# Introduction to Scratch 1

(1 hour)

OBJECTIVES: 1. Learn to install Scratch locally and how to use the web version

2. Understand that programs are simple things built upon others to produce complex things

OVERVIEW FOR TRAINERS: This is lesson one in the English Scratch training course “Introduction to Scratch.” It is intended as an intro to the process of learning a computer language and specifically an intro to learning the Scratch programming language. In this lesson we will learn about the program, the interface and the options for installing locally and using online.

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| METHOD | TIME | KNOWLEDGE |
| Starter 1 – Ask students to describe a basic computer game they have played (solitaire, mine sweeper, etc.). Discuss the things the computer must do to allow game play. Starter 2 – Show the Tie Fighter game. Ask students to list the things the computer must do to allow game play.  ----SHO questions----  **S** What do you **S**ee and hear?  **H** What is **H**appening (Problem)?  **O** Does it happen in **O**ur place? | 5” |  |
| Tie Fighter game – show the game, let students play with it a bit.  What elements does the game have?  What actions does the game do?  How does the user interact with the game?  What improvements can you think of to add to the game? | 10” | Background  Tie Fighter  Cockpit  Fire balls  Explosions  The game has a number of actions, this may be a good time to discuss how the elements (above) interact with each other.  Aim guns  Tie fighter flight  Fire guns  Tie fighter explosion  Start the game  Move the aiming reticle  Fire the guns  Illusion of flight  Change size of tie fighter as it approaches |
| Walk students through the Scratch interface | 15” | Block section   * Motion * Looks * Sound * Pen * Control * Sensing * Operators * Variables   Scripts/Costumes/Sounds  Stage   * Demonstrate changing stage size   Sprites   * Show how to edit a sprite * Show how to import a sprite |
| Motion Animation | 10” | Have students write scripts to move Scratchy around   * Move forward in a line * Move in a square * Move in a triangle |
| Installing Scratch   * Download files from:   + <https://scratch.mit.edu/scratch_1.4/>   + <https://scratch.mit.edu/scratch2download/> * Run the program!   Demonstrate the Scratch Website   * [https://scratch.mit.edu](https://scratch.mit.edu/) | 10” | I prefer to stay with 1.4 since the install is much simpler (no AdobeAIR required). |

ATTITUDE: Understand that computer programs are just a sequence of instructions to make a computer do something useful. Understand how to get and install Scratch on the student's own computer.

SKILL: Write beginning animation programs

EVALUATION: Scratchy moves!

MATERIALS: Computers, Internet connection

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