## Course 1

## Quarter 2 - Math Project

Floor Plan
Date Assigned: $\qquad$ Due Date:

Objective: Students will create a floor plan for an apartment that is 1300 square feet in order to determine the area of a composite figure.

## Materials:

| Poster board | Grid paper | Ruler |
| :--- | :--- | :--- |
| Color paper or construction paper | Scissors | Tape, glue or paste |
| Markers | Color pencils | Pencils |
| Math book/Notes | Plain white paper |  |

## Task

1. Create a floor plan
A) On the white paper complete a rough draft of how you want your apartment to look. The plan must include at least one bedroom, one bathroom, one closet, and kitchen.
B) The shapes below must be incorporated into the floor plan.
a. Rectangles
b. Squares
c. Triangles
d. Parallelograms
C) Be sure that each room of the apartment is labeled with the names of rooms and hall ways along with their dimensions.
2. Transferring information to the poster board
A) Complete a rough draft on grid paper for teacher approval. Once it is approved, transfer that information to the poster board.
3. Summary
A) White a summary that explains the floor plan of your apartment. The explanation must include the dimensions of each room and hallway represented in the apartment along with the areas of each room and how they were calculated. Be sure that the total 1300 total square feet is represented in the summary. Also, discuss how decisions were made regarding room placement and square footage of the rooms.

Quarter 2 - Math Project - Floor Plan - 6th $^{\text {th }}$ Grade TEACHER PLANNING AND PACING CALENDAR

| Element | Due Dates | Possible Points |
| :--- | :---: | :---: |
| Project Introduced | $1-12-09$ | 0 |
| Signed Parent Letter | $1-15-09$ | 10 |
| Rough Draft of floor plan | $1-21-09$ | 10 |
| Mathematical Calculations | $1-23-09$ | 10 |
| Foor plan poster board | $1-26-09$ | 10 |
| Summary | $1-26-09$ | 10 |
| Overall neatness | $1-26-09$ | 10 |
| Total |  | 60 |

## Notes:

Quarter 2 - Math Project - Floor Plan - 6th Grade STUDENT PLANNING AND PACING SHEET
Name:

| Element | Due Dates | Completed <br> $(\sqrt{ })$ |
| :--- | :---: | :---: |
| Project introduced | $1-12-09$ |  |
| Signed parent letter | $1-15-09$ |  |
| Rough draft of floor plan | $1-21-09$ |  |
| Mathematical calculations | $1-23-09$ |  |
| Aoor plan poster board | $1-26-09$ |  |
| Summary | $1-26-09$ |  |
| Overall neatness | $1-26-09$ |  |

## Notes:

|  | POINTS AND CRITERIA |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 10 | 8 | 7 | 6 |
| Floor Plan | Foor plan contains all required information: bedroom, closet, bathroom, and kitchen. Rooms are labeled appropriately along with the dimensions. All required shapes are included in the plan. | Foor plan contains all of the rooms and shapes. It may be missing some labels. | The floor plan may not include all of the required rooms or shapes. It may be missing some labels. | The floor plan does not include the required shapes, shapes, and labels. |
| Mathematical Calculations | All individual room areas are calculated correctly. The total area of 1300 square feet is represented. | Most of the room calculations are accurate. The process is correct, but there may be a calculation error. | Some of the room calculations are inaccurate. | Few of the calculations are correct due to incorrect processes (i.e. using incorrect area formulas) |
| Summary | An explanation of how the area of each room was determined and includes the calculation of the total area of the apartment. It also includes a discussion of the room placement and how the square footage of the rooms was determined. | An explanation of how the area of most rooms was determined and includes the calculation of the total area of the apartment. It also includes a discussion of the room placement and how the square footage of the rooms was determined. | An explanation of how the area of some rooms was determined and includes the calculation of the total area of the apartment. It may or may not includes a discussion of the room placement or how the square footage of the rooms was determined. | An explanation of how the area of few rooms was determined may not include the calculation of the total area of the apartment. It does not include a discussion of the room placement or how the square footage of the rooms was determined. |
| Overall Neatness | Project is neat. | Project has one to two areas that are sloppy. | Project has three to four areas that are sloppy. | Project is unorganized and sloppy. |

Name: $\qquad$ Score: $\qquad$

|  | POINTS AND CRITERIA |  |  |  | Points |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10 | 8 | 7 | 6 |  |
| Parent Letter | Parent Letter was signed and returned. | $\xrightarrow{+}$ |  | Parent Letter was NOT returned. |  |
| Rough draft | Rough draft was submitted for teacher approval. |  |  | Rough draft was NOT submitted for approval. |  |
| Floor plan | Floor plan contains all required information: bedroom, closet, bathroom, and kitchen. Rooms are labeled appropriately along with the dimensions. All required shapes are included in the plan. | Foor plan contains all of the rooms and shapes. It may be missing some labels. | The floor plan may not include all of the required rooms or shapes. It may be missing some labels. | The floor plan does not include the required shapes, shapes, and labels. |  |
| Mathematical calculations | All individual room areas are calculated correctly. The total area of 1300 square feet is represented. | Most of the room calculations are accurate. The process is correct, but there may be a calculation error. | Some of the room calculations are inaccurate. | Few of the calculations are correct due to incorrect processes (i.e., using incorrect area formulas). |  |
| Summary | An explanation of how the area of each room was determined and includes the calculation of the total area of the apartment. It also includes a discussion of the room placement and how the square footage of the rooms was determined. | An explanation of how the area of most rooms was determined and includes the calculation of the total area of the apartment. It also includes a discussion of the room placement and how the square footage of the rooms was determined. | An explanation of how the area of some rooms was determined and includes the calculation of the total area of the apartment. It may or may not includes a discussion of the room placement or how the square footage of the rooms was determined. | An explanation of how the area of few rooms was determined may not include the calculation of the total area of the apartment. It does not include a discussion of the room placement or how the square footage of the rooms was determined. |  |
| Overall Neatness | Project is neat. | Project has 1-2 areas that are sloppy. | Project has 3-4 areas that are sloppy. | Project is unorganized and sloppy. |  |
| TOTAL |  |  |  |  |  |
| Percent Score |  |  |  |  |  |
| TOTAL SCORE |  |  |  |  |  |

Quarter 2-Math Project - Floor Plan - $\mathbf{6 H}^{\boldsymbol{H}}$ Grade
SAMPLE FLOOR PLAN


Source:
http://www.themajestic.com/floorpln.htm

