Feed the Mouse Game

Materials: A deck of cards, toy mouse or other animal, toy treats, toy obstacles (optional)

Background Information: This game teaches children about algorithms, which is a group of instructions written by the programmer to tell the computer what to do. They will also learn the concept of debugging, which is how to fix a problem in a program.

STEM Career Connection: Software designers create the new technologies that businesses and the public need. All the apps, computer programs, websites and business tools were all created by software developers.

Literature Connections: Trapped in a Video Game Series by Dustin Brady, Code Your Own Games!: 20 Games to Create with Scratch by Max Wainewright, A Computer Called Katherine: How Katherine Johnson Helped Put America on the Moon by Suzanne Slade

Challenge:
1. Gather materials.
2. Set up a maze or path by placing playing cards on the ground. Place toy treats along the path.
3. One child acts as the Computer (who moves the mouse by listening to the Programmer’s instructions). The other child acts as the Programmer (who gives the commands). The Programmer gives verbal instructions like 'Move Forward' (state how many card spaces), 'Move Backward' (state how many card spaces), and 'Turn Right' or 'Turn Left' to guide the computer/mouse throughout the path, without missing any of the treats.
4. The challenge level of the game can be increased by creating a more complex maze and putting obstacles in pathways that the mouse has to escape from or maneuver around.

Source of the Activity: http://info.thinkfun.com/stem-education/6-unplugged-coding-activities-for-hour-of-code