

# Dothill Progression Mapping



## Computing

Respect Happiness Responsibility Creativity HONESTY Enthusiasm Confidence Kindness Cooperation fairness

	EYFS	Year One	Year Two
<b>Substantive Knowledge</b> <b>Computer science</b>  (Algorithms and programming, data, systems)	<ul style="list-style-type: none"> <li>✓ I know how to operate simple technological equipment.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I know that instructions tell me how to make something work.</li> <li>✓ I know that a robot/programmable toy can move in different directions.</li> <li>✓ I know what a command is.</li> <li>✓ I know that a series of commands can be joined together.</li> <li>✓ I know what a sprite is.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I know what an algorithm is.</li> <li>✓ I know what a prediction is.</li> <li>✓ I know what a sequence is.</li> </ul>
<b>Substantive Knowledge</b> <b>Information Technology</b>  (Digital artefact and computing contexts)	<ul style="list-style-type: none"> <li>✓ I know what a tablet is.</li> <li>✓ I know what a computer is.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I know I need to save my work.</li> <li>✓ I know you can enter numbers into a computer.</li> <li>✓ I know that double clicking means tap a word twice.</li> <li>✓ I know what caps lock does.</li> <li>✓ I know what the space bar does.</li> <li>✓ I know what the toolbar is.</li> <li>✓ I know the differences between painting on a computer and on paper.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I know how to explain how information technology helps us.</li> <li>✓ I know how to use information technology safely.</li> <li>✓ I know what each tool icon represents.</li> <li>✓ I know that some photographs can be changed.</li> <li>✓ I know why a picture may be unclear.</li> <li>✓ I know what is meant by portrait and landscape format.</li> <li>✓ I know that some photographs can be changed.</li> </ul>
<b>Substantive Knowledge</b> <b>Digital literacy</b>  (Mechanics, searching/ selecting information, and e-safety)	<ul style="list-style-type: none"> <li>✓ I know some safer internet rules.</li> <li>✓ To use 'Educated for a Connected world' to deliver:                             <ul style="list-style-type: none"> <li>✓ <b>Self-image and identity</b></li> <li>✓ <b>Online reputation</b></li> <li>✓ <b>Health, well-being and lifestyle</b></li> <li>✓ <b>Managing online information</b></li> <li>✓ <b>Online bullying</b></li> <li>✓ <b>Online relationships</b></li> <li>✓ <b>Privacy and security</b></li> <li>✓ <b>Copyright and ownership</b></li> </ul> </li> <li>✓ I know that the internet can be used to communicate.</li> <li>✓ I know that the internet can help me find information online.</li> <li>✓ I know simple examples of my personal information (e.g. name, address, birthday, age, location).</li> <li>✓ I know someone who would be trustworthy to share personal information with.</li> <li>✓ I know that work I create belongs to me.</li> </ul>	<p><b>Computing systems and networks: Technology around us</b></p> <ul style="list-style-type: none"> <li>✓ I know that technology is something that helps us.</li> </ul> <p><b>Self-image and identity</b></p> <ul style="list-style-type: none"> <li>✓ I know to speak to an adult I can trust if sad/worried.</li> </ul> <p><b>Online reputation</b></p> <ul style="list-style-type: none"> <li>✓ I know what information I should not put online without asking a trusted adult first.</li> <li>✓ I know that information can stay online and could be copied.</li> </ul> <p><b>Health, well-being and lifestyle</b></p> <p><b>Managing online information</b></p> <ul style="list-style-type: none"> <li>✓ I know how to find information using digital technologies, e.g. search engines, voice activated searching.</li> <li>✓ I know that we can encounter a range of things online including things we like and don't like as well as things which are real or make believe / a joke.</li> </ul>	<p><b>Computing systems and networks: IT around us</b></p> <ul style="list-style-type: none"> <li>✓ I know what information technology (IT) is.</li> <li>✓ I know how information technology helps us.</li> </ul> <p><b>Online bullying</b></p> <ul style="list-style-type: none"> <li>✓ I know what bullying is, how people may bully others and how bullying can make someone feel.</li> </ul> <p><b>Online relationships</b></p> <ul style="list-style-type: none"> <li>✓ I know who I should ask before sharing things about myself or others online.</li> <li>✓ I know why I have a right to say 'no' or 'I will have to ask someone'. I know who can help me if I feel under pressure to agree to something, I am unsure about or don't want to do.</li> </ul> <p><b>Privacy and security</b></p> <ul style="list-style-type: none"> <li>✓ I know that online information about me could be seen by others.</li> <li>✓ I know what is meant by 'private' and 'keeping things private' online.</li> </ul> <p><b>Copyright and ownership</b></p> <ul style="list-style-type: none"> <li>✓ I know that content on the internet may belong to other people.</li> </ul>

