



At Stanley Grove Academy, we use Mr Ps DARES Computing curriculum.
Our Computing Curriculum has the following areas of study:

COMPUTER SCIENCE

INFORMATION TECHNOLOGY

Digital Literacy

SUBSTANTIVE CONCEPTS

Digital Literacy

Self Image and Identity

Online Relationships

Managing Online Information

Health, Wellbeing and Lifestyle

Online Reputation

Online Bullying

Privacy and Security

Copyright and Ownership

Computational Thinking

Computer Networks

DISCIPLINARY CONCEPTS

Computer Science

Computational Thinking

Coding/ Programming

Artificial Intelligence

Information Technology

Word processing / Typing

Data Handling

Presentation, Web Design
and eBook Creation

Animation

Video Creation

Photography and Digital Art

AR and VR

Sound



CONCEPT DELIVERY:

All concepts of computing are taught over two years - KS1, LKS2, UKS2.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computer Science	Computational Thinking Coding and Programming Artificial Intelligence	Computational Thinking Coding and Programming	Computational Thinking Networks Coding and Programming	Coding and Programming Artificial Intelligence	Computational Thinking Coding and Programming Artificial Intelligence	Networks Coding and Programming
Information Technology	Word Processing/ Typing Presentations, web design and eBook Creation Animation Video Creation Sound	Word Processing/ Typing Data Handling Presentations, web design and eBook Creation Video Creation Photography and Digital Art Augmented Reality and Virtual Reality (AR & VR)	Word Processing/ Typing Data Handling Presentations, web design and eBook Creation Photography and Digital Art Augmented Reality and Virtual Reality (AR & VR)	Presentations, web design and eBook Creation Animation Video Creation Sound	Data Handling Presentations, web design and eBook Creation Animation Video Creation Photography and Digital Art	Presentations, web design and eBook Creation Animation Video Creation Augmented Reality and Virtual Reality (AR & VR) Sound
Digital Literacy All areas of digital literacy each year.	Self-Image and Identity Online Relationships Online reputations Online Bullying Managing Online Information Health, Wellbeing and Lifestyle Privacy and Security Copyright and Ownership					



YEAR 1

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics (long term plan) Computer Science/ Information Technology	AI AI Around Us (Intro to siri/ Google Maps)	Animation – Creating a Cartoon/ Animated Character- Stickman Cartoon	Video creation – Toys Seesaw , Puppet Pals HD	Presentation / Computational Thinking – Spider Diagram Word Processing Seesaw	Programming – Robot maze game or cratch Jr Create an animation	Sound – Podcasting- Keynote or Book Creator
Digital Literacy	Digital Literacy – 6. Health, Well-being and Lifestyle 2. Online Relationships	Digital Literacy – 1. Self-Image and Identity	Digital Literacy – 3. Online Reputation 4. Online Bullying	Digital Literacy – 5. Managing online information	Digital Literacy – 7. Privacy and Security	Digital Literacy – 8. Copyright and Ownership
Vocabulary	<i>Program, algorithm, data, AI, technology, voice assistant, text, recognise</i>	<i>Filters, stickers, scene</i>	<i>Voiceover, highlight, zoom, countdown, playback, delete, pause, rewind, fast forward.</i>	<i>Labels, order, storyboard, sequence, spider diagram, text box, style</i> <i>Space Bar, Delete, Return Key, Enter, Mouse, Trackpad, arrow keys, cursor, select,</i>	<i>Algorithm, sequence, order, bug, fix, precise</i> <i>Digital, program, follow, code, bugs, fix, order,</i>	<i>Sequence, instruments, short, long, effects</i>



YEAR 2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics (long term plan) Computer Science/ Information Technology	Presentations - Speech Bubble Pictures - iPad - Balloon Stickies Plus	Video Creation – Masking Storytime - Seesaw, video acting out Traditional tale – iPad - Doink Greenscreen	Photo and Digital Art – Robot Avatars iPad – pic collage	AR and VR – Storytelling with AR - Virtual Reality and Sound – Pudding Lane. ArtMaker, Thinglink, Keynote, Doink Greenscreen iPad	Data handling – Digital Venn Diagram- Data in a spreadsheet link to topic or Science. – Seesaw	Presentation- Animal Catchphrase Quiz -Digital Quiz (Link to topic/ Science)- Keynote iPads
Digital Literacy	Digital Literacy – 1. Self-Image and Identity. 6. Health, Wellbeing and Lifestyle.	Digital Literacy – 2. Online Relationships	Digital Literacy – 3. Online Reputations 4. Online Bullying	Digital Literacy – 5. Managing Online Info.	Digital Literacy – 7. Privacy and Security	Digital Literacy – 8. Copyright and Ownership
Vocabulary	<i>Voice labels, import, tag, add to, right click, layout, format</i>	<i>Teleprompter, pace, rate, effects, titles, Greenscreen, layer, masking, drag</i>	<i>Crop, filters, fill, export, JPEG, zoom, flash, undo</i>	<i>Markers, Augmented Reality, trigger,</i>	<i>Venn diagrams, carroll diagrams, bar charts, database, table</i>	<i>Voice labels, import, tag, add to, right click, layout, format</i>



