**Creative Computing with **

**Intro to Scratch**

****

Learn the basics of Scratch to begin creating new games and designs!

|  |  |  |
| --- | --- | --- |
| **Title: Intro to Scratch**  **Time: 1 hour**  **Level: Beginner** | | |
| Learning Objectives:   * Learners to understand that Scratch is a commonly used programming language * Learners to be able to imagine possibilities for their own Scratch-based creation | | |
| * Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems * Solve problems by decomposing them into smaller parts * Use sequence, selection and repetition in programs: work with variables and various forms of input and output * Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs | | **Standards:**  **UK National Curriculum** |
| L1:6 CT Computational Thinking   * Understand and use the basic steps in algorithmic problem-solving * Develop a simple understanding of an algorithm * Understand the connection computer science and other fields   L1:6 CPP Computing Practice and Programming   * Construct a program as a set of step-by-step instructions to be acted out * Implement problem solutions using a block based visual programming language | | **Standards:**  **US Computer Science Teachers Association** |
| **Starter: 10 min**  Ask students about their experiences with computers. Ask them to draw one thing they’d want to use technology for/ what they would want technology to do.  Introduce students to creating with Scratch and the range of projects they will be able to create by showing the [Scratch overviewvideo](http://youtu.be/-SjuiawRMU4)and some [sample projects](http://scratch.mit.edu/studios/137903).  Explain that over the next few sessions they will be creating their own interactive computational media with Scratch. (Show some videos from the resource links provided)  **Explain that Scratch/blocks is just another form of a coding language.** | | |
| **Collect Kanos:** 5 min  **Retrieve Computers, Turn On, Log In..** | | |
| **Exploration Activities: 30 min**  **Challenge 1:**  Students explore in Scratch and complete the introduction activity <https://www.raspberrypi.org/learning/getting-started-with-scratch/worksheet/>.  If you need to walk through specifics with the students reference the [“Getting to Know Scratch”](https://docs.google.com/a/kano.me/presentation/d/1fpC-QLC7HecfzOnqOyHElI3AV5K9-HWarQogEGltiGs/edit?usp=sharing) powerpoint. | | |
| **Sharing: 10 min**  What did you create in Scratch? Turn and talk to a partner and share your Scratch creations. What would you like to learn or do for your next Scratch lesson? | | |
| **Kano Cleanup:** 5 min  **Power down and put away the Kanos** | | |