**It’s** **a Rockridge Math 8 Carnival!**





The purpose of this project is to investigate games of chance by using the probability concepts you have learned and applying them in designing, creating, and analyzing your own game. Once we have had a chance to experiment with everyone’s game, you will take time to reflect on the observations you have made and discuss how this could be relevant outside of the classroom. We will be hosting a mini carnival for another class on the last day of school. You may work in groups but there should be no more than 3 to a group. In planning your game, you should take the following considerations into account:



* Your game should resemble the types of games you would find at a carnival, amusement park, or casino. This means that the game can be quickly played and multiples trials can be conducted in a class period.
* Your game should be ***unique***, i.e., you cannot replicate something that already exists; however you are allowed to modify or adapt a current game.
* Keep in mind we will be playing the games you create so a model or a playable scale model needs to be put together in order play. The key word here is that the game is ***playable***! This means that the game is understandable, can be played within the confines of the classroom, and has all accessible materials.
* You do not have to actually provide prizes but you should consider how your players are to be awarded if they win.
* You need be able to ***calculate the probabilities*** of the outcomes of your game and more importantly, you must also be able to explain it! On the day of the carnival…I will come to each group and ask a random group member the following questions (or others):
	+ What are the odds of me winning your game? How did you find that out?
	+ What are the odds of you winning your game? How did you find that out?
	+ What makes you game appealing and playable?
	+ What improvements to your game do you think you could make?
* And lastly, your game does not have to be fair, but should be honest.

In addition to creating a game, you are also expected to provide a reflection on **google classroom** for **Criteria D**. You will have class time to do this on **Monday June 17th**…the same day your games are due.

We will be inviting other classes to come play your games on **Wednesday June 19th.**