<p>Disciplinary Knowledge <b>Computer science</b> (Algorithms and programming, data, systems)</p>	<ul style="list-style-type: none"> <li>✓ I can show an interest in real objects that involve technology.</li> <li>✓ I can show skill in making toys work by pressing parts to achieve effects (sound, light, movement, showing of images).</li> </ul>	<ul style="list-style-type: none"> <li>✓ I can control the movement of a floor robot using commands.</li> <li>✓ I can use more than one command.</li> <li>✓ I can run my program.</li> <li>✓ I can use a start block in a program.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I know how to begin to <b>debug</b> any errors in code.</li> <li>✓ I know how to follow a sequence.</li> <li>✓ I can explain what happens when we change the order of instructions.</li> <li>✓ I can create a list of instructions to make things happen well.</li> <li>✓ I can control and debug commands for programmable toys.</li> <li>✓ I can identify several possible solutions to a problem.</li> </ul>
<p>Disciplinary Knowledge <b>Information Technology</b> (Digital artefact and computing contexts)</p>	<ul style="list-style-type: none"> <li>✓ I can interact with a computer or tablet to make something happen successfully.</li> <li>✓ I can interact with age-appropriate computer software.</li> <li>✓ I know how to turn on and off a device.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I can open a word processor.</li> <li>✓ I can use a computer to write.</li> <li>✓ I can recognise keys on a keyboard.</li> <li>✓ I can identify and find keys on a keyboard.</li> <li>✓ I can enter text into a computer.</li> <li>✓ I can use letter, number, and space keys.</li> <li>✓ I know how to change the text's appearance.</li> <li>✓ I know how to 'undo' my actions.</li> <li>✓ I can compare typing on a computer to writing on paper.</li> <li>✓ I can select appropriate colours, brush sizes, and brush tools to independently create an image.</li> <li>✓ I know how to make lines/marks on a screen and can explain which tools I used.</li> <li>✓ I know how to use the paint tools to draw a picture.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I know how to use a digital device to take a photograph.</li> <li>✓ I can recognise the uses and features of information technology.</li> <li>✓ I can identify the uses of information technology in the school.</li> <li>✓ I can identify information technology beyond school.</li> <li>✓ I can recognise that choices are made when using information technology.</li> </ul>
<p>Disciplinary Knowledge <b>Digital literacy</b> (Mechanics, searching/ selecting information, and e-safety)</p>	<ul style="list-style-type: none"> <li>✓ I can recognise that I can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asks me to do something that makes me feel sad, embarrassed or upset.</li> <li>✓ I can give examples of how I (might) use technology to communicate with people I know.</li> <li>✓ I can identify ways that I can put information on the internet.</li> <li>✓ I can describe ways that some people can be unkind online and can offer examples of how this can make other feel.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I can identify a computer and its main parts.</li> <li>✓ I know how to use a mouse in different ways.</li> <li>✓ I can use a keyboard to type and edit on a computer.</li> <li>✓ I can recognise that there may be people online who could make someone feel sad, embarrassed, or upset.</li> <li>✓ I can identify rules that help keep us safe and healthy in and beyond the home when using technology.</li> <li>✓ I know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable worried or frightened.</li> </ul>	<ul style="list-style-type: none"> <li>✓ I can recognise the uses and features of information technology.</li> <li>✓ I can explain why anyone who experiences bullying is not to blame.</li> <li>✓ I can talk about how anyone experiencing bullying can get help.</li> <li>✓ I know how someone might use technology to communicate with others they don't also know offline and explain why this might be risky. (e.g. email, online gaming, a pen-pal in another school / country).</li> <li>✓ I can explain how passwords can be used to protect information, accounts and devices.</li> <li>✓ I can explain how some people may have devices in their homes connected to the internet and give examples (e.g. lights, fridges, toys, televisions)</li> </ul>
<p>Vocabulary Computer Science</p>		<p>Program                  Sprite                  Backwards Command                Forwards                Direction Run</p>	<p>Instructions              Algorithm                Prediction Sequence                 Debug                     Control</p>
<p>Vocabulary Information Technology</p>		<p>Light                      Image                      Compose Focus                      Photograph                Capture Portrait                    Lens Landscape</p>	<p>Paint                      Line                        Picture Draw                        Mark                        Image Tools                        Fill Shape</p>
<p>Vocabulary Digital Literacy</p>		<p>Identity                  Consent                  Voice activated Online                    Devices                  searching Avatar                    Search engines        Content Information              Real/make believe    Rules Trusted adult          Webpage                Safe Offline                    Healthy</p>	<p>Bullying                 Trusted                  Private Online                    Trust-worthy            Belonging Unkind                   Passwords                Save work Upset                     Protect                    Created Personal information</p>

