



Create a Storyboard - Project Checklist

TASK: Replay a game that you have already mastered and think about where students may get stuck in solving this puzzle.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Draw pictures illustrating step-by-step how you solve this puzzle. Only 1 puzzle per level needed. Use as many storyboards as needed.
- Include a description of what is being represented under each picture.
- Identify where you think students will get stuck and why.
- Include at least 3 questions teachers can ask students who are stuck. The questions should not tell how to get the answer, but make them think about the math in the game. *Example:* Think about where students might get stuck in the game. What is hard? Is there anything in this game that is particularly confusing?
- Include a summary of the math in the game. Please include appropriate vocabulary.

SCORE	MATHEMATICS SUMMARY	HELPING STUCK STUDENTS	STORYBOARD
2	Description demonstrates understanding of the math concepts.	Identified where students would get stuck and included 3 questions for teachers to ask.	Storyboard is neat and includes illustrations showing step-by-step how the puzzle was solved for each level in the game.
1	Description shows some understanding of the math concepts.	Identification of where students would get stuck is missing or only includes 1-2 questions .	Storyboard is missing illustrations from some of the puzzles in the game.
0	Description is missing or does not show understanding of the math concepts.	Identification of where students would get stuck is missing and does not include 3 questions for teachers to ask.	Storyboard only includes 1 level in the game.

_____ Points (6)



Game Storyboard

NAME: _____ OBJECTIVE: _____ GAME: _____ LEVEL: _____



Game Storyboard

NAME: _____ OBJECTIVE: _____ GAME: _____ LEVEL: _____

QUESTIONS:

Describe where you think a student might get stuck in this puzzle and why.

Questions a teacher could ask a student who is stuck are:

- 1.
- 2.
- 3.

SUMMARIZE THE MATH IN THE GAME:

This game is about _____



Create New Levels - Project Checklist

TASK: Create two new levels for a game.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Describe the game.
- Play through each level.
- Identify how each level is different than the one before it.
- Describe the math that occurs in that level and give an example.
- Explain what the 0 level will look like.
- Explain what the new higher level will look like. *Example:* If it has 4 levels, what would level 5 look like?

SCORE	GAME DESCRIPTION	LEVEL DESCRIPTION	NEW LEVELS
2	Description of the game is clear.	Description of the math in each level is accurate and examples included are appropriate.	Created two new levels. The new math levels are clearly described and mathematically correct.
1	Description of the game is unclear.	Description of the math in each level is inaccurate or the examples included are missing or inappropriate.	One of the levels is missing or there are mathematical flaws in the description of the new levels.
0	Description of the game is missing.	Description of the math is missing.	New levels are missing.

_____ Points (6)



Create New Levels

NAME: _____ OBJECTIVE: _____ GAME: _____ LEVEL: _____

Describe the game using words or pictures.

How do the puzzles change throughout each level? What is the math that is happening in each level? Give an example.

Create two new levels. Explain what the 0 level will look like and what the new higher level will look like. *Example:* If it has 4 levels, what would level 5 look like?



Create Math Stories - Project Checklist

TASK: Create a math story.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Select at least one of the characters you meet in the ST Math games.
- Write a math story. Use the Story Map to help plan your story.
- Describe the math concept(s) you want to include in your story.
- Create a math problem in your story that the characters have to solve.
- Include math vocabulary words that go with the math concept(s).
- Provide an answer to the math problem that was created.
- Include a beginning, a middle, and an end for your story.

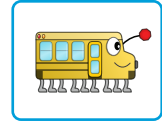
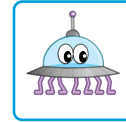
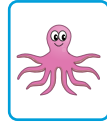
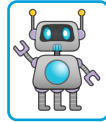
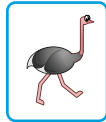
SCORE	MATHEMATICS CONCEPT	VOCABULARY	MATH PROBLEM	MATH STORY
2	Description demonstrates understanding of the math concepts.	Mathematics vocabulary used is appropriate.	Math problem included in the story is clear and mathematically correct. Answer to the problem is provided and is correct.	Math story is neat, clear, and concise and contains a beginning, middle, and an end.
1	Description shows some understanding of the math concepts.	Some mathematical vocabulary is used correctly.	Math problem included in the story has minor mathematical flaws or answer is missing or incorrect.	Math story is somewhat clear but does not include a beginning, middle, and an end.
0	Description is missing or does not show understanding of the math concepts.	No use of mathematical vocabulary.	Math problem is missing or is mathematically incorrect.	Math story does not make any sense and/or does not include a beginning, middle, and an end.

