**Situation:** Your best friend is having a hard time understanding area and perimeter so you decide to help them by creating a game that will help them not only understand what area and perimeter are but also help them practice calculating area and perimeter.

**Project Requirements:**

**Game (35%):** Your game must include the following elements:

* At least three different shapes
* Clearly incorporate calculation and understanding of area
* Clearly incorporate calculation and understanding of perimeter
* Be creative! Think outside the box!

**Instructions (35%):** You must also write instructions to tell us how to play your game. Your instructions must:

* Be clearly and legibly written
* Be easy to follow and remember
* Have no grammar or spelling mistakes

**Reflection (25%):** Tell me a little bit about how this project went. Answer the following questions in complete sentences.

* What did you like about this project?
* What did you find easy about this project? Why?
* What did you find difficult about this project? Why?
* Tell me about a problem you faced while creating your game and how you overcame it and were successful.

**Peer Evaluation (5%):** Were you helpful? A good team member? Did you contribute to the success of your game?

Be creative and colorful! Use the following rubric to help you as you design and build your game. You may work with a partner.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name:** | | | | |
| **Partners:** | | | | |
| **CATEGORY** | **4** | **3** | **2** | **1** |
| **Game**  **(35%)**  **Score: \_\_\_\_** | * Includes at least three different shapes * Clearly incorporates calculation of area into the game * Clearly incorporates understanding of area into the game * Clearly incorporates calculation of perimeter into the game * Clearly incorporates understanding of perimeter into the game * Wow! This game is amazing! Super creative! | * Includes at least two different shapes * Incorporates calculation of area into the game but it’s not super clear * Incorporates understanding of area into the game but it’s not super clear * Incorporates calculation of perimeter into the game but it’s not super clear * Incorporates understanding of perimeter into the game but it’s not super clear * Yep, this is a good game. Fairly creative. | * Includes at least one shape * Incorporates calculation of area into the game but can be confusing at times * Incorporates understanding of area into the game but can be confusing at times * Incorporates calculation of perimeter into the game but can be confusing at times * Incorporates understanding of perimeter into the game but can be confusing at times * This is good but there are areas you could improve on. Think outside the box! | * Incorporates calculation of area into the game but it is very confusing * Incorporates understanding of area into the game but it is very confusing * Incorporates calculation of perimeter into the game but it is very confusing * Incorporates understanding of perimeter into the game but it is very confusing * What happened? |
| **Instructions (35%)**  **Score: \_\_\_\_** | * All instructions are clear * Instructions are easy to follow and remember * Contains no grammatical or spelling errors. | * Most (>75%) instructions are clear * Most (>75%) instructions are easy to follow and remember * Contains few distracting grammatical or spelling errors | * Some (>50%) instructions are clear * Some (>50%) instructions are easy to follow and remember * Contains some distracting grammatical or spelling errors | * Few (<50%) instructions are clear * Few (<50%) instructions are easy to follow and remember * Contains many distracting grammatical or spelling errors |
| **Reflection (25%)**  **Score: \_\_\_\_** | * Answers all six of the prompts * Answers all prompts thoroughly * Answers all prompts in complete sentences * Responses show metacognition and are reflective in nature * Contains no grammatical or spelling errors | * Answers five of the prompts * Answers five of the prompts thoroughly * Answers five of the prompts in complete sentences * Most (75%) responses show metacognition and are reflective in nature * Contains few distracting grammatical or spelling errors | * Answers three or four of the prompts * Answers three or four of the prompts thoroughly * Answers three or four of the prompts in complete sentences * Some (50%) responses show metacognition and are reflective in nature * Contains some distracting grammatical or spelling errors | * Answers two or fewer prompts * Answers one or less of the answered prompts thoroughly * Answers one or less of the prompts in complete sentences * Few (<50%) responses show metacognition or are reflective in nature * Contains many distracting grammatical or spelling errors |
| **Peer Evaluation**  **(5%)**  **Score: \_\_\_\_** | Your team members report that work was evenly shared and you were a valuable team member. | Your team members report that work was fairly evenly shared and that you did what you were assigned. | Your team members report that the work was not evenly divided and that you contributed only when specifically asked. | Your team members report that the work was not evenly divided and that you contributed very little. |