How can multiple sets of data be organised, used and presented? | Programming: Selection in Physical Computing How can algorithms be used with selection? | Creating Media: Vector Drawing How can a variety of media be combined to meet a purpose? Creating images in a drawing program by using layers and groups of objects. manipulate, object, group, duplicate, resize, rotate, layers, pixel | Progr How select |
|--------|---|---|--|--|---|----------------------|
| Year 6 | Online Safety and Wellbeing: 6 How can we stay safe and well when using digital technology? Be Internet Sharp digital footprint, positive, negative, settings Be Internet Alert spear phishing, verifiable, deceptive, firewall, malware, encrypted Be Internet Secure two-step verification, security token Be Internet Kind bystander, upstander, harassment, amplify, block Be Internet Brave PEGI rating, app store rating Be Internet Healthy digital wellbeing | <text><text><text><image/><text></text></text></text></text> | <text><text><text><text><text></text></text></text></text></text> | Data and Information: Spreadsheets How can a spreadsheet help organise complex data sets? Image: A set of the | Creating Media: 3D Modelling How can a variety of media be combined to meet a purpose? Image: Complete the second secon | Progr How variate |

| lia: Vector Drawing | Programming: Selection in Quizzes |
|--|--|
| riety of media be neet a purpose? | How can algorithms be used with selection? |
| ges in a drawing program rs and groups of objects. bject, group, duplicate, layers, pixel | Image: selection in programming to design and code an interactive quiz. selection, condition, if then else |
| | |
| lia: 3D Modelling | Programming: Sensing |
| riety of media be | Programming: Sensing How can algorithms be used with variables? |
| riety of media be neet a purpose? | How can algorithms be used with |
| dia: 3D Modelling riety of media be neet a purpose? eloping, and evaluating models of physical <i>O printing</i> | How can algorithms be used with variables? |