

STOMP 2011 Curriculum
Lesley Ellis School
Mike Mogenson and Laura Nixon

Fifth Grade Class

Feb 11th:

Students will be introduced to Engineering and the Engineering Design Process. They will break up into groups of two and construct a NXT vehicle. The challenge will be to have the vehicle drive forward and stop on a black line using a variety of methods such as dead reckoning, the light sensor, sound sensor, or touch sensor. For an extension, a second black line can be placed behind the vehicle. The vehicle should not cross any lines.

Feb 18th:

We will introduce sensors and actuators. The students will add sensors to the vehicles they previously made. The students will program the vehicles to drive around a table and avoid falling off.

March 4th

Continuing with sensors, the students will split up into two teams and plan a relay race with their NXT vehicles. Each team will have to decide how the previous vehicle will trigger the next vehicle to start.

March 11th:

The students will chose a creature to emulate with their NXT kit. They must create a puppet that will react to external stimulus in different manners. Students will learn boolean operations.

March 18th:

The students will finish their automatic puppets and present them to the class.

Third and Forth Grade Class

We will tentatively reiterate the above activities for the 3rd and 4th grade class. The activities will be modified based on ability and time.

April 1st

Build a car and going the distance challenge.

April 8st:

Stay on the table.

April 15th:

Team relay race.

April 29th:

Automatic puppet challenge.

May 6th:

Puppets continued.