

Reception

Computer Science	Information Technology	Digital Literacy	Total
I can explain that an algorithm is a list of instructions to solve a problem.	Use technology purposefully to create digital content E.g. I can create a digital drawing.	I can recognise common uses of information technology beyond school E.g. I can name some uses of computing in our world e.g. telephones, traffic lights, computers, cameras, TV.	19
I can explain the importance of sequencing (putting things in order).	I can label (can be verbal) different parts of a computer. E.g. Screen, keyboard, printer, mouse, speakers, power button etc.	I can use technology safely E.g. I can follow rules around using computers and iPads in class and at home.	
I can program a Beebot/Robot to move along the floor using one instruction at a time (Other toys Dash or Sphero can be used).	I can choose which app/programs I need to use on the iPad/computer.	I can explain what is meant by personal information.	
I can program a Beebot/Robot with two or three instructions at a time and correct mistakes.	I can explain why and how objects can be sorted. E.g. colour, side or shape.	I can recognise that I must keep personal information private.	
I can explain the task of programming a toy to move to a desired location. / I can control a programmable toy and make it move to a desired location.	I can use a simple digital camera/iPad to take pictures (more able may can review and delete poorly taken photos).		
	I can record either sounds or video on a recorder and use computing words like 'record', 'play', 'rewind' and 'stop'.		
	I can use the keyboard to write my name and other simple words.		
	I can print out words or pictures from a computer.		
	I understand that work can be saved.		
	I can turn on and off a computer or iPad.		

Year 1

CS	IT	DL	Total
I can create an algorithm (set of instructions) for my friend to follow that guides them to a desired location.	I can open and complete simple tasks in programs/apps on the computer or iPad.	I can recognise the ways we use technology in our classroom.	33
I can create a storyboard detailing a sequence of instructions.	I can use technology to create and present my ideas. E.g. I can create a photo story with audio.	I can recognise ways that technology is used in my home and community.	
I can explain what an algorithm is.	I can use the shift, space and return keys.	I can begin to identify/explain some of the benefits of using technology.	
I can press the buttons in the correct order to make my robot do what I want (and then explain what is happening in the simple program).	I can recognise links within websites or documents.	I can agree and follow sensible e-Safety rules.	
I can begin to use software/apps to create movement and patterns on a screen. e.g. I can program a with Bee-Bot on an iPad.	I can use the keyboard or a word bank on my device to enter text.	I can explain what personal information is.	
I can create a simple program E.g. An animation in Scratch Jr, Daisy the Dino or other simple coding app.	I can combine text and image in a document.	I can tell an adult when I see something unexpected or worrying online.	
I can begin to predict what will happen for a short sequence of instructions.	I can save information in a special place and retrieve it again. E.g. Folder on computer or folder in a cloud.	I can recognise an age appropriate website or app.	
I can use the word debug when I correct mistakes when I program.	I can talk about the different ways in which information can be shown.	I can keep my password private.	
	I can use technology to record/collect information, including photos, video and sound.	I can identify people I can trust and discuss any concerns I may have about using the internet.	
	I can add information to a document/pictograph and talk to you about what I have found out.	I can talk about why it's important to be kind and polite.	

	I can take a good quality photograph and video on an iPad/digital camera.	I can send an email (this can be an unplugged session, send and receive paper messages to introduce language)	
	I can review and delete poorly taken photos and video.		
	I can use Google find facts and images and understand this is called a search engine.		
	I can use Google Earth to search faraway places.		

Year 2

CS	IT	DL	Total
I can explain what an algorithm is with an example. E.g. I can tell you the order (sequence) I need to do things in to make something happen and talk about this as an algorithm.	I can create digital images (poster) using more than one app or piece of software.	I can explain the different ways of communicating online	35
I can give instructions to my friend (using forward, backward and turn) and physically follow their instructions to complete a task or solve a problem.	I can produce a video showing a sequence of events and use simple editing and formatting techniques. E.g. Filters or trim the clip.	I can talk about the positive and negative use of technology. E.g. Why too much time online is bad.	
I can identify 'bugs' (errors) in computer programs and use the term debug in context. E.g. Light Bot game.	I can type text on a computer using the keyboard. Using capital letters, delete key, symbols, numbers and correct grammar should as full stops.	I can tell you why I use technology in the classroom. I can describe how I use computing to develop my work.	
I can fix a 'bug' (errors) and explain how I did it and use the term debug in context.	I can create an electronic game (without coding) E.g. Boxel, Sketch Nation or Floors. Included: I can use the mouse to paint pictures on a computer/iPad. I can draw a basic sprite and explain what a sprite is.	I can tell you why I use technology in my home and community.	
I can plan and give instructions to control devices. E.g. Beebot, Spheros or Dash.	I can create a podcast. E.g. record spoken audio and save/share to the appropriate place. or I can compose music on a computer/iPad and save/share to the appropriate place.	I am starting to understand that other people have created the information I use.	
I can program a robot with software/app to do a particular task. E.g. Beebot, Spheros or Dash.	I can use the internet to research and find/use information to answer questions.	I can talk about the differences between the Internet and things in the physical world.	

