Everyone knows how to play Rock, Paper, Scissors. But does everyone know how to play Rock, Paper, Scissors against a computer program that they made themselves, complete with sounds, flashing lights, and special symbols? You don’t? Well, this challenge will show you!

What You’ll Need:
1 PicoCricket
1 Colored Light
1 Display
2 Cricket Wires
1 Cricket USB cable
1 Cricket Beamer
1 Laptop Computer
1 Partner

Directions: Follow these carefully. One wrong move and your Rock, Paper, Scissors might be a bit more rocky than you’d hoped for!

1. Gather your supplies. Start by connecting the 2 wires to the ports of the PicoCricket. Then connect the Display to one wire end and the Colored Light to the other wire.

2. Turn on your computer and open up PicoBlocks on your computer. If you’re having difficulty finding the program, just raise your hand and ask for help.

3. Plug the USB cable into a USB port on the Laptop. Plug the other end of the USB port into the Cricket Beamer.

4. Now for the programming! Take a look at the picture to the right. Study it hard and try to figure out how it works. It’s important that you and your partner look over HOW it works. If you just copy it, you’re not really learning. Together go through and figure out how it works. When you’re done figuring it out, raise your hand and a teacher will come by. Explain to him/her how the program works. If they approve your explanation, you can move on to the programming stage.
5. Reconstruct the picture on your right to complete the programming. If you need help finding a piece of the puzzle, just ask!

6. When you’ve done that, line up your PicoCricket with the Cricket Beamer, where the antennas of both Crickets are facing each other. Then, take the magic wand in the PicoBlocks program and click the very top box in your program, which says “Forever” on it.

7. That’s it! That’s all there is to it! Now you’re ready to play Rock, Paper, Scissors against the Cricket! First the light will flash purple 3 times, signifying when you should say, “Rock, Paper, Scissors...Shoot!” Then the Cricket Display will change color and the Display will change to. Rotate the Display 90 degrees so that the numbers no longer look like number, but rather like symbols. The sideways 7, or \( \forall \) signifies Rock. The sideways 2, or \( \forall \) signifies Scissors. The sideways 0, or \( \forall \) signifies paper. Try it out! It actually works really well! When everyone is ready, prepare for a competition!

Now for the competition...We’ll see who’s better, the human or the computer! Everyone in the class is on a team against the computer. Everyone form a line, and set a PicoCricket Rock, Paper, Scissors program on a desk. One teacher needs to be score keeper, keeping score for the Cricket and for all the students together. Each student gets to go a total of 3 times, but once at a time. In other words, each student will face the Cricket once and then go to the back of the line. Finally, after each person has gone 3 times, the total points for human versus computer will be added up, and we shall see who is the winner!