

name _____ date _____

Do Now: Tiny House Design

Scenario:

You just graduated from architecture school and you are anxious for your first job. A young family of three with a baby and a dog want you to design their dream tiny home. In this exercise, you will create the perfect living space for them. Your job is to imagine, design, build and decorate the perfect tiny home for this young family.

1. Describe two design features you would include in a tiny house to meet the needs of this family.

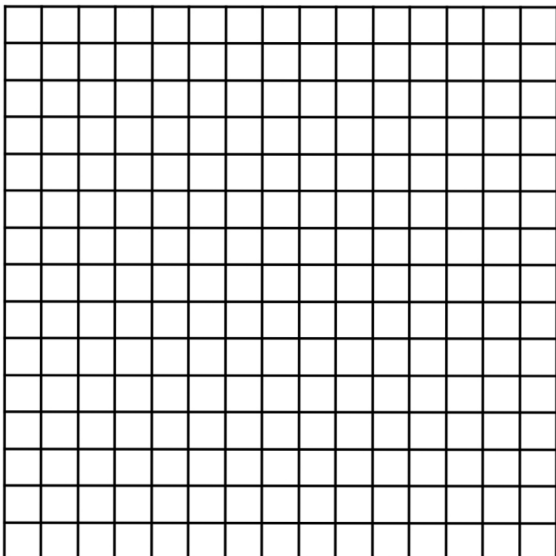
Tiny House Requirements:

The area of the **footprint** of this home must be no greater than 150 square feet and may only be 12 feet tall. You can, however, make use of the vertical space to create a loft or even a roof patio.

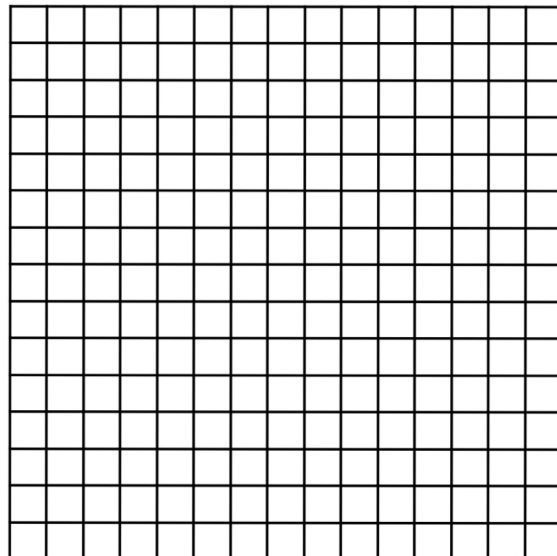
**Keep in mind that many adults are more than 6 feet tall so a full second story is not an option

