



## <u>Year 1</u>

#### **Information Technology**

- I can use simple key words in search engines
- I can describe how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable, worried or frightened (butterfly feeling)
- I can explain why I should always ask a trusted adult before I share information about myself online
- I can explain how passwords can be used to protect information and devices
- I can log on and off the school network using my individual username and password

#### **Digital Literacy**

- I can input text and images using simple publishing programs#
- I can type simple sentences on the screen, making use of word bank
- I can alter my writing in a number of ways (size, colour, font etc.)
- I can tell you the main keys for writing e.g. shift, space bar, full stop
- I can use buttons within a programme to make text bold/italics/text alignment etc
- I can move to different places in the text using the arrow keys or mouse
- I can use the 'undo' icon to fix a mistake
- I can create a pictogram by entering data into a simple graphing package

#### **Computer Science**

- I know that a program is a precise set of instructions also called an algorithm
- I can give and follow instructions, which include straight, turning command one at a time
- I can plan a simple algorithm
- I can create a simple program
- I can debug a simple program causing an unexpected outcome

- I can recognise that there may be people online who could make me feel sad, embarrassed or upset
- If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust (Butterfly feeling)
- I can use the internet with adult support to communicate with people I know
- I can explain why it is important to be considerate and kind to people online
- I can recognise that information can stay online and could be copied
- I can describe what information I should not put online without asking a trusted adult first
- I can explain rules to keep us safe when we are using technology both in and beyond the home





## Year 2

#### Information Technology

- I can demonstrate how to navigate a simple webpage to get to information I need (e.g. home, forward, back buttons, links, tabs and sections
- I can explain what passwords are and can use passwords for my accounts and devices
- I can log on and off the school network using my individual username and password and save my work to Purplemash or the school network

#### **Digital Literacy**

- I can start to use simple keyboard shortcuts Ctrl + B, I, U to edit my text style
- I can use spell checker to correct my work
- I can use the 'undo' icon to fix a mistake
- I know how to save an image from the internet rather than using copy & paste
- I can arrange clips to make a short film that conveys meaning
- I can add simple titles and credits
- I can create and search a branching database
- I can use a database to answer simple questions
- I can search a database to find information
- I can use ICT to support handling data creating simple graphs, bar charts and pie charts

#### **Computer Science**

- I can give and follow instructions, which include direction and turning command several in order
- I can create a program that contains several commands for a device or software programme
- I can debug a program independently that has caused an unexpected outcome

- I can explain how other people's identity online can be different to their identity in real life
- I can describe ways in which people might make themselves look different online
- I can give examples of how I might use technology to communicate with other I do not know well
- I can explain how information put online about me can last for a long time
- I know who to talk to if I think someone has made a mistake about putting something online
- I can talk about how someone can/would get help about being bullied online or offline





## Year 3

#### **Information Technology**

- I can explain that if I am not sure or I feel pressured, I should ask a trusted adult
- I can explain why copying someone else's work from the internet without permission can cause problems
- I understand file extensions and which ones attribute to different ICT products '.doc, .xls, .ppt, .pub, .pdf, .mp3, .mp4
- I can communicate using a range of online resources (blogs, email)

#### **Digital Literacy**

- I can type a number of sentences using the keyboard
- I can use cut, copy and paste to reorder text
- I can use simple keyboard shortcuts e.g. Ctrl + V, X, C to reorder text
- I can format image move, rotate and re-size shapes using an object-based graphics package
- I can use a variety of tables tools (merge cells, fill etc.)
- I can explain the difference between save and save as
- I can create a folder to save my work in
- I can give a file a name to identify it
- I can create a new eBook with a front cover and add or remove pages

#### **Computer Science**

- I can detect and debug errors in algorithms and programs
- I know that a sequence is a list of instructions in a particular order
- I know that if I change the sequence I may change the outcome of the program
- I can predict how a change in a sequence may impact the outcome of a program

- I can explain how I can represent myself in different ways online
- I can explain ways in which and why I mighty change my identity depending on what I am doing online (e.g. gaming, using an avatar, social media
- I can give examples of technology specific forms of communication (e.g. emojis, acronyms, text speak
- I can explain why I should be careful who I trust online and what information I can trust them
  with
- I can explain what is meant by 'trusting someone online'. I can explain why this is different from 'liking someone online'
- I can describe rules about how to behave online and how I follow them
- I can explain why spending too much time using technology can sometimes have a negative impact on me, I can give some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos)





## Year 4

#### **Information Technology**

- I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers, in app purchases, pop ups) and can recognise some of these when they appear online
- I can explain that some people I meet online (e.g. through social media) may be computer programmes pretending to be real people
- I can explain what a strong password is
- I understand that there are multiple platforms and the differences between these e.g. Windows / Apple / Android
- I can describe what a URL (web address) is
- I can identify the most relevant result from a search engine not just 'sponsored' links