I can use programming software to make objects move. E.g. Dasiy the Dino or Scratch Jr	I can create a presentation or basic digital book that is well designed and has images included.	I can explain risks when using the internet	
	I can type text on a computer using the keyboard and using keys like "shift" and basic short cuts like copy and paste.	I can explain what is meant by personal information and explain who I should share it with	
	I can save my work on computer/iPad to a cloud and understand that work can be retrieved later.	I can explain what is meant by the term cyberbullying.	
	I can use an app/software to create a basic 3D model.	I can send an email to the teacher or classmate.	
	I can create a 5-10 second Stop Frame Animation and explain the process.	I can use computing to communicate with others, following instructions on safe use. E.g. I can post safely on Edmodo/Seesaw or other online tool / I can share my work with other others.	
	I can make and save a chart or graph using the data I collect. E.g. digital tally chart or bar chart. about favourite food in class.	I can explain why I need to keep my password and personal information private.	
	I can talk about the data that is shown in my chart or graph and I am starting to understand a branching database.	I can describe the things that happen online that I must tell an adult about.	
	I can talk about the different ways I use technology to collect information, including a camera, microscope or sound recorder.	I can talk about why it is important to be kind and polite online and in real life.	
		I know that not everyone is who they say they are on the Internet.	

Year 3

CS	IT	DL	Total
I can use sequence of instructions to control devices/programme a floor robot and achieve specific outcomes. E.g. Complete a maze.	I can use search tools to find and use an appropriate website.	I can create a simple blog or wiki page.	40
I can use a simulation app to test predictions. E.g. The Duck Builder simulation or http://algodoo.com	I can search for and use information from a range of sources.	I can send an email with an attachment.	
I can create a basic game using Hopscotch, Tynker or Scratch Jr/Scratch.	I can use an art package to create illustrations. Or I can create my own sprite and background in Scratch.	I can use computing to communicate with others and know strategies for staying safe.	
I understand that I must keep testing my program and I can recognise when I need to debug it.	I can make an animation and understand the use of frames.	I can post positive comments online.	
I can talk about the visible parts of a computer, including inputs and outputs. (screen, keyboard, mouse etc)	I can create an eBook to retell a story. E.g. I can combine a mixture of text, graphics and sound to share my ideas and learning.	I can use an appropriate tool to share my work online.	
I can use repeat commands to improve my programs.	I can improve the quality and presentation of my work using editing and formatting techniques.	I can make judgements about usefulness of information.	
I can create a simple flow diagram.	I can evaluate my work and improve its effectiveness.	I can recognise websites and games appropriate for my age.	
I can explain what an algorithm is and give examples.	I can talk about the different ways data can be organised.	I can search for copyright free images online to use in my own work.	
I can write my own algorithm.	I can collect, record and organise data to answer questions and present findings.	I can use the safety features (I know how to report something) of websites as well as reporting concerns to an adult.	
I can decompose an algorithm. E.g. I can break an open-	I can search a ready-made database to answer	I can talk about what makes a secure password	

Year 4

CS	IT	DL	Total
I can use conditional statements such as "If", "Else" and "Then" to control devices/sprites and achieve specific outcomes.	I can search for and use information from a range of sources.	I can collaborate to create a 3D world	38
I can use Scratch to create a computer game including one or more variables.	I can use Toca Builder/Minecraft or other 3D tool to build a simple structure.	I can use a shared space online to save and share my work	
I can use a sensor to detect a change which can select an action within my program.	I can create a poster including images and text.	I can create a blog and explain how to use it correctly.	
I know that I need to keep testing my program while I am putting it together.	I can film video using an iPad or flipcam.	I can use computing to communicate with others and know strategies for staying safe.	
I can recognise an error in a program and debug it.	I can import video footage into an editing application such as iMovie or Windows Movie Maker.	I comment positively and respectfully online.	
I recognise that an algorithm will help me to sequence more complex programs.	I can edit my footage and organise video clips to tell a story.	I can make judgements about usefulness of information.	
I can explain how variables and loops are used in a scratch game.	I can collect, record and organise data to answer and present findings.	I can use the internet safely and responsibly and identify online risks	
I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts.	I can organise data/information in different ways.	I can describe my use of computing inside and outside of school.	
I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.	I can plan, create and search a database to answer questions.	I can explain what makes a secure complex password.	
I can explain what the key components of a computer are. E.g. CPU, Hard Drive and RAM.	I can use a data logger to record and share my readings with my friends.	I can talk about the ways I can protect myself and my friends from harm online.	
I can create a very basic web page using HTML .		I use the safety features of websites as well as	

		reporting concerns to an adult.	
I can say what HTML stands for.		I know that anything I post online can be seen by others.	
I can use advanced search tools in Google to get better results. E.g. most recently updated.		I choose websites and games that are appropriate for my age.	
		I can help my friends make good choices about the time they spend online.	
		I can talk about why I need to ask a trusted adult before downloading files and games from the Internet.	

