Curriculum Coherence – Year 1 Computing

Term 1	Online Safety and Trusted Adults	Programming Using Basic Algorithms

Prior Learning: ELG Understanding the World – Chn know how to operate simple equipment. They show an interest in technological toys with knobs or pulleys, or real objects. Chn show skills in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. They know that information can be retrieved from computers. Chn can complete a simple program on a computer and interact with age-appropriate computer software.

INTENT	IMPLEMENTATION	IMPACT
KNOWLEDGE **Online safety and trusted adults** *-Know their trusted adults and when ask for help and guidance.* *- Passwords are kept private.* **Programming using basic algorithms** *- what coding means* *- to use clear instructions in the correct order* *- to clear the memory before inputting new instructions* **VOCABULARY** Log in/out, username, password, browser, avatar. Coding, program, directions – left/right turn, forward, backwards, start, clear, algorithm, input, debugging	**ACTIVITIES** **Online safety and trusted adults unit 1.1** - Discuss trusted adults and how they can help -Log in to Purple Mash with their username and password and log out again - Discuss what a password is and how we keep them safe - Talk about what an avatar is and create their own **Programming using basic algorithms** - tinkering with BeeBots - to input instructions into BeeBots - to make their own map for the BeeBot to travel around - to both follow and write simple algorithms themselves and for BeeBots to reach a predetermined destination - to discuss what went wrong with their algorithm (debugging) **Key Questions** **How can we stay safe online?** **Who can we talk to if we have a problem?** **Who are my trusted adults?** **How can I fix my algorithm?** **What makes a good algorithm?**	**OUTCOMES** **Online Safety and Trusted Adults** **PUPILS will know** - who are their trusted adults? - what is a digital avatar? - what is a password and why should we keep them safe? - what does coding mean? - what is personal information and why/how is it kept safe? **will be able to** - Turn on/off a computer - Log on/off using their own username/password **will understand** I can keep my password private. I can tell an adult when I see something unexpected or worrying online. I can talk about why it's important to be kind and polite. I can recognise an age appropriate website. I can agree and follow sensible e-Safety rules. **Programming using basic algorithms** **PUPILS will know** -what is an algorithm? -how can we program a BeeBot? -what is debugging? **Will be able to** -tinker with a floor robot -enter instructions into a Beebot -sequence instructions to reach a target destination -look for errors in their instructions and think about how to correct these **will understand** I can give instructions to my friend and follow their instructions to move around. I can describe what happens when I press buttons on a robot. I can press the buttons in the correct order to make my robot do what I want. I can describe what actions I will need to do to make something happen and begin to use the word algorithm. I can begin to predict what will happen for a short sequence of instructions.
SKILLS • Double clicking • Mouse skills • Turning on and off a computer safely • Logging on and off • Clearing memory • Inputting instructions into a BeeBot		**NEXT STEPS IN LEARNING** Safer Searching and digital footprint (Year 2, Autumn 1) Creating onscreen algorithms (Year 1, Summer 2)

LINKS
Life Learning - Staying safe online
Maths – directions
THREAD - transport