

for Primary Schools  
Y1-Y6

iCompute  
Primary Computing



DL

# Progression

Digital Literacy

# DL Progression in Primary Computing

This guide is intended to support teachers using iCompute's Primary Computing Scheme of Work for pupil progression in the Digital Literacy (DL) strand of the National Curriculum for Computing for Key Stage 1 and Key Stage 2.

It forms part of a comprehensive Computing Assessment Toolkit for Primary Computing covering all strands of the National Curriculum:

- 📁 Computer Science
- 📁 Digital Literacy (incl. eSafety)
- 📁 Information Technology

## Digital Literacy Progression

To demonstrate good practice in developing learning across the curriculum, this guide has been arranged into six sections: Year 1 to Year 6

This guide shows how expectations for children's digital literacy capability can progress from Reception to Year 6.

It is a guide only and should be adjusted to suit your school setting and the capabilities and competencies of your pupils.

It does not cover progression in Information Technology and Computer Science; which are detailed separately in the Assessment Toolkit.

## Declarative and Procedural Knowledge

For progress in computing to take place, pupils need to be taught components of learning and acquire declarative and procedural knowledge.

At iCompute, we think of knowledge components in terms of **know that... understand that... know how...**

Procedural Knowledge refers to the knowledge of "how to" perform a specific skill or task.

Declarative Knowledge involves "knowing that" and "understanding that".

# Digital Literacy - Knowledge Components

Working Towards

Meeting

Greater Depth

Early Years

Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge
Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...
<ul style="list-style-type: none"> <li>you can use computers to make things happen</li> <li>you can use computers to draw</li> <li>we can get information from pictures and video as well as words</li> </ul>	<ul style="list-style-type: none"> <li>interact with multimedia software to make something happen on screen</li> <li>explore, access and make choices with digital content</li> <li>create basic shapes using digital tools with support</li> <li>record basic sounds (audio) with support</li> </ul>	<ul style="list-style-type: none"> <li>you can draw and write using computers</li> <li>you can get information from pictures, words, video and sound</li> <li>you can use computers to communicate through text, images and sound</li> <li>you can record sound and play it back</li> <li>you can search for things using computers</li> </ul>	<ul style="list-style-type: none"> <li>have created shapes and text using digital tools</li> <li>used technology to show learning</li> <li>talk about different kinds of information such as pictures, words, video and sound</li> <li>create simple compositions and record/playback audio</li> <li>find information using a basic search</li> </ul>	<ul style="list-style-type: none"> <li>you can play back, fast forward and pause audio using a device</li> <li>you can present information using computers</li> <li>you can find things out online</li> </ul>	<ul style="list-style-type: none"> <li>access a website using shortcuts</li> <li>navigate a website using buttons and obvious links</li> <li>talk about information they have found out from images, text, video and sound</li> <li>explore features of digital audio recording</li> <li>put together simple presentations with multimedia aspects</li> <li>obtain information online</li> <li>make choices about the kind of information they collect online</li> </ul>

# Digital Literacy - Knowledge Components

Working Towards

Meeting

Greater Depth

Early Years

Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge
Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...
<ul style="list-style-type: none"><li>✓ you can visit a website</li><li>✓ you can move around a website</li><li>✓ you can find things out on a website</li><li>✓ you can draw using computers</li></ul>	<ul style="list-style-type: none"><li>✓ access a website using desktop shortcuts</li><li>✓ navigate simple websites with support</li><li>✓ get simple information from the world wide web</li><li>✓ use drawing tools to say something</li></ul>	<ul style="list-style-type: none"><li>✓ websites have buttons and links</li><li>✓ you can use websites to answer questions</li><li>✓ you can use computers to share information</li></ul>	<ul style="list-style-type: none"><li>✓ move around a website using buttons and image links</li><li>✓ find answers to simple questions using a website</li><li>✓ use drawing and text tools to give information</li></ul>	<ul style="list-style-type: none"><li>✓ websites have their own addresses</li><li>✓ lots of different things on a website can be links</li></ul>	<ul style="list-style-type: none"><li>✓ visit a website by typing its address</li><li>✓ move around a website using links (images and words) and buttons</li></ul>

