

## THE APARTMENT Teaching Guidelines

**Subject:** Mathematics

**Topics:** Measurement (area)

**Grades:** 3-6

**Concepts:**

- Area
- Square unit

**Knowledge and Skills:**

- Can determine an area in square units by measurement
- Can determine the area of a rectangle by computation

**Materials** (for each team of two students):

- One apartment “floor plan” (handout)
- One set of “furniture” (see template sheet)
- One marker

**Procedure:**

Begin with a discussion of times when you and the students have had to move your residence or rearrange your rooms. Point out that one of the things you have to think about at such times is the amount of area you have to work with.

Tell students that you want to talk about area, and you want them to take a few minutes and write down things that they know about area. Give students approximately 5 minutes to do so, and have them tell you what they wrote down.

In this discussion, be sure to cover the concept of “area”, the concept of “square unit”, and the relationship of area units to length units. Discuss also some ways of determining area (*count square units, use a formula for the shape involved if you have one*).

Once you know that students understand the concept of area, and how it is measured or determined, introduce the activity of designing their own apartments, and distribute the apartment floor plans and furniture packets to teams of two students.

The rules of the activity are as follows:

- Each team is to divide the floor plan into four rooms: kitchen, bathroom, living room and bedroom.
- Each room must be designed to hold all of its furniture.
- Once the students are certain where they want the walls, they should draw them in with a marker.
- After the apartment is designed, each team must find the area of each of the rooms they have designed and the area of the entire apartment.

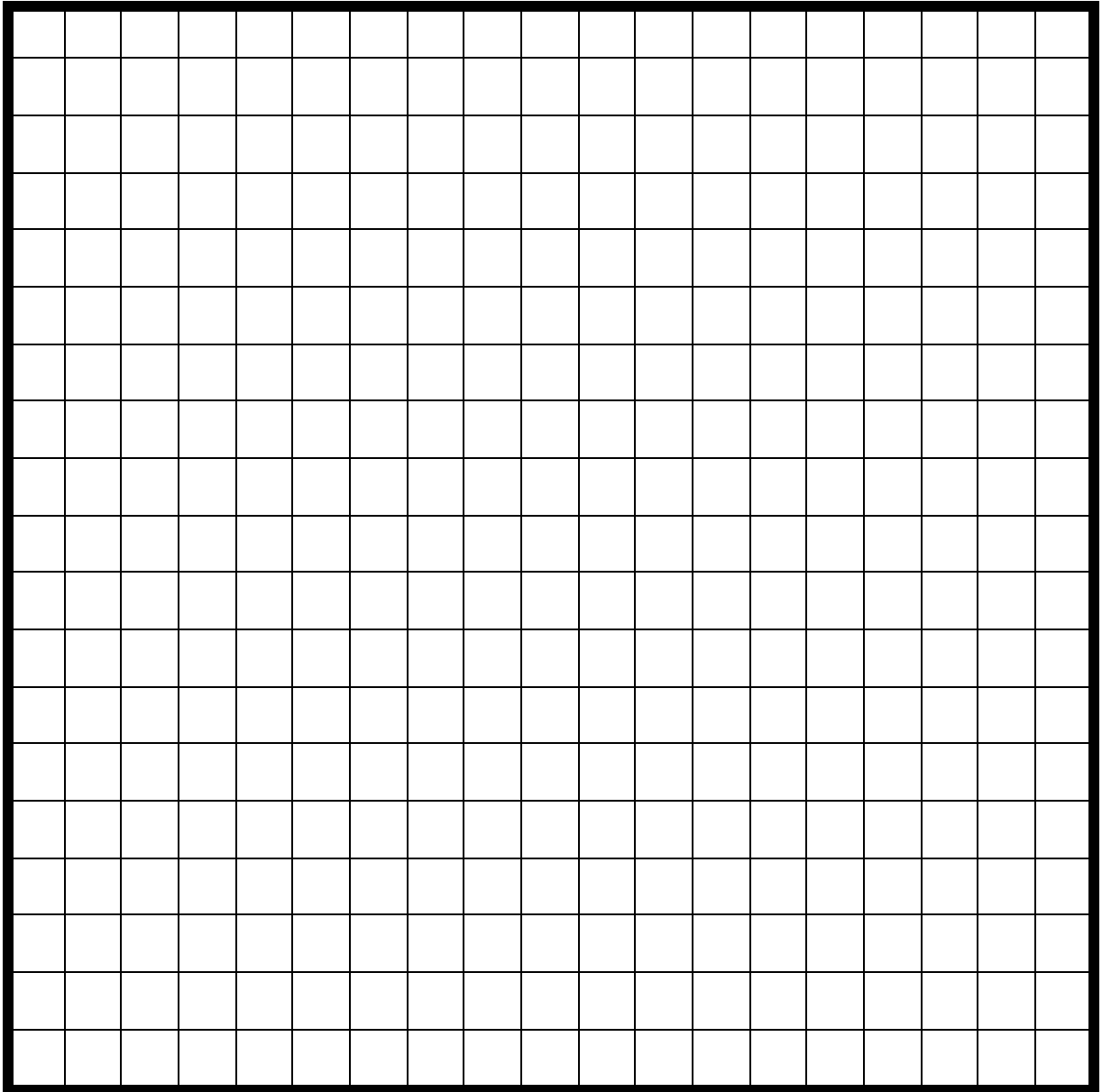
Make sure that students know what is expected of them, and then have them begin the project.


They should be given 10 – 15 minutes to complete the work. Circulate as they are doing so and assist as needed.

When all teams have completed their apartments, have them present their floor plans to the class.

FLOOR PLAN

Student's Name: \_\_\_\_\_



 = 1 square foot

- Area of Kitchen = \_\_\_\_\_
- Area of Bathroom = \_\_\_\_\_
- Area of Living Room = \_\_\_\_\_
- Area of Bedroom = \_\_\_\_\_
- Area of Apartment = \_\_\_\_\_

## Furniture Templates