2. Sketch and label the dimensions of a floor that meets the 150 sq feet area "rule".

floor plan



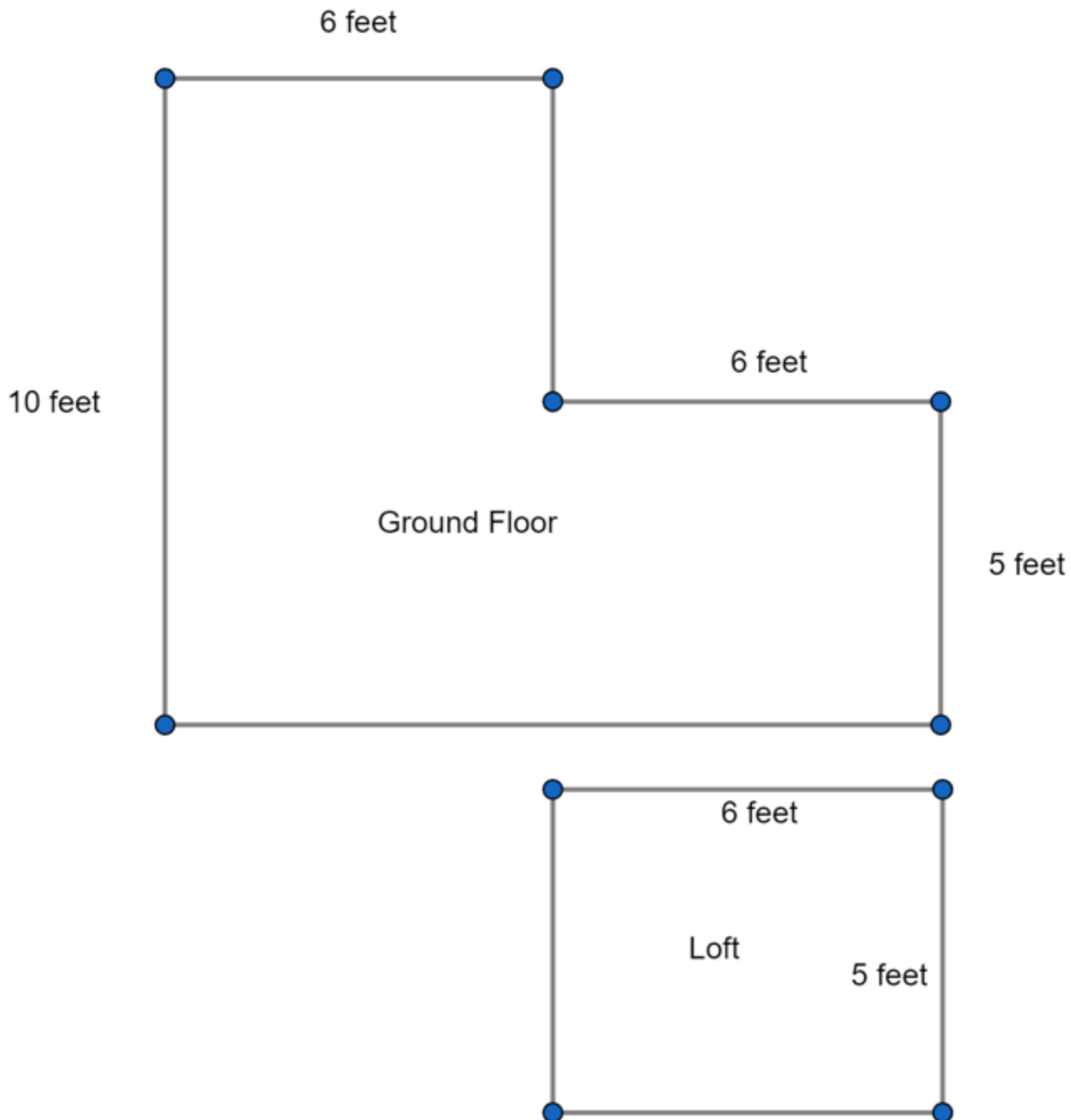
loft/rooftop



name _____ date _____

3. Irregular House Floor Plan

Does this floor plan meet the requirements?

