

Final Task: Game Designer

You are a game designer, and you have been given the task of creating a math game that can be used as a tool for teachers to determine how much students have learned throughout the school year. You have been given specific directions about how many and what type of questions the game must contain, but the design can be all yours.

Your game must be made for at least three to four people to play at one time. Work with your group to decide who will be responsible for writing the questions and who will be responsible for making the game. Use the color codes below for each problem to easily identify each category. You will be given time during class to work on the game design and the math problems. Use your time wisely and stay focused.

Questions Requirements: **35 math problems** categorized in the following manner.

Problems that Include:	Percent of Problems:	Required Number of Problems:	Color Code:	Standards:
Geometry: Transformations, Congruence and Similarity	12%		Green	MCC8.G.1; G.2; G.3; G.4; G.5
Exponents	15%		Blue	MCC8.EE.1; EE.2; EE.3; EE.4; EE.7a; EE.7b; NS.1; NS.2
Geometric Applications	10%		Yellow	MCC8.G.6; G.7; G.8; G.9; EE.2
Functions	30%		Red	MCC8.F.1; F.2; EE.5; EE.6; F.3
Data and Statistics	10%		Orange	MCC8.F.4; F.5; SP.1; SP.2; SP.3; SP.4
Systems of Equations	20%		Purple	MCC8.EE.8a; EE.8b; EE.8c

*->Keep a written record of the process as you develop the game. The written record will be turned in. This written record should include:

- a) a rough draft of game design (sketch on paper),
- b) calculations used to determine required number of problems for each category,
- c) copy of ALL questions with answers,
- d) game directions (neatly and legibly handwritten or typed),
- e) and the self-checklist (the back of this paper completed and signed).

GAME CHECKLIST

NAME _____

DUE AT THE START OF CLASS – _____!**Students will choose to work with a partner, group of three, or group of four.**

_____ Clear directions: How to Play the Game (neatly and legibly handwritten)

_____ 35 problem / question cards:

Geometry: Transformations, Congruence, Similarity 12%= _____

Exponents 15%= _____

Geometric Applications 10%= _____

Functions 30%= _____

Data and Statistics 10%= _____

Systems of Equations 20%= _____

_____ Answer Key

_____ Each category must be color coded

_____ Board game is for 3 to 4 people to play

_____ All game pieces must be in a baggie or container

****Timeline of Items to turn in:**

_____ Calculations used to determine required number of problems [date _____]

_____ Copy of handwritten or typed game directions [date _____]

_____ Copy of problems with answers [date _____]

_____ Rough draft of game (sketch on paper) [date _____]

_____ Self-checklist (this paper completed and signed) [date _____]

***I understand all the requirements and expectations of this assignment. I will successfully complete this project task with my best effort.**

Student Signature _____

Parent Signature _____

Final Task Rubric: Game Designer

	Beginning Designer	Practicing Designer	Expert Designer
Game Directions	Directions are included but limited in details or may or may not be clear. Directions are not neatly handwritten. 0-5 points	Directions are included but may be limited in details or may or may not be clear. Directions are neatly handwritten. 5-10 points	Directions are included and provide clear instructions on how to play the game. Directions are entirely typed. 10-20 points
Required Questions and Problems	The necessary required (35) number of questions and problems are not included in the game to match each category [see checklist]. An answer key is not included. 0-20 points	The necessary required (35) number of questions and problems are included in the game, but may not match each category [see checklist]. An answer key is included. 20-40 points	The necessary required (35) number of questions and problems are included in the game and match each category [see checklist]. An answer key is included. 40-50 points
Creativity, Neatness, and Originality	The game is not original in design or is not legible or colorful. The color codes for each category may or may not be correct. Game pieces are not included. 0-10 points	The game has elements of original design but may not be colorful. The color codes for each category may or may not be correct. Game pieces are included. 10-15 points	The game is original in design and the color codes for each category are correct. The game board is legible and colorful. Game pieces are included. 15-20 points
Effort and Time Management	Student showed little to no effort in completing assignment. Class time was not used appropriately. 0-10 points	Student showed little effort in completing assignment. Class time was used appropriately. 10-15 points	Student showed much effort in completing assignment. Class time was used appropriately. 15-20 points
Punctuality	Assignment was not turned-in or was turned-in more than 2 days late. 0-3 points	Assignment was turned-in 1 day late. 7 points	Assignment was turned-in on time. 10 points

Student Overall Final Grade: _____ / 120

Standards Based Grading:	115-120 points = 4 100-114 points = 3 84-99 points = 2 0-83 points = 1	Traditional Grading:	108-120 points = A 96-107 points = B 84-95 points = C 72-83 points = D 0-71 points = F
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GAME DESIGNER GRADE SHEET [alternate]

GROUP MEMBERS _____

FINAL GRADE _____ / 120

PLAYABILITY (10 points)	YES	NO	SOME	COMMENTS
Are game <u>directions/instructions</u> included in the game?	2	0	1	
Are <u>directions/instructions</u> easy to understand?	2	0	1	
Are <u>game pieces</u> and/or necessary accessories included in game?	2	0	1	
Is game created for at least <u>3-4 people</u> to play?	2	1		
Is game <u>fun</u> ? (This is based on student questioning.)	2	1		

GAME DESIGN REQUIREMENTS (30 points)	YES	NO	SOME	COMMENTS
Is game <u>appealing</u> to the eye? Is game <u>neat</u> in appearance?	10	5	8	
Was <u>effort</u> put into creating the game? (creativity, colorful, original)	10	5	8	
Is game board and/or pieces <u>legible</u> and understandable?	10	5	8	

GAME LOGISTICS {PROBLEMS} (70 points)	YES	NO	SOME	COMMENTS
Is <u>appropriate number of questions</u> included in game as outlined on checklist?	55	30	40	
Is an <u>answer key</u> included in game?	10	2	7	
Is each different category of questions <u>color coded</u> ?	5	1	3	

PUNCTUALITY (10 points)	ON TIME	1 DAY LATE	2+ DAYS LATE	COMMENTS
Game turned in....	10	7	3	

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