Lesson 2 - Student Activity #2 Guide

Modifying the Silver Nitrate and Copper Reaction Model

Remix the base model: “silver nitrate and copper reaction” and change its name to include your name and your partner’s name.

Challenge #1:
Modify the code to add or remove some or all of the water molecules in the model.

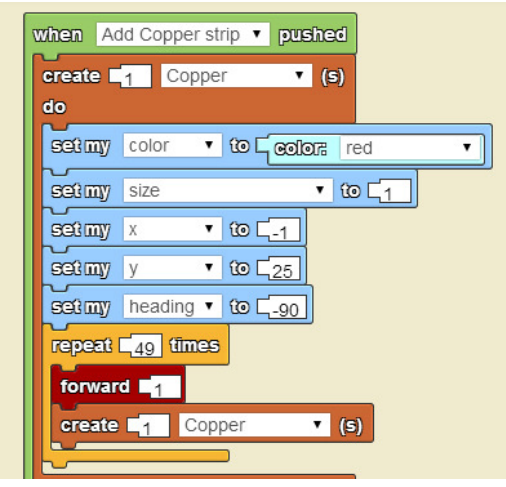
Reminder: Execute your model every time you add a piece of code. Debug as needed. Save often.

Hint: Look at the setup instructions for the water agents.
After you change the code, go up to the SpaceLand interface, save the model and click on “Run Code’ before running the model by clicking on the interface buttons. Debug the model as needed.

Q: Does removing the water molecules affect the execution of the model and real-world representation?
If time allows after you are done, think about what is included in this model and what is missing.

Challenge #2:
Modify the code to move the copper rod somewhere else in the solution keeping the number of agents of copper the same. Please note: The base model gives 150 copper agents to represent 150 copper atoms.

Hint: Look at the setup instructions for the copper agents (section shown below)



After you change the code, go up to the interface and hit “Save” and “Run Code” before executing the model. Debug the code as needed.

What does the command “set my x to” do? What does the command “set my heading to” do? What happens if you change the number of times the loop repeats?