

Mini Maze – Design & Print!

Grade Sheet
(75 pts.)

1. Design & Draw to Scale on Draft Paper (25 pts.)

Partners will discuss the layout of their “Mini Maze” and then begin the process of drawing it on a sheet of drafting paper that will be supplied to you (or you can download from this site). **You Must Use A Ruler!** There are a few specifications that all “Mini Mazes” must adhere to.

Specifications:

- Base: H: 1/4" x W: 3" x L: 3" (5pts.)
- Walls: H: 1/4" x W: 1/8" (Interior walls must be at least 1/4" away from all walls.) (5pts.)
 - A Block Wall must be placed on each of the exterior walls except the wall connected to “Final”. So 3 total Block Walls. (5pts.)
- Holes: H: 3/8" x W: 3/8" (6 holes - must be at least 1/4" away from all interior walls. Can touch exterior walls.) (5pts.)
- Add an “S” at the Start and an “F” at the Finish. (5pts.)

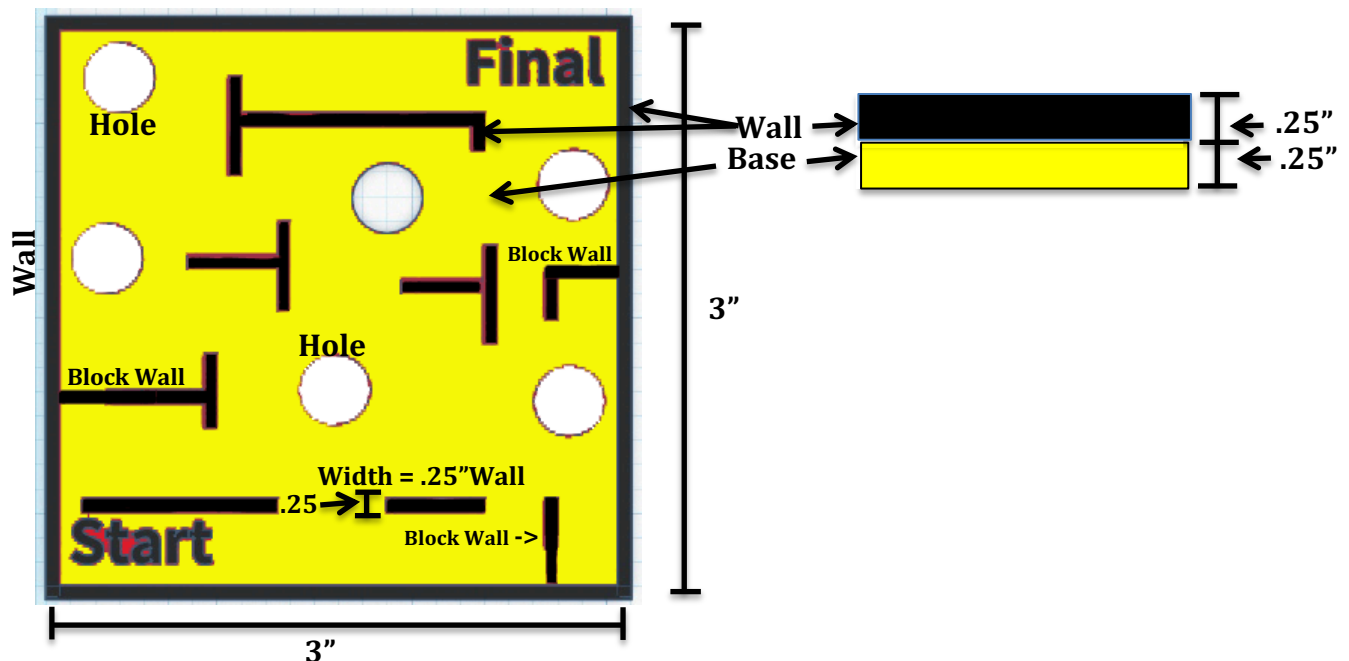
Note:

1/4 " = .25"

1/8" = .125"

3/8" = .375"

When the students complete their Mini Maze drawing, they must show it to the instructor prior to building it in Tinkercad.



2. Build - CAD (Computer Aided Design) – Tinkercad (50pts.)

(Students must complete their Mini Maze drawing and show it to the instructor prior to building it in Tinkercad.)

Students will build their Mini Maze using Tinkercad. When they are done, they will submit it to the instructor for review. The instructor will then export and print the student’s Mini Maze on a 3d Printer. Student gets full credit when the Mini Maze prints correctly.

Remember: Group the Base, Walls & Holes so that the actual holes will appear!

Have Fun!

