**Class Title:** Blue Rube Goldberg Machines

**Teacher Name:** Tiziana Buell and Joy Wright

**Class Day**: Monday

**Class Size:** 15

**Class Cost:** $72

**Ages or color group served:** Blue

**What level is this class:** Level 2

**Prerequisites:** Students should demonstrate a level of maturity as this will be a working class with equipment such as hot glue guns, wire cutters, etc.

**Graduation Requirements:** N/A

**Homework Requirements:** Some homework assignments may be given to prep for the following class.

**Class Description:**

Calling all inventors!

According to the Webster's New World Dictionary, a Rube Goldberg Machine is “a comically involved, complicated invention, laboriously contrived to perform a simple operation." Humor and a narrative are what separate a Rube Goldberg machine from a chain-reaction machine.

In this class, students will learn about and invent their own Rube Goldberg machines to make something happen. Each week, students will learn the basics of physics, studying the 6 simple machines humans use every day and create their own examples of each. Then, we will break up into teams to begin designing our own machines using the principles learned. The goal is to invent something that will not only meet machine requirements and results, but will have an awesome, hilarious story behind it.

**Week 1:**

Introduction: What is a Rube Goldberg Machine? What are simple machines?

**Week 2:**

What is a Wheel and Axle? Make your own toy car.

**Week 3:**

What is an Inclined Plane? Win a race with an inclined plane.

**Week 4:**

What is a Lever? Make your own catapult.

**Week 5:**

What is a pulley? Test your strength with a pulley.

**Week 6:**

What is a Wedge? Draw a Rube Goldberg Machine with a wedge.

**Week 7:**

What is a Screw? Moving grain with a screw conveyor.

**Week 8:**

Using what we've learned of simple machines, we will break up into groups and begin designing our Rube Goldberg machines.

**Week 9:**

Gather supplies and begin your build.

**Week 10:**

Continue building and begin testing your design.

**Week 11:**

Final testing and troubleshooting of your design.

**Week 12:**

Teams will demo their machines to the class.