# Digital Literacy - Knowledge Components

Working Towards

Meeting

Greater Depth

Year 2

Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge
Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...
<ul style="list-style-type: none"><li>✓ you can share links to websites</li><li>✓ you can go back to the last page you visited</li><li>✓ you can use websites to find information</li></ul>	<ul style="list-style-type: none"><li>✓ use a shared link to find a website</li><li>✓ move around a website using hyperlinks and the back button with help</li><li>✓ find answers to questions using information in a website with help</li></ul>	<ul style="list-style-type: none"><li>✓ websites have their own address and it's called a URL</li><li>✓ links can be found online because the cursor changes (e.g. into a hand shape)</li></ul>	<ul style="list-style-type: none"><li>✓ enter the address (URL) of a website with support</li><li>✓ identify some links within web content and move around them with purpose</li><li>✓ use a range of apps and devices without help</li></ul>	<ul style="list-style-type: none"><li>✓ some websites are more useful than others when trying to find something out</li><li>✓ you need to be careful online and choose appropriate information</li></ul>	<ul style="list-style-type: none"><li>✓ choose a website based on how useful it is</li><li>✓ show you how I found specific information on a website</li><li>✓ choose carefully the information I get from websites</li></ul>

# Digital Literacy - Knowledge Components

Working Towards

Meeting

Greater Depth

Year 3

Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge
Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...
<ul style="list-style-type: none"> <li>there are lots of ways to move around websites and you can go back to websites you've visited before</li> <li>websites have their own address and it's called a URL</li> <li>you use a web browser to visit websites</li> <li>patterns are everywhere</li> <li>you can use computers to present information</li> </ul>	<ul style="list-style-type: none"> <li>move around a website using hyperlinks and the back button</li> <li>type web addresses (URLs) into a web browser</li> <li>create bookmarks/favourites</li> <li>recognise patterns in everyday activities</li> <li>point out suitable information to present</li> </ul>	<ul style="list-style-type: none"> <li>you need to be accurate when entering web addresses otherwise you can't visit it</li> <li>anyone can make a website and not all information on them are accurate</li> <li>you can make favourites or bookmarks for websites you visit regularly</li> <li>you can print web pages</li> <li>you can copy and paste images and text online to other applications</li> </ul>	<ul style="list-style-type: none"> <li>find information by moving around a web page using hyperlinks and the back button</li> <li>confidently enter web addresses into a web browser</li> <li>question the reliability of information I found online</li> <li>create bookmarks/favourites and use them to access websites</li> <li>print web pages and copy and paste information into other applications</li> </ul>	<ul style="list-style-type: none"> <li>people can communicate and collaborate online</li> <li>technology makes working together faster and easier</li> <li>online content can be searched</li> <li>I need to be careful when searching</li> <li>I need to check information is accurate and reliable</li> </ul>	<ul style="list-style-type: none"> <li>use search technology to find things out</li> <li>double check information found online on one website against another</li> <li>carefully select information from a range of websites</li> </ul>




# Digital Literacy - Knowledge Components

Working Towards

Meeting

Greater Depth

Year 3

Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge
Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...
		 images and text found online may be copyright protected	 describe how I use technology at school and at home  judge my own and other peoples work and talk about how they could be made better		

