Team Names: _____

Due Date: <u>Final Exam Day</u>   (You have **8** classes for this project, so manage your time)

2019 Gummy Bear Grading Rubric

ALL DOCUMENTS MUST BE COMPUTER GENERATED

STEP 1- The first step of this project is sharing this GoogleDoc with all team members and Ms. Groves. Make sure to give the "<u>Project Worksheet</u>" a unique name that identified your team.

	Who did this part? (initials or ALL)	**Points**

"<u>Project Worksheet</u>"
- This worksheet is a template designed to include your **ENTIRE** project.
- See **Appendix 1** of the "**<u>Project Worksheet</u>**" for more details on requirements for this project.

- **"Project Worksheet"** parts completed **prior to launch**

  a) Project Worksheet- pages 1-3   (8)   _____   _____
  b) Pre-Planning/Controls (Appendix 2)   (6)   _____   _____
     o In Appendix 2, clearly outline all your controls in the pre-planning part of your project. This is critical for a well-designed experiment to address all extraneous factors to ensure reliable results

  IMPORTANT: Your Group must complete pages 1-3 and Appendix 2 "Controls," and it <u>must be approved by Ms. Groves prior to launching your Gummy Bears</u>.

- **Catapult**   (10)   _____   _____
  - Your team must demonstrate your catapult and explain your procedure to Ms. Groves **or you will have to relaunch.**

- **"Project Worksheet"** parts completed **AFTER launch**

  c) Project Worksheet- Section IV   (10)   _____   _____
  d) Raw data (Appendix 3)   (5)   _____   _____
  e) Summary Statistics (Appendix 4)   (7)   _____   _____
  f) Graphs (Appendix 5)   (8)   _____   _____

FINAL written report is also included in the "*<u>Project Worksheet</u>.*" There are 4 parts.

- See **Appendix 1** of the "**<u>Project Worksheet</u>**" for more details on requirements for the Final Report.

  1) **Introduction**   (8)   _____   _____
     o <u>Written in paragraph form</u> summarize (in English). Summary of your experiment (experimental units, factors, treatments), discuss 3 key components of your experimental design, discuss your hypothesis and what inference test used, and your confidence level and its statistical procedure used.

  2) **Summary of treatment data**   (10)   _____   _____
     o <u>Written in paragraph form</u> to summarize the results of your experiment to someone without a statistical background.

  3) **Inference Analysis**   (12)   _____   _____
     o <u>Written in paragraph form</u> summarize (in English) your confidence interval and test of hypothesis.

  4) **Reflections on Experiment**   (6)   _____   _____

Cover   (10)   _____   _____
- Must be in color and include pictures of your design, launch, and/or teammates. Be creative.

Project Grade: _____

Individual's grades	Partner 1:	Partner 2:	Partner 3:

Teacher Comments (on back)