**Pyret Progression**

Prep Resources (possibly) - Orthogonal to other resources

These four resources should be merged together for a concise packet.

* <https://docs.google.com/document/d/1mEOHz9uYwN_YM7iHF7wQ5tyvmNLjLqOANbTGpEKQczw/edit>
* <https://docs.google.com/document/d/1mEOHz9uYwN_YM7iHF7wQ5tyvmNLjLqOANbTGpEKQczw/edit?usp=sharing>
* <https://docs.google.com/document/d/1v3QfgGXveDoU7UOaiFy0A69Ih_KC1u-Pf8-bcBmSuEY/edit?usp=sharing>
* <https://docs.google.com/document/d/1ozJgicsno3a6ugMzkUV7kU-7PdXm1m4eSsZbzjS0-w4/edit>

Unit 1

(proposed) - simple function writing and image creation

Unit 2

* Writing a differential function (next-x)

Unit 3

* (next-x and next-v)

Unit 4

* Introduction to strings
* Writing conditionals

Unit 5

Are they writing functions from scratch? Or is it “learning from filling in holes” from programs.

Is there enough programming? If what they are doing is just fill-in-the-blank, why not just use PhET?

Jess: First introduction to writing functions was C/F temperature conversions.

Melissa: Used materials that were developed by the curriculum team.

Jess: It’s a different way to see what they’re thinking. PhEt doesn’t give them the ability to fail. PhET is so full-proof, there’s really no way they can fail anything. They may not understand what they are doing, but they can’t do it wrong. For me, the easiest thing to say that Pyret opens up for is the ability to craft scenarios that we couldn’t operate in the lab, and find out what kids are really thinking. From the CS side, I don’t know that it necessarily is doing what you hoped, from the the physics side it’s offering us new avenues to get inside their heads.

Joe: What kinds of failures? Interesting or annoying?

Jess: Sometimes annoying. The more interesting failures is when for example they don’t recognize that hey need to make something go to the left and therefore put an neg sign goes in, and that they can actually see something speed up when it’s supposed to slow down. They can see right away when they do that that this needs to be negative, so they flip the sign. SOme of the failures are transferring math to code. Some of the physics errors are really kind of cool, like when you want to stop the cart slow to the horses, some have it slowing down immediately, while some don’t. It’s a wide range of failure that we didn’t have before.