_____ **Points (8)**



JiJi Math Stories – Story Map

NAME: _____ OBJECTIVE: _____ STORY TITLE: _____



Choose a character(s):

Math vocabulary words:

What are the math concepts in this story?

Plot:

What is the problem you want the reader to solve?



Create a JiJi User Guide - Project Checklist

TASK: Create a user guide for one of the ST Math games.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Describe the mathematics in the game in words or with pictures.
- Give an example of a math problem represented in each level.
- Create a list of math vocabulary words that go with the game.
- Identify math skills needed to solve the puzzles.
- Pick one level and describe a strategy that can be used to solve the puzzles in that level.
- Create a word problem that students can solve once they have completed the game. Include the answer.

SCORE	MATHEMATICS UNDERSTANDING	STRATEGY	MATHEMATICS WORD PROBLEM	MATH EXAMPLES	MATH SKILLS AND VOCABULARY
2	Description demonstrates understanding of the math concepts.	Description of the strategy presented in the selected level is clear and easy to understand.	Word problem is clear and mathematically correct. Answer to the problem is provided and is correct.	Math examples are included for each level and are mathematically correct.	Math skills and vocabulary identified are appropriate.
1	Description shows some understanding of the math concepts.	Description of the strategy presented in the selected level is not clear.	Word problem has minor mathematical flaws and/or answer is incorrect.	Math examples are missing for some of the levels or are mathematically incorrect.	Math skills or vocabulary are missing or inaccurate.
0	Description is missing or does not show understanding of the math concepts.	Description of the strategy presented in the selected level is missing.	Word problem is missing or answer is mathematically incorrect.	Math examples are missing.	Math skills and vocabulary are missing.

_____ **Points (10)**



JiJi User Guide

NAME: _____ OBJECTIVE: _____ GAME: _____ LEVEL: _____

Game description (use words or pictures):

Math examples (use words or pictures):

Math vocabulary:



JiJi User Guide

NAME: _____ OBJECTIVE: _____ GAME: _____ LEVEL: _____

Math skills needed for the puzzles:

Try this out: Here is a strategy that can be used to solve the puzzles in level _____:

After playing the game, see if you can solve this word problem:



Create a Game - Project Checklist

TASK: Create a board game that is based on a game in ST Math.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Identify an ST Math game and list the math concept(s) taught in the game.
- Create a board game using the same math concepts.
- Create directions and a title for the game.
- Create a description of the mathematics involved in the game.

SCORE	MATHEMATICS UNDERSTANDING	IDENTIFICATION OF THE PROBLEM	DIRECTION	GAME DESIGN
2	Description demonstrates understanding of the math concepts.	Description of the problem presented in the selected level is clear and easy to understand.	Clear directions and title for game.	Game board is neat/clear, connected to the math concepts, and includes all necessary pieces to play.
1	Description shows some understanding of the math concepts.	Description of the problem presented in the selected level is not clear .	Directions are unclear or missing title.	Game board is messy or missing pieces, or does not show evidence of being connected to the math concepts.
0	Description is missing or does not show understanding of the math concepts.	Description of the problem presented in the selected level is missing.	Missing directions.	Game board is incomplete.

_____ Points (8)



Create a Quiz - Project Checklist

TASK: Create a quiz to go with one of the ST Math games.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Play through all the levels of a game.
- Describe the math concept that is being developed.
- Write a math word problem for each level of the game.
- Create an answer sheet for the quiz.

SCORE	MATHEMATICS UNDERSTANDING	MATH PROBLEM	QUIZ
2	Description demonstrates understanding of the math concepts.	Math vocabulary and/or the symbolic notation used is appropriate.	There is one math word problem for each level in the game.
1	Description shows some understanding of the math concepts.	Some mathematical vocabulary and/or symbolic notation is used correctly.	Only some of the problems are written as word problems.
0	Does not understand the math concepts.	Math problems are not represented as word problems.	None of the problems are word problems.

