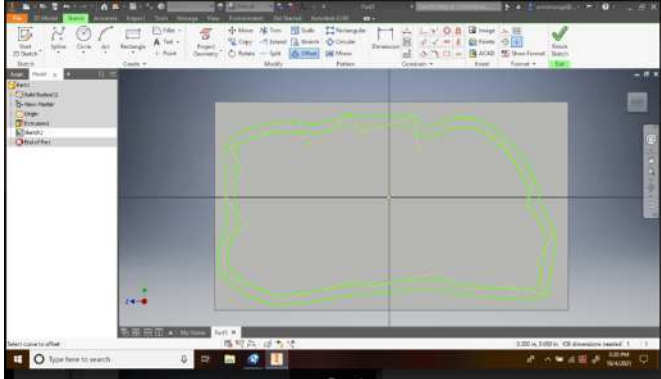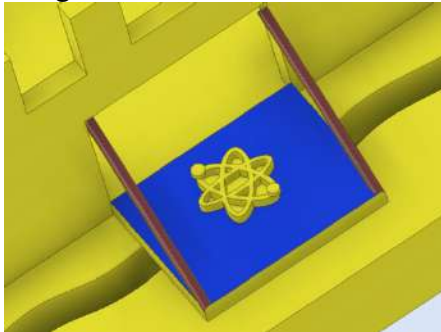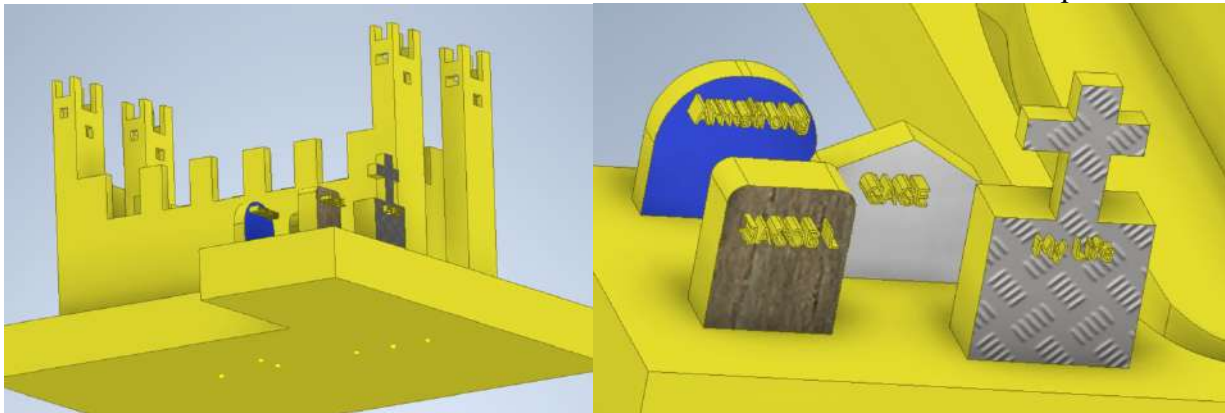# Castle Project Design Brief

1. Open Inventor and a Standard.IPT
2. Click on Sketch and draw a rectangle (any size). Finish sketch and extrude.
3. Click on sketch and click the rectangle. Use the **spline** tool to draw a "moat" around the edge of your rectangle. Click on **offset** and make a second line so that you can extrude it.
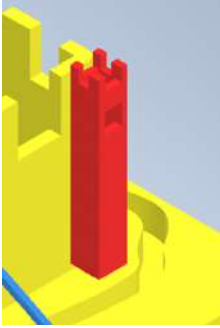

4. Click finish sketch and extrude cut your moat (not all the way through!). To extrude just the moat, you need to zoom very close to the spline.
5. Click on sketch and click the rectangle. Draw a rectangle inside the moat. Offset it to make walls.
6. Finish sketch and extrude the rectangle to make castle walls.
7. Click on sketch and click on one of your walls. Draw a rectangle on the wall and use **rectangle pattern** to make several of them along the wall and cut them out to look like a castle wall. Repeat for each wall.
8. Cut a hole in one of your walls for your doorway.
9. Make a drawbridge that goes across your mote. Extrude it and then sketch on it and make a drawing (whatever you choose). This drawing represents your kingdom. Add ropes that are connected to the side of your drawbridge. Click on the side of the bridge and sketch. Using lines, draw a rectangle from the bridge to the wall of the castle. Finish sketch, then extrude. Repeat on the other side of the draw bridge.
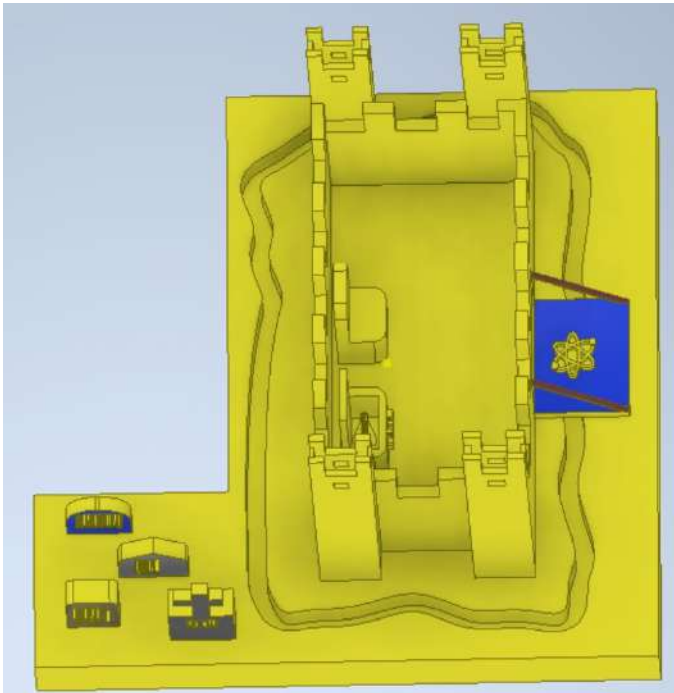

10. Click on the outside of the moat and sketch. Draw a rectangle. Finish sketch and extrude it. Click on the extruded part and draw a rectangle. Finish sketch and extrude it to make it into a tombstone. Click on the side of the tombstone, sketch, and add text. Finish sketch and extrude the text. Make 4 different shapes of tombstones. All must have extruded text on them and all must be a different shape.

11. Make towers (that are hollow) with windows cut out on each corner of your castle.

12. Make a throne and a treasure chest (with details on each one) inside the castle walls. Put whatever you love inside your treasure chest.

GRADES:

Castle with Moat and cut outs on walls, cut out for door	25 points
Turrets (towers) with windows (hollowed out with windows)	15 points
Drawbridge (with details-a design for your castle) and rope on each side	15 points
Cemetery (with 4 tombstones -all different shapes, and text on each)	15 points
Furniture inside the castle	
Throne with some detail	15 points
Treasure chest with something inside	15 points

Total   **100 points**