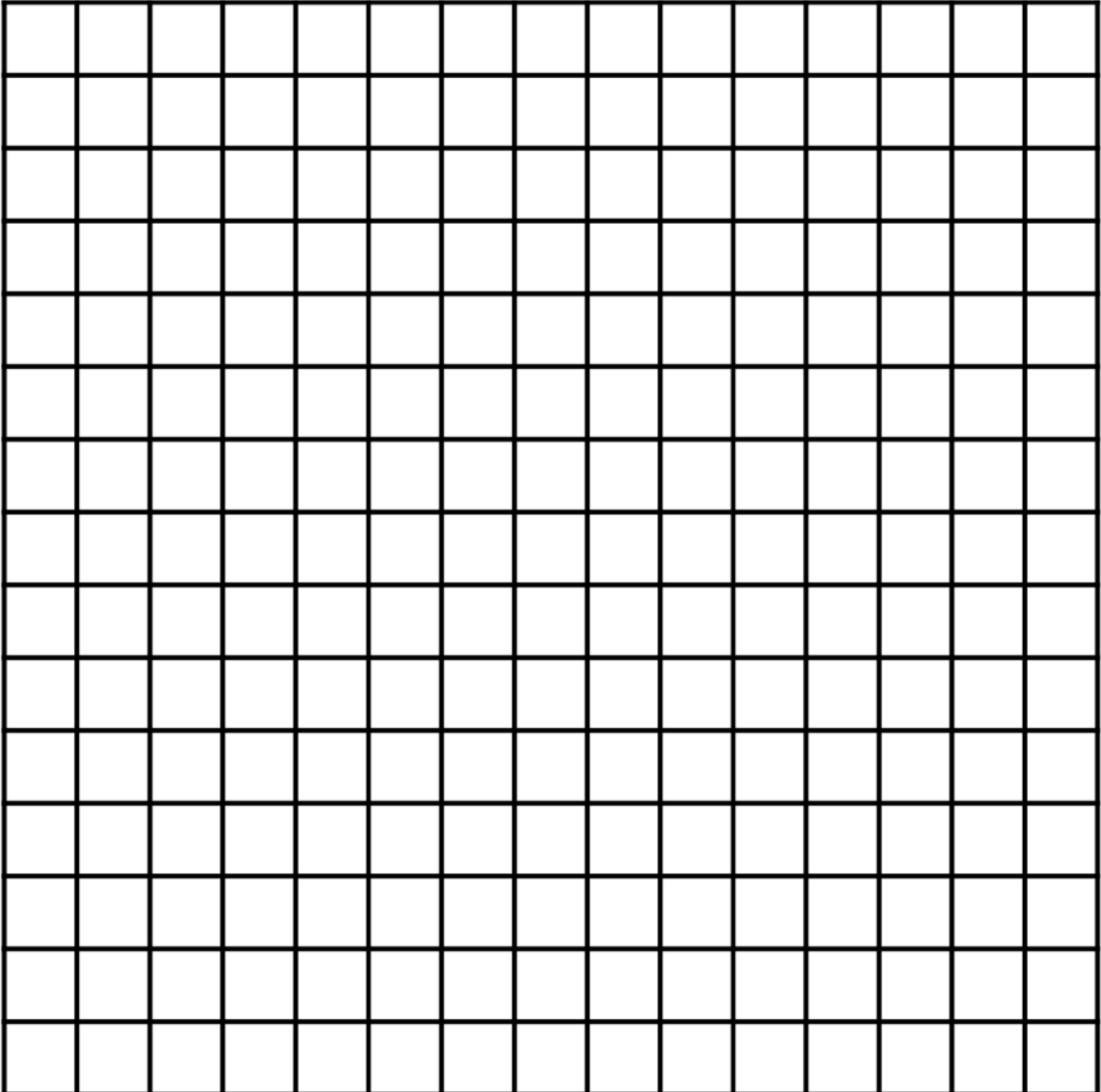


The Tiny House Challenge

Grades 3-6

name _____ date _____

Tiny House Plan Draft

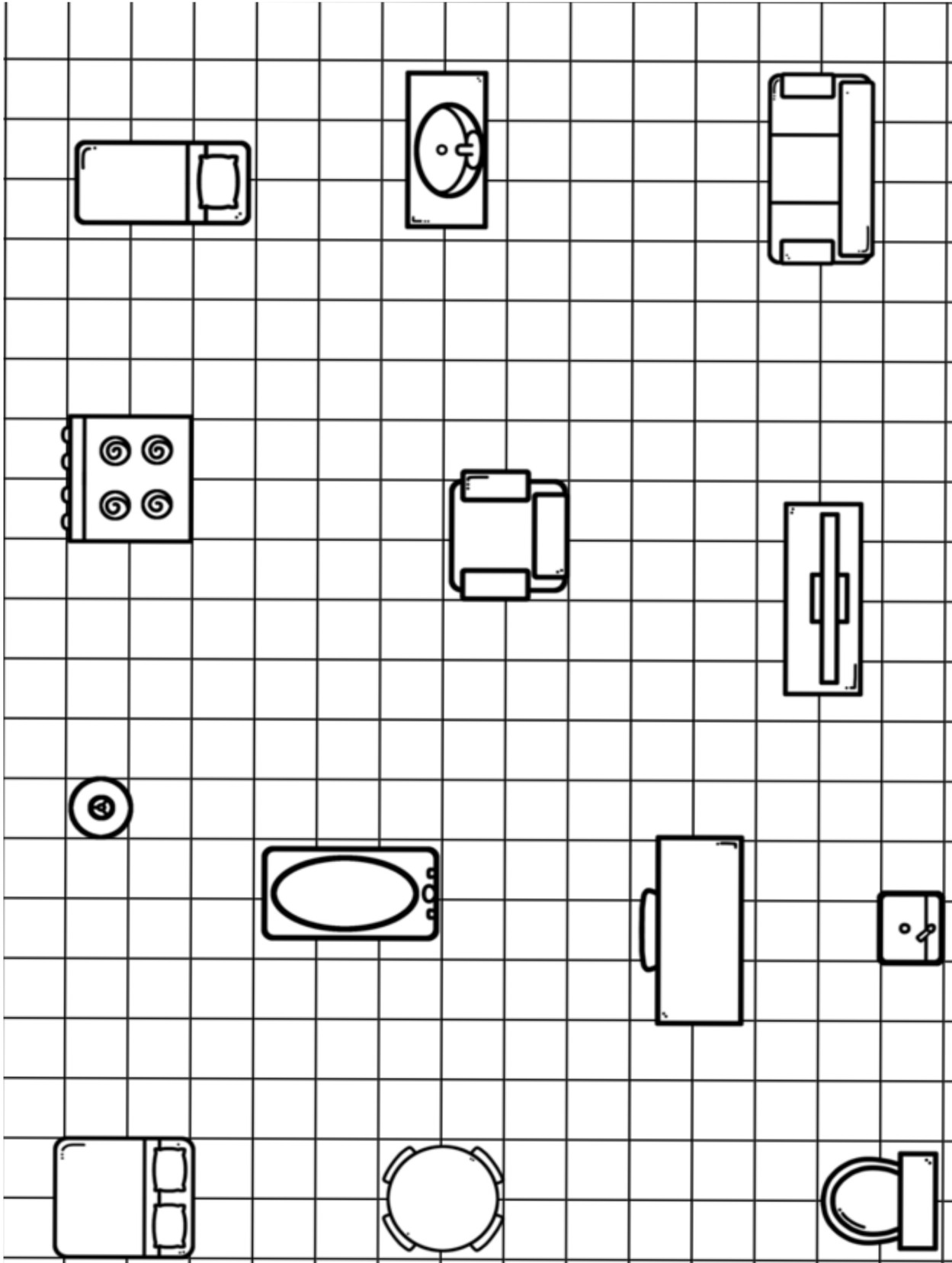


The Tiny House Challenge

Grades 3-6

name _____ date _____

furniture sizes to scale

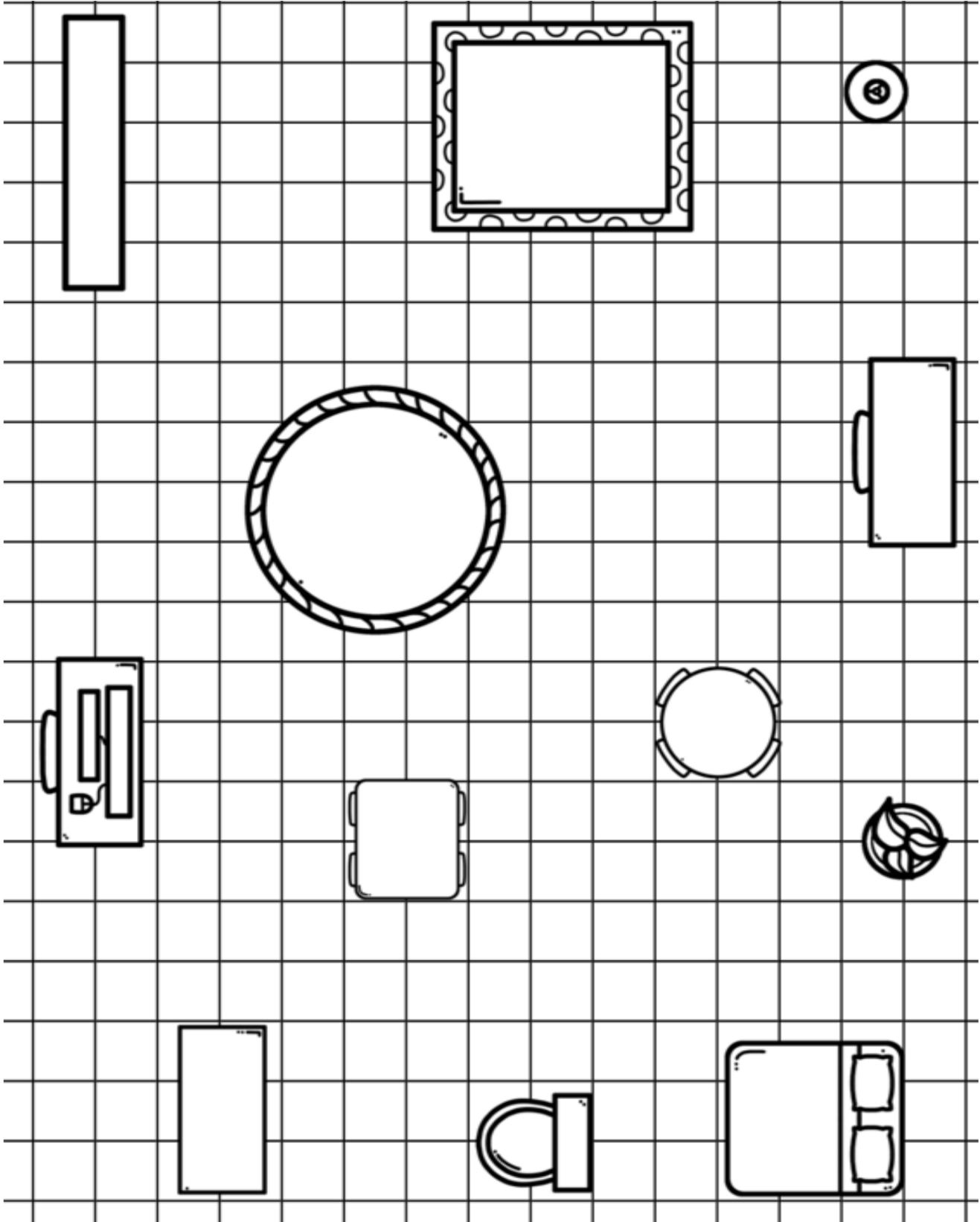


The Tiny House Challenge

Grades 3-6

name _____ date _____

furniture sizes to scale



name _____ date _____

Standard:

ETS 1.2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem

MP 1: Make sense of problems and persevere in solving them

3 MD 6: Understand concepts of area and relate area to multiplication and addition. Measure areas by counting unit squares.

4 MD 3: Solve problems involving measurement and measurements from a larger unit to a smaller unit. Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

5 MD 4: Understand concepts of volume and relate volume to multiplication and addition

Objective:

I know how to design a tiny house because I can create a floor plan.

Tiny House Footprint and Design Worksheet

1. The area of my tiny house is _____. I determined this by:

2. Describe 5 design choices you had for your tiny house. Explain why they will be important for your family of three.

Choice 1:

Choice 2:

Choice 3:

Choice 4:

Choice 5:

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final draft

