# DAY 1:

Boy Scouts Presentation

Build the Robot

**Program Simple Movements** 

DAY 2:

Sumo

Do Sumo Tournament

**Destroy Sumo** 

DAY 3: Scratch <a href="http://wiki.classroom20.com/Scratch+Lesson+Plans">http://wiki.classroom20.com/Scratch+Lesson+Plans</a>

-Test/Goals

DAY 4: Scratch Video Game

-Rubric

DAY 5: More extensive programming stuff with robots using sensors

### DAY ONE

- Drivable Robot Kits w/ Instructions
- Laptops with NXTPrograms w/Chargers
- Laptop with Presentation
- Batteries/Chargers
- Masking tape
- Plastic cups (For Obstacle course)
- Extension cords
- Power strips
- People ~5 (4-6) per group
- Planned Tasks (Lego bots)
  - Stop within box
  - o Go forward, get to box, turn, go back
  - Curves
  - Follow paths
  - Obstacle course?
  - Work with sensors
  - Follow path forward then backwards without turning around
  - o "S"

### DAY TWO

- Lego Boxes
- Drivable Robot Kits w/ Instructions
- Laptops with NXTPrograms w/Chargers
- Laptop with Presentation
- Batteries/Chargers
- Masking tape
- Extension cords
- Power strips
- Sumo Ring(s?)

Brackets for tournament

# DAY THREE

- Laptop with Presentation
- Laptops with Scratch
- Batteries/Chargers
- Extension cords
- Power strips
- Intro to Scratch
- Planned Tasks DAY 3 (Scratch) Kids new to scratch
  <a href="http://wiki.classroom20.com/Scratch+Lesson+Plans">http://wiki.classroom20.com/Scratch+Lesson+Plans</a>
  - Draw name with pen
  - o Animate name
  - Make name dance
  - Have flying spaceship abduct name

### DAY FOUR

- Laptops with Scratch
- Laptop with presentation
- Batteries/Chargers
- Extension cords
- Power strips
- Scratch Video Game Rubric
  - o has to use controls from keyboard
  - o has to be able to complete/win
  - clear objective
  - o dynamic, different each time you play

# **DAY FIVE**

- Lego Boxes
- Laptop with presentation
- Drivable Robot Kits w/ Instructions
- Laptops with NXTPrograms w/Chargers
- Batteries/Chargers
- Masking tape
- Extension cords
- Power strips
- Box of Sensors
- Activity
  - Loops
  - Bumper Cars