_____ Points (6)



ST Math Quiz

NAME: _____ OBJECTIVE: _____ GAME: _____ LEVEL: _____

Describe the math concept that is being developed in this game.

QUIZ

Write a math word problem for each level of the game. Don't forget to create an answer sheet for the quiz.

- | | |
|----|----|
| 1. | 4. |
| 2. | 5. |
| 3. | 6. |



Create an Advertisement - Project Checklist

TASK: Create an advertisement for one of the ST Math games.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Play through all the levels of a game.
- Create an advertisement for the game. Be creative.
- Include the title of the game.
- Include a written description of the math students will learn in playing the game.
- Include a visual representation of the math.

SCORE	WRITTEN DESCRIPTION	ADVERTISEMENT	VISUAL REPRESENTATION
2	Description demonstrates understanding of the math concepts.	Advertisement is neat and colorful, visually appealing (pictures), and includes the title of the game. Advertisement is creative.	Visual representation is neat, connected to the math concepts, and easy to understand.
1	Description shows some understanding of the math concepts.	Advertisement lacks visuals or is messy.	Visual representation is not clear.
0	Description does not show understanding of the math concepts.	Advertisement is confusing and messy.	Visual representation missing or is not connected to the math concepts.

_____ Points (6)



Write a Letter to JiJi - Project Checklist

TASK: Write a letter to JiJi.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Select a game that you have played.
- Write a letter to JiJi.
 - Paragraph One – Describe the game. *Example:* What did you have to do to get JiJi across the screen?
 - Paragraph Two – Explain what you learned. Give examples and use math vocabulary.
 - Paragraph Three – Share what you liked and didn't like about the game. Include any ideas you have for changing the game.

SCORE	MATHEMATICS UNDERSTANDING	VOCABULARY	COMMUNICATION
2	Explanation demonstrates understanding of the math concepts.	Mathematics vocabulary used is appropriate.	Description of the game is clear.
1	Explanation shows some understanding of the math concepts.	Some mathematical vocabulary is used correctly.	Description of the game is not clear.
0	Explanation is missing or does not show understanding of the math concepts.	No use of mathematical vocabulary.	The game description is missing.

_____ Points (6)



Letter to JiJi



NAME: _____ OBJECTIVE: _____ GAME: _____ LEVEL: _____

Dear JiJi,



Letter to JiJi (cont.)





Create a New Visual - Project Checklist

TASK: Create a new visual representation of the game.

NAME: _____ **OBJECTIVE:** _____ **GAME:** _____ **LEVEL:** _____

For this project check to make sure you:

- Play through all the levels of the game.
- Select one level and describe the problem.
- Create a different way to represent the problem visually. Draw a picture of this new visual.
- Describe how JiJi would travel in the game with this new visual.
- Show an example of what JiJi does when students get it right and what JiJi does when students get it wrong.
- Explain how this visual helps students learn the math concept.

SCORE	MATHEMATICS UNDERSTANDING	IDENTIFICATION OF THE PROBLEM	COMMUNICATION	VISUAL REPRESENTATION
2	Explanation demonstrates understanding of the math concepts.	Description of the problem presented in the selected level is clear and easy to understand.	Clear description of how JiJi will travel in the game and includes examples of what JiJi does when students get it right and wrong.	Visual representation is neat, connected to the math concepts, and easy to understand.
1	Explanation shows some understanding of the math concepts.	Description of the problem presented in the selected level is not clear.	Description is unclear or missing 1 example.	Visual representation is not clear.
0	Explanation is missing or does not show understanding of the math concepts.	Description of the problem presented in the selected level is missing.	Description is missing or is missing the examples.	Visual representation is missing or is not connected to the math concepts.

_____ Points (8)



Create a New Visual

NAME: _____ GAME: _____ SELECT A LEVEL: _____

Describe the problem represented in the level.

Create a different way to represent the problem visually. Draw a picture of this new visual below.



Create a New Visual

NAME: _____ GAME: _____ SELECT A LEVEL: _____

Describe how JiJi would travel in the game with this new visual.

Show what JiJi does when students get it right.

Show what JiJi does when students get it wrong.

Explain how this visual helps students learn the math concept.