End of Year STEM Challenge



Make

Pizza Box

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Teacher Preparation

- I clean pizza box per group
- 5 copies of template per group
- I self-assessment rubric per student
- I copy per group:
 - grade level standards
 - feedback sheet
 - rules & answer key sheet
- paint or contact paper to cover box.
- Plan groups carefully. Divide skills:
 - artistic
 - organized
 - leader
 - gifted/talented
 - behavior
- Monitor, question, guide and PRAISE!

Challenge

- You must create a fun game board using the inside of a pizza box.
- The box must not loose its shape to store with other games.
- The game must include at least 20 questions based on the _____ standard your group chose.
- The game must have the directions and answer key.
- Game must accommodate up to 6 players.

Name:

Game Name:

Self - Assessment Rubric

5	New, Creative and Thoughtful Idea and plan	Clean, Neat, Precise Design	Followed all challenge guidelines	All 20 questions matching your standard
3	Thoughtful planning may not be original	Design is clear and mostly neat and organized	Followed most of the challenge guidelines	Almost all 20 questions meet standard
1	Idea copied from internet or actual game	Sloppy design, looks messy	at least two guidelines were met	At least 10 questions meet standard

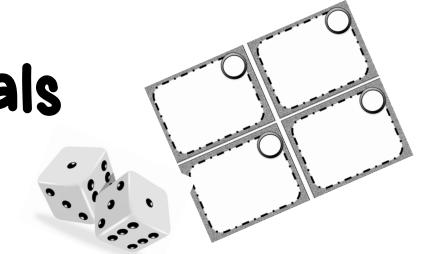
Describe your role in the team and creation of the game. Give many details to support reasons why you deserve a good grade. (5pts):

Ask

- Your table group has been given a unit we studied in class this year. Each unit is filled with standards you had to master this year.
- Which standard or standards would be best to make a game?
- Will it be interesting or helpful for next year's ____ graders?



Materials

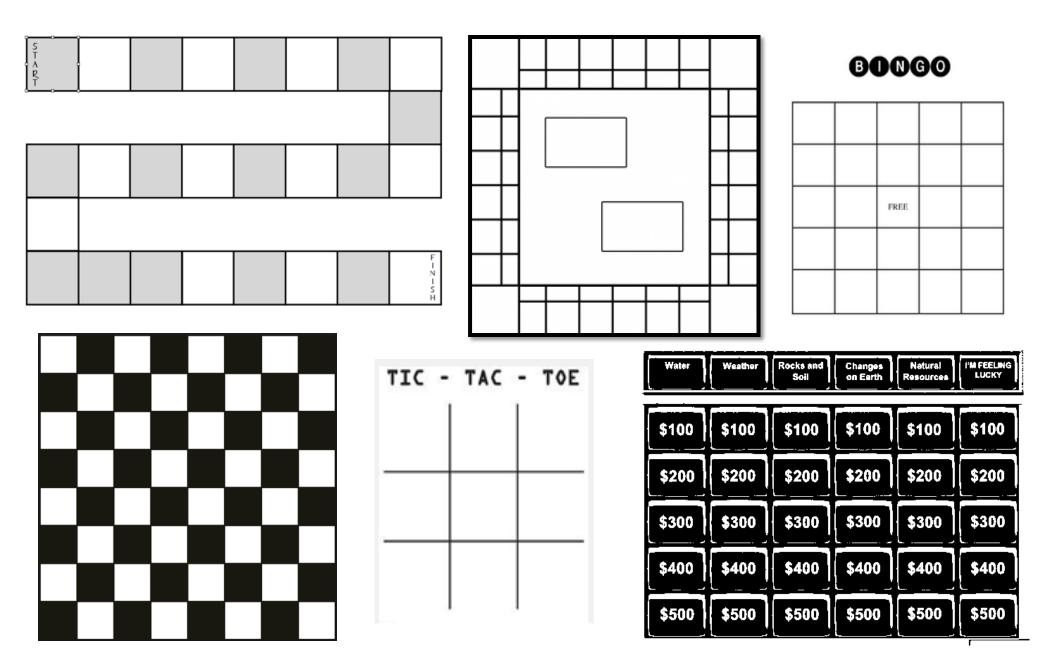


- pizza box
- five (5) flashcard template sheets
- I die
- markers
- text book, journal, past assessments
- contact paper for game board
- create or collect your player pieces.

Research and Imagine

- Once your group decides on a standard or set of standards, think about a theme for your board design.
- Research game boards to get ideas for your game. You are not limited to game boards. Your game can be a card game, hands-on game, or memory style game. The limits are your imagination.
- Write down and/or sketch all the design ideas found during your research in your journal.

Basic Game Board Ideas





Plan

- In your journals, plan all parts of your design.
 - color
 - theme, art
 - game pieces
 - board style, design
 - player rules/ how-to-play guide

Create

 All members must participate. Make sure each member has a job. Record each member of the team in your journal with their job assignment.

> question creation team board creation team box decoration/design team

Play and Improve

- Another teams will play your game and give feedback.
- Include the feedback in your journal.
- Decide as a team using the feedback, How will you improve your game?
- Write in your journal how your team will improve the game.
- Make the improvements and submit game with journals and self assessment to the teacher for a grade.

Game Feedback

How would you rate the following? I= poor, 2= fair, 3= good, 4= amazing

- Cover Design (Artwork and Lettering) =
- Game Design (Organization and Idea) =
- Questions (Made sense, easy to read) =
- Fun or Interesting =

Changes you would suggest:

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I.
2.
3.
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Game Rules

Answer Key

		•
Ι.	11.	2 I.
2.	12.	22.
3.	13.	23.
4.	14.	24.
5.	15.	25.
6.	16.	26.
7.	17.	27.
8.	18.	28.
q .	19.	29.
10.	20.	30.