YEAR 3

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics (long term plan) Computer Science/ Information Technology	Photo and Digital Art – Digital Self-Portrait – Keynote- Xmas Card	AR and VR- Designing a playground – TinkerCAD	Programming – Computational Thinking - MicroBit LED Animations – MicroBit and MakeCode	Presentation – Paper Based App Prototype – Marvel	Data Handling – Story Graphs – Seesaw – Word Processing	Computer Networks – Network Explorer – iMovie
Digital Literacy	Digital Literacy – 1. Self-Image and Identity. 8. Copyright and Ownership	Digital Literacy – 2. Online Relationships	Digital Literacy – 3. Online Reputations 4. Online Bullying	Digital Literacy – 5. Managing Online Info.	Digital Literacy – 6. Health, Wellbeing and Lifestyle.	Digital Literacy – 7. Privacy and Security
Vocabulary	<i>Manipulate, brush size, transparent, instant alpha, PNG, framing,</i>	<i>Field of view, Holograms, Virtual Reality, explore, slide size,</i>	<i>Sequence, inputs, outputs, code, design, programming language, Scratch Abstraction, information, relevant, pattern, same, different, complex</i>	<i>Media, interactive, audio, annotate, background, clip art, prototype, web page, timeline,</i>	<i>Table, column, row, cell, spreadsheet, graph, Touch type. Edit, format, font, size, borders, shadows, duplicate, organise, undo, redo, autocorrect, clipart</i>	<i>Network, server, client, LAN (Local Area Network), switch</i>



YEAR 4

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics (long term plan) Computer Science/ Information Technology	AI – My AI Invention - Teachable Machine	Animation – Line Draw Animation – Keynote – Quentin Blake Character	Programming – MicroBit Get Off My Stuff – MicroBit and MakeCode	Video Creation – Dynamic Video – Imovie – Video on Italy	Sound - Movie Soundtrack – Imovie/ Garageband – Link to Science Topic	Presentations – Quiz Ebook – Book Creator – Viking E-Book
Digital Literacy	Digital Literacy – 1. Self-Image and Identity. 2. Online Relationships	Digital Literacy – 3. Online Reputations 4. Online Bullying	Digital Literacy – 5. Managing Online Info.	Digital Literacy – 6. Health, Wellbeing and Lifestyle.	Digital Literacy – 7. Privacy and Security	Digital Literacy – 8. Copyright and Ownership
Vocabulary	<i>Neural network, deep learning, big data, data, train, model, image, class, pattern</i>	<i>3D, line draw, build in, build out, exposure, dynamic</i>	<i>Repetition, loop, forever loop, count controlled loop, selection, condition, systematic</i>	<i>Clips, media library, import, ken burns, subtitles, crop, overlay, adjust, playback, pan, tilt</i>	<i>Podcast, clipping, crossfade, fade, gain</i>	<i>Animation, design template, effects, multimedia, eBook, ePub, export, hyperlinks</i>



YEAR 5

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics (long term plan) Computer Science/ Information Technology	AI – My AI Invention - Teachable Machine	Presentations - Webpage design - Adobe Spark / Canva	Programming – Coding with Scratch	Animation/ Photography and Digital Art - Animated Scene – Keynote	Data Handling – Excel / Google Sheets	Video Creation - Doink Greenscreen- News Report
Digital Literacy	Digital Literacy – 1. Self-Image and Identity. 3. Online Reputations	Digital Literacy – 2. Online Relationships	Digital Literacy – 4. Online Bullying	Digital Literacy – 5. Managing Online Info.	Digital Literacy – 6. Health, Wellbeing and Lifestyle.	Digital Literacy – 7. Privacy and Security 8. Copyright and Ownership
Vocabulary	<i>Cloud computing, cognitive computing, robotics</i>	<i>Blog, collaboration, share, slide layout, slide show, transitions, embed, publish, instant alpha</i>	<i>Data, memory, variables, value, initialisation, control, simulate, physical system</i>	<i>Chroma Key, Flipbook, export, GIF, publish, Photoshop, landscape, portrait,</i>	<i>Formula bar, Autosum, Autofill, value</i>	<i>Split screen, cutaway, montage, fade,</i>



YEAR 6

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics (long term plan) Computer Science/ Information Technology	Animation –Animated Cartoon Character GIF Keynote Presentation – App prototype – Keynote or Powerpoint or Slides	Programming – Video Game Scratch 3.0/	AR and VR – Interactive AR Scene – Reality Composer	Computer Networks – HTML - Glitch	Video Creation - Greenscreen special effects	Sound – Podcasting – Garageband
Digital Literacy	Digital Literacy – 1. Self-Image and Identity. 3. Online Reputations	Digital Literacy – 2. Online Relationships	Digital Literacy – 4. Online Bullying 8. Copyright and Ownership	Digital Literacy – 5. Managing Online Info.	Digital Literacy – 6. Health, Wellbeing and Lifestyle.	Digital Literacy – 7. Privacy and Security
Vocabulary	<i>Staging, aspect ratio, computer generated imagery (CGI) angles, overlay, claymation, cut scene</i> <i>Placeholder, dropdown, navigation, homepage, footer, sidebar, HTML, URL, design, application</i>	<i>Procedure, abstraction, conditional loop, logic, operator, implement</i>	<i>ARKit and ARCore</i>	<i>HTML (HyperText Markup Language), opening tag, closing tag, code</i>	<i>Picture in Picture,</i>	<i>Compression, reverb, BPM</i>