

## AP Statistics Group Project - Final Assessment

Team Names: \_\_\_\_\_

Due Date: Final Exam Day (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 "Project Worksheet" a unique name that identified your team.

	Who did this part? (initials or ALL)	Points																												
<b>"Project Worksheet"</b>																														
<ul style="list-style-type: none"> <li>• This worksheet is a template designed to include your <b>ENTIRE</b> project.</li> <li>• See <b>Appendix 1</b> of the "<b>Project Worksheet</b>" for more details on requirements for this project.</li> <li>• "<b>Project Worksheet</b>" parts completed <b>prior to launch</b> <table style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 60%;">a) Project Worksheet- pages 1-3</td> <td style="width: 10%; text-align: center;">(8)</td> <td style="width: 10%; border-bottom: 1px solid black;"></td> <td style="width: 10%; border-bottom: 1px solid black;"></td> </tr> <tr> <td>b) Pre-Planning/Controls (Appendix 2)</td> <td style="text-align: center;">(6)</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td colspan="4"> <ul style="list-style-type: none"> <li>○ 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</li> </ul> </td> </tr> </table> </li> </ul> <p style="color: red; margin-top: 10px;"><b>IMPORTANT:</b> Your Group must complete pages 1-3 and Appendix 2 "Controls," and it <b>must be approved by Ms. Groves prior to launching your Gummy Bears.</b></p> <ul style="list-style-type: none"> <li>• <b>Catapult</b> (10) <span style="float: right;">_____</span> <span style="float: right;">_____</span> <ul style="list-style-type: none"> <li>• Your team must demonstrate your catapult and explain your procedure to Ms. Groves <b>or you will have to relaunch.</b></li> </ul> </li> <li>• "<b>Project Worksheet</b>" parts completed <b>AFTER launch</b> <table style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 60%;">c) Project Worksheet- Section IV</td> <td style="width: 10%; text-align: center;">(10)</td> <td style="width: 10%; border-bottom: 1px solid black;"></td> <td style="width: 10%; border-bottom: 1px solid black;"></td> </tr> <tr> <td>d) Raw data (Appendix 3)</td> <td style="text-align: center;">(5)</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>e) Summary Statistics (Appendix 4)</td> <td style="text-align: center;">(7)</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td>f) Graphs (Appendix 5)</td> <td style="text-align: center;">(8)</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> </table> </li> </ul>			a) Project Worksheet- pages 1-3	(8)			b) Pre-Planning/Controls (Appendix 2)	(6)			<ul style="list-style-type: none"> <li>○ 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</li> </ul>				c) Project Worksheet- Section IV	(10)			d) Raw data (Appendix 3)	(5)			e) Summary Statistics (Appendix 4)	(7)			f) Graphs (Appendix 5)	(8)		
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**FINAL written report is also included in the "Project Worksheet."** There are 4 parts.

- See **Appendix 1** of the "**Project Worksheet**" for more details on requirements for the Final Report.
- |  |      |  |  |
|--|------|--|--|
| 1) <b>Introduction</b>   | (8)  |  |  |
| <ul style="list-style-type: none"> <li>○ <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.</li> </ul> |      |  |  |
| 2) <b>Summary of treatment data</b>  | (10) |  |  |
| <ul style="list-style-type: none"> <li>○ <u>Written in paragraph form</u> to summarize the results of your experiment to someone without a statistical background.</li> </ul>  |      |  |  |
| 3) <b>Inference Analysis</b>   | (12) |  |  |
| <ul style="list-style-type: none"> <li>○ <u>Written in paragraph form</u> summarize (in English) your confidence interval and test of hypothesis.</li> </ul>   |      |  |  |
| 4) <b>Reflections on Experiment</b>  | (6)  |  |  |
| <b>Cover</b>   | (10) |  |  |
- Must be in color and include pictures of your design, launch, and/or teammates. Be creative.

**Project Grade:** \_\_\_\_\_

<b>Individual's grades</b>	Partner 1:	Partner 2:	Partner 3:
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*Teacher Comments (on back)*