#### **Digital Literacy**

- I can select appropriate tools to add emphasis and effect to my work
- I can change the look of a spreadsheet by using different formats e.g. text styles, colour, number format inc, currency and date, row and column heights
- I can insert and delete columns and rows in a spreadsheet
- I can use SUM to calculate the total of a set of numbers in a range of cells
- I can use spreadsheets to create a graph
- I can decide on the most appropriate from of graph for a data set giving reasons for my choice
- I can explain why I have chosen my layout and formatting
- I can extend the use of multimedia packages to include importing images, hyperlinks and the use of sounds recorded independently
- I can effectively plan for an animation or film and use purposefully
- I can take a series of pictures to form a short film clip/ animation/eBook
- I can enter a basic mathematical formula into Excel

#### **Computer Science**

- I can independently select and sequence code to make my own program
- I know that a loop is used to repeat a set of instructions
- I can use sequence and loops (repetition) in programs confidently
- I can detect and debug errors in algorithms and programs

- I can give examples of how to be respectful to others online
- I can explain ways that some of the information about me online could have been created, copied or shared by others
- I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat)
- I can explain why I need to think carefully about how content I post might affect others, their feelings and how it may affect how others feel about them (their reputation)
- I can identify times or situation when I might need to limit the amount of time I use technology





## Year 5

#### **Information Technology**

- I can explain what is meant by a 'hoax'. I can explain why I need to think carefully before I forward anything online
- I can explain why some information I find online may not be honest, accurate or legal
- I can explain how many free apps or services may read and share my private information (e.g. friends, contacts, likes, images, videos, voice, messages, and geolocation) with others
- I can explain how and why some apps may request or take payment for additional content (e.g. in-app purchases) and explain why I should seek permission from a trusted adult before purchasing
- I can recognise the intellectual property rights and copyright protection carry over into the online world
- I can identify the features of legal downloads and illegal (pirated) content
- I understand that if I use material that is not my own, often I need to credit the source
- I know what an operating system is and why it is important
- I can identify the key internal parts of a computer RAM, memory, processor, motherboard

#### **Digital Literacy**

- I can select appropriate tools to add emphasis and effect to my work
- I can think about whether my work is suitable for the audience
- I can use a mobile device to film a short clip
- I can consider the effect of camera angles, flight and shadow when filming
- I can add titles, credits, transition and special effects
- I can review and add to, replace and edit clips to make messages clearer
- I can explain my choice of clips, effects and structure in resources I have created
- I can discuss and compare film for effect on audience
- I can explain why I have chosen my layout and formatting
- I can review and edit my work and talk about the changes I made
- I can create a database structure of my own and enter the data
- I can use spreadsheets and create a graph
- I can decide on the most appropriate form of graph for a data set giving reasons for my choice
- I can interpret graphs of data collected from variety of sources

#### **Computer Science**

- I can plan and write an algorithm using the following: commands, sequence, selection 'if... then (conditional statement) and repetition
- I can detect and debug errors in more complex algorithms and programs

- I can explain that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my/our fault
- I can articulate what constitutes good behaviour online
- I can recognise when someone is upset, hurt or angry online
- I can explain how to block abusive users





- I can describe the helpline services who can support me and what I would say and do if I needed their help (e.g. Childline/CEOP
- I can use social networking websites appropriately, keeping an adult informed of my online activity and make good choices when presenting myself online
- I can protect myself from cyberbullying or causing hurt to others, especially when using social networking
- I can judge what sort of privacy settings might be relevant to reducing different risks
- I can judge when to answer a question online and when not to
- I understand my impact on the online world





## Year 6

#### **Information Technology**

- I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important
- I know what to do if my password is lost or stolen
- I can explain what app permissions are and can give some examples from the technology of services I use
- I can describe simple ways to increase privacy on apps and services that provide privacy settings
- I can describe ways in which some online content targets people to gain money or information illegally, I can describe strategies to help me identify such content (e.g. scams, phishing)
- I can independently save and retrieve work from different places

#### **Digital Literacy**

- I can select appropriate tools to add emphasis and effect to my work
- I can explain why I have chosen my layout and formatting
- I can review and edit my work and talk about the changes I made

#### **Computer Science**

- I can confidently use selection, loops, variables and events
- I know and can explain what a variable is
- I can use a variable in a variety of programming software 2Simple 2Code/ ScratchJr / Kodu/ Kodable/ LightBot/ ALEX/ Scratch
- I can confidently break a problem down and methodically create a program to solve it, testing and adapting as I go
- I can evaluate the effectiveness of my programming and suggest improvement
- Introduction to Python or Ruby (support available)

- I can describe how to capture bullying content as evidence (e.g. screen grab, URL, profile) to share with others who can help me
- I can challenge and explain why it is important to reject inappropriate messages about gender online
- I can describe issues online that might make me or others feel sad, worried, uncomfortable or frightened. I know and can give examples of how I might get help, both on and offline
- I can explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming)
- I can demonstrate ways of reporting problems online for both my friends and myself
- I can identify a range of ways to report concerns in both school and at home about online bullying
- I can describe common systems that regulate age-related content (e.g. PeGI, BBFC, parental warnings) and describe their purpose