# Digital Literacy - Knowledge Components

Working Towards

Meeting

Greater Depth

Year 4

Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge
Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...
<ul style="list-style-type: none"><li>there are lots of ways to move around websites and you can go back to websites you've visited before</li><li>websites have their own address not all information online is correct</li><li>internet search engines search for websites</li></ul>	<ul style="list-style-type: none"><li>navigate around a website using hyperlinks and the back/forward button</li><li>enter URLs into an address bar of a browser</li></ul>	<ul style="list-style-type: none"><li>a computer network means connected computers</li><li>you can use the internet for activities other than web browsing</li><li>not all information online is reliable and that it needs to be checked</li></ul>	<ul style="list-style-type: none"><li>confidently enter URLs into the address bar of a browser</li><li>use a browser and move forward and backward between websites</li><li>check information found on a website for accuracy</li></ul>	<ul style="list-style-type: none"><li>I need to be careful when searching</li><li>I need to check information is accurate and reliable</li><li>a computer network is a number of computers and devices that are connected</li><li>internet search engines give a list of websites based on key words</li></ul>	<ul style="list-style-type: none"><li>suggest a range of activities that you can do using the internet, including web browsing</li><li>find information by navigating around a number of websites using hyperlinks and buttons</li><li>question the credibility of information given on websites</li><li>cross-check information provided on one website</li></ul>



# Digital Literacy - Knowledge Components

Working Towards

Meeting

Greater Depth

Year 6

Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge
Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...
<ul style="list-style-type: none"> <li>you can use the internet for activities other than web browsing</li> <li>not all information available online is reliable and that it needs to be checked, but I don't always check it</li> <li>search engines give a list of websites based on search terms</li> </ul>	<ul style="list-style-type: none"> <li>find information by navigating round a number of websites using links and buttons</li> <li>check information I find online</li> </ul>	<ul style="list-style-type: none"> <li>search engines help you find things online</li> <li>that the internet is used by lots of different things</li> <li>not all information online is reliable or accurate and I need to check it</li> <li>some software and applications might be better than others for creating content</li> </ul>	<ul style="list-style-type: none"> <li>use search technology to find things out</li> <li>suggest a number of activities you can use the internet for (e.g. online gaming, voice over internet, email etc)</li> <li>cross-check information provided on one website against multiple alternative sources</li> <li>create digital content for specific purposes</li> </ul>	<ul style="list-style-type: none"> <li>people can work together online</li> <li>there are lots of different services that use the connections of the internet to work</li> <li>software and technology can be used together to make digital content</li> </ul>	<ul style="list-style-type: none"> <li>discuss opportunities for communication and collaboration online</li> <li>use a variety of services provided by the internet (e.g. email, gaming, video chat)</li> <li>create content for specific purposes by combining applications and internet services to communicate with an audience (e.g. creating web pages)</li> </ul>

# Digital Literacy - Knowledge Components

## Working Towards

## Meeting

## Greater Depth

Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge	Declarative Knowledge	Procedural Knowledge
Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...	Pupils understand/know that..	Pupils know how to...
<ul style="list-style-type: none"> <li>internet search engines find information and list search results in the order of popularity</li> </ul>	<ul style="list-style-type: none"> <li>use internet services other than web browsing (e.g. VOIP or email)</li> <li>talk about opportunities for communication and collaboration online</li> <li>find relevant information online and make some checks for accuracy and reliability</li> <li>remix web content, sometimes with help</li> <li>recognise an audience when creating digital content</li> </ul>	<ul style="list-style-type: none"> <li>internet search engines use algorithms to find web content (e.g. web crawling)</li> <li>search engines are organised in order of popularity</li> </ul>	<ul style="list-style-type: none"> <li>use search technology and clear search terms to view web pages and obtain information and data</li> <li>use a number of internet services (e.g. email, voice over internet etc)</li> <li>create digital content for specific purposes and audiences</li> <li>use feedback to improve digital content</li> </ul>	<ul style="list-style-type: none"> <li>internet search results are ranked</li> <li>computers on networks (incl. the internet) have unique addresses (IP addresses) and that data is transmitted in packets</li> </ul>	<ul style="list-style-type: none"> <li>design and create web pages using HTML and CSS</li> <li>design criteria for evaluating digital content</li> <li>identify improvements and refine my own and other's work</li> </ul>