INTRODUCTION TO NXT
There are many different types of robots:
Think about the 4 D's - which robot does which?

DULL  DANGEROUS  DELICATE  DIRTY
You will be using the...\n\n**NXT Robot Platform**

**NXT hardware**
what you can see and touch

**NXT firmware**
instructions manufacturer gives robot

**NXT software**
instructions programmer (that's you) gives robot
Building with LEGO pieces

- axles
- bushings
- motor
- turntable
- NXT
  "brick"

...and more!

http://stemrobotics.ca
LEGO motors and sensors

Motors

Light Sensor

Ultrasonic Sensor

Sound Sensor

Touch Sensor
Draw and label each Sensor:

Sound Sensor

Ultrasonic Sensor

Label inputs and outputs for each NXT component.
Draw the Brick + motor

Label inputs and outputs for each NXT component.
LEGO NXT - the "brick"

Motor Output Ports

LCD Display Screen

Sensor Input Ports

USB Socket

Speaker

Navigation Buttons
  LEFT
  RIGHT
  YES
  NO

Battery Charger Socket
LEGO - not just a toy...

Rubik's Cube Solver
http://www.youtube.com/watch?v=5fAn5A0HbhU&feature=player_embedded

Sudoku Solver
http://www.youtube.com/watch?v=Mp8Y2yjV4fU

Portrayer
http://www.youtube.com/watch?v=_ogQuLdEcBY&feature=player_embedded

Medical Research
http://www.youtube.com/watch?v=WBEtUJmp05w&feature=youtu.be