Other Scratch Activities/Programs to Try

Debug Programs

Scratch Users and Developers have created programs that need "debugging".
They are programs with bugs that need fixing and are *great ways to challenge your students* (they are of varying difficulties):
http://scratch.mit.edu/studios/676572/projects/
http://scratch.mit.edu/projects/38119530/?fromexplore=true

Cross-Curricular (Non-Math) Ideas:

Quiz – Students can create a quiz for ANY subject area. This includes a higher degree of coding concepts, but students could just copy the code and then add their questions in.
Video Tutorial:

TIP: Search in Scratch for any topic…. This will give you an idea of what other students have created and you can come up with an assignment of your own related to that topic.

Grade Level	Strand	Ideas
LANGUAGE		
7/8	**Oral Communication**	• Students can record themselves in Scratch!
7/8	**Reading**	• Demonstrate understanding of text by creating program or game that summarizes the key points • Reward: Read the book then you get to program!
7/8	**Writing**	• Programming provides perfect opportunity to organize their thoughts and ideas • Students choose intended audience for their game or graphic novel that they create in Scratch • Reward: Write a proposal for a game, edit text that will be included, then you get to program! • Easy to create a spelling game as the words need to be spelled EXACTLY correct or the program will indicate it is incorrect • Students can create an online dictionary with buttons that provide the definition for words
7/8	**Media Literacy** (see 1 for examples)	• Students can create: Graphic novels, choose your own adventure books, greeting cards, reports, advertisements (commercials), short films, scenes with narrative (recording option)
Science		

7	**Understanding Matter and Energy – Pure Substances and Mixtures** (see 2 for example)	• Students make animation to demonstrate particle theory • Students make game to classify matter according to characteristics (e.g. drag and drop into proper categories) • Students make animation comparing pure substances and mixtures
	Understanding Life Systems – Interactions in the Environment	• Students make game to classify biotic and abiotic elements • Animation depicting what happens to ecosystems as a result of human intervention (click here to see what happens when…)
	Understanding Earth and Space Systems – Heat in the Environment	• Students make animation to demonstrate how heat transformation can be explained using particle theory of matter • Students make Interactive animation to show positive and negative effects on the environment
8	**Understanding Life Systems - Cells**	• Interactive animation showing organization of cells, tissues, organs, organ systems, organisms • Interactive animation showing how systems are interdependent • Students can create a game to differentiate between plant and animal cells and cell processes
	Understanding Structures and Mechanisms – Systems in Action	• Lego NXT (expensive!) • Arduinos?
	Understanding Earth and Space Systems – Water Systems	• Students can create an interactive animation depicting water cycle • Students can demonstrate understanding of human impact on water resources with an interactive animation (e.g. If this is done, then this will happen)
Arts		
7/8	**Dance**	• Students can write algorithms for steps of a dance • Students can demonstrate the ability to apply the creative processes to the composition of a dance piece for a sprite • Students can demonstrate an understanding of variety of dance forms/traditions/styles by making a simple dance with appropriate music, movement, backdrop, characters
7/8	**Drama**	• Develop some sort of drama work in Scratch to demonstrate their knowledge of the creative process to communicate multiple perspectives, styles
7/8	**Music**	• Students can actually compose simple pieces using Scratch • Students can create an interactive program with buttons to play sample pieces from different genres (music files can be played) • Students can create an interactive program with buttons to play music that conveys various feelings
7/8	**Visual Arts** (see 3 for example)	• Students can use drawing tools in Scratch to create backdrops, sprites to demonstrate their understanding of art forms, styles

		• Use Scratch as the multimedia platform for producing art work • Students can create an interactive program that has buttons that display various art forms and styles

1 – Media

- ***Holiday Card Video Tutorial*** (by: Dave Lanovaz):
  - https://www.youtube.com/watch?v=si-02o_Hcnc
- ***Graphic Novel*** **-** Sample Student work
  - http://scratch.mit.edu/projects/2826802/

2 – Science

- **Particle theory**
  - Incredibly simple program someone created:

http://scratch.mit.edu/projects/21542432/

3 – Arts – Use Drawing Tools in Scratch

- Here are simple programs that show use of drawing tools in Scratch before and during run-time
  - **Etcha-Scratch**

    Screen Print of Code

  - **Snow Flake Creation**

    Here is a simple program that someone created, but students could try to create symmetrical artwork:

    http://scratch.mit.edu/projects/16495218/