

You are going on vacation to OUTER SPACE

You are going on a vacation to the “planet of the exponents”. When you get there, the exponents are up in arms because of all the silly tourists who keep breaking the laws of the land. They commission you to make a tourist brochure laying out all the laws of the planet. Your assignment is to

- (a) Explain all the rules
- (b) Come up with consequences if tourists break the rules (be creative)
- (c) AND to show the ways in which tourists have commonly broken the rules so that future tourists know not to do it again. You must explain the following laws in your brochures:
 - (1) The product rule
 - (2) The quotient rule
 - (3) The power rule
 - (4) What a zero exponent is
 - (5) How to turn negative exponents into positive exponents
 - (6) An explanation of scientific notation with both positive and negative exponents
 - (7) An explanation of how to do operations with scientific notation.
- (d) Be as creative as you wish. You may include pictures or descriptions of the planet, just make sure to include all the math on the list above.
- (e) You may do this brochure on paper or you may do it electronically using Microsoft publisher or another brochure program. If you do it on paper, make sure that your handwriting is neat and legible, that the brochure is well organized, and that there aren't a lot of smudges, crumples or erasures.
- (f) The rubric you will be graded with is on the next page.



| Score out of 20 /20 | Exceeding (4) | Meeting (3) | Approaching (2) | Not Yet (1) |
|--|---|---|--|---|
| Explanation of the rules | The rules are neatly presented, named and “proved” (show why each rule works) and examples of using the rule are presented. | Most of the rules are neatly presented, named and “proved” (show why each rule works) and examples of using the rule are presented. | The rules are presented and are named, but explanation is lacking and examples may be missing | The rules may be written and or named but they are not explained well and examples are not provided |
| Examples of common ways rules are “broken” (common mistakes) | There are clear examples of each rule used incorrectly along with an explanation about why the answer is incorrect | There are some clear examples of each rule used incorrectly along with an explanation about why the answer is incorrect | A few easy ways to make mistakes with the rules are presented, but specific examples aren’t present or are not well explained. | Explanations are unclear or examples aren’t provided. It is not easy to tell from your brochure how to avoid common mistakes. |
| Completeness | All 10 topics in the list on the previous page are addressed in the “explanation of the rules” section and in the ways the rules could be broken section | Most of the 10 topics in the list on the previous page are included in one or both of the above two sections | 3-4 rules are missing from one or both of the above two sections | Only a few of the rules are explained fully or are included in the ways the rules could be broken section |
| Creativity | You’ve thought of funny, interesting consequences for breaking the rules, you explain the planet or the aliens a little, you provide pictures or other creative elements. | You have some consequences for breaking the rules and you have one or two extra creative flairs (pictures or descriptions of the planet.) | You have some consequences for breaking the rules but they are uninteresting and you have no creative touches. | You did not include anything in your brochure but a straightforward explanation of the rules |
| Mechanics | Spelling and punctuation errors are few and far between and your sentences make sense | There are a few spelling and punctuation errors and your sentences may be difficult to understand at times. | There are a lot of spelling and punctuation errors and your sentences are vague or unclear | There are a lot of spelling and punctuation errors and it’s difficult to understand any of your explanations |