Year 5

CS	IT	DL	Total
I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program.	I can use complex searches to find, select and use information.	I can create a website using WordPress, Weebly, Edublogs or other online tool.	37
I understand the need for precision when creating a sequence of instructions.	I can film and produce a short video and understand basic elements of filming.	I can collaborate with others to develop and improve work.	
I can create a complex game using Scratch.	I can scan QR codes and create a QR code.	I understand the benefits of online communication.	
I use logical thinking, imagination and creativity to extend or improve a program. E.g. What can I add to improve my game?	I can explain what Augmented Reality is.	I can exchange ideas and information with others in a variety of different ways.	
I can change the properties of a sprite in Scratch using a conditional statement.	I can translate binary numbers to decimal	I know the difference between http and https.	
I can use a variable to increase programming possibilities.	I can use a data program to collect data to support my investigations.	I can explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult.	
I can refine a procedure using repeat commands to improve a program.	I can use a spreadsheet and database to collect and record data.	I know that anything I post online can be seen, used and may affect others.	
I can make predictions about consequences of decisions and code.	I can search a database using different operators to refine my search.	I can talk about the dangers of spending too long online or playing a game.	
I can use logical reasoning to detect and debug mistakes in a program.	I can present work in a variety of ways to suit the intended audience, using a variety of computing tools.	I can explain the importance of communicating kindly and respectfully.	
I can use a Trace Route tool to explore networks and internet traffic.	I can use the skills I have already developed to create content using unfamiliar technology.	I can discuss the importance of choosing an age-appropriate website or game.	
I can create a basic web page using HTML and insert media.	I can select an appropriate online or offline tool to create and share ideas. E.g. Make a short video to	I can explain why I need to protect my computer or device from harm. I know which resources on the	

	demonstrate understanding.	Internet I can download and use.	
I can describe different parts of the Internet. E.g. www	I can review and improve my own work and support others to improve their work. E.g. Listen to feedback and offer positive feedback to peers.		
I can describe the different parts of a webpage. E.g. head, body, menu etc.			
I can explain why web site appear in an order after a Google search.			

Year 6

CS	IT	DL	Total
I can execute (basic) common commands using Python.	I can explain 5 or more ways to improve a web search.	I can select an appropriate tool to communicate and collaborate online.	33
I can use (basic) Javascript commands to make a sprite move.	I can produce a technical drawing and label key elements.	I can explain the consequences to myself and others of not communicating kindly and respectfully. / I can explain what cyberbullying is and know how to report any concerns.	
I can create a complex game using Scratch and go beyond tutorials to add new elements. I can share a game with the Scratch community.	I can create a digital storyboard with a complete narrative.	I protect my computer or device from harm on the Internet.	
I can execute common Swift commands using Swift Playground.	I can use art package to create illustrations.	I can tell you the Internet services I need to use for different purposes.	
I can create a simple mobile app.	I can create a well designed eBook with recorded audio.	I can tell you about copyright and acknowledge the sources of information that I find online.	
I can use "Custom Blocks" in Scratch.	I can produce graphs to analyse data.	I can check the reliability of a website.	
I can recognise when I need to use a variable to achieve a required output. E.g. I can use a variable and operators to stop a program.	I can use multiple software applications to produce a report.	I can give tips designed for younger learners on how to stay safe when playing online games.	
I can use different inputs (including sensors) to control a device or onscreen action and predict what will happen.	I can explain what wearable technology is and discuss the positive uses.	I can protect my password and other personal information.	
I can deconstruct a problem into smaller steps, recognising similarities to solutions used before.	I can explain what a prototype is and why it is important in the design process.	I can explain the consequences of sharing too much about myself online.	
I can evaluate and improve an algorithm while I continually test the programming of that algorithm.	I can create an advert to market a product.	I support my friends to protect themselves and make good choices online, including reporting concerns to an adult.	
I can use logical reasoning to detect and correct	I can explain what different graphics types	I can explain the consequences of spending too much time	

errors in a algorithms and programs.	are and where/when they should be used.	online or on a game.	
I can describe how information is transported on the Internet.	I can select the most effective tool to collect data for my investigation. E.g. Microscope, video, sound, data-logger etc.		
I can talk about the way search results are selected and ranked.	I can check the data I collect for accuracy and plausibility.		
	I can interpret the data I collect and I can present the data I collect in an appropriate way.		
	I can confidently identify the potential of unfamiliar technology to increase my creativity.		
	I can combine a range of media, recognising the contribution of each to achieve a particular outcome.		
	I can tell you why I select a particular online tool for a specific purpose.		
	I can be digitally discerning when evaluating the effectiveness of my own work and the work of others.		