**PLTW Gateway to Technology: Design and Modeling**

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Class Website: [www.missmeller.com](http://www.missmeller.com)

**Course Description**

This is an introductory course for engineering. As part of this course you will be exploring technology in today’s society. In addition, you will be designing and building projects. This is a unique learning experience that will differ from anything you have done before. This course is part of the Project Lead the Way (PLTW) curriculum and students will have a chance to take more PLTW engineering courses in high school.

**Students will need the master the following skills to be successful in this class.**

* Measurement:
  + I can make correct dimensions on the computer software.
* Drawing and Sketching:
  + I can properly draw simple objects in Isometric form.
  + I can draw objects in orthographic form.
  + I can draw one of my *Inventor* projects in isometric form.
* Modeling on *Inventor*
  + I understand the basic functions of the software *Inventor*.
    - For example: Tool bar, drawing functions, using constraints, setting dimensions
  + I can build a dice following the blue print and using correct measurements.
  + I can make a bracket using the correct dimensions and functions in the blue print.
  + I can make *Lego* pieces and properly constrain them together.
  + I can construct a chessboard using proper dimensions and constraints.
  + I can design chess pieces that fit on the chessboard with similar features of real pieces.

**For students to get an A in this class they need to master all 5 projects. They will receive a B for mastery of 4 projects and a C for mastery of 3 projects.**

**Materials needed Expectations**

* Come to class prepared and on time.
* Show up with a I CAN attitude
* Complete assigned tasks
* Make up work when class is missed
* Respect the computers and others
* If I am not happy with my assessment grade I will redo my work.
* 1/2 inch binder or folder
* Planner (Everyday!)
* 12-inch ruler
* Pencils with erasers

Please sign to indicate that you understand what the expectations are for this class.

Student’s name Date

Parent/Guardian’s name Date

**Turn this handout in by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**