

Unit 3 Portfolio Assignment:

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 do the following. **Check off each one as you complete it:**



- (a) Explain all the laws of exponents and include:
 - a. Title: _____
 - b. Algebraic form/rule: _____
 - c. An explanation of each law IN YOUR OWN WORDS: _____
 - d. An example! Show your steps. _____
- (b) Come up with consequences if tourists break the laws/rules (be creative!) Each law should have a separate consequence! _____
- (c) AND to show the ways in which tourists have commonly broken the laws/rules so that future tourists know not to do it again. Must include for ALL laws/rules: _____
- (d) You must explain the following laws/rule in your brochures:
 - (1) The product rule for exponents _____
 - (2) The quotient rule for exponents _____
 - (3) The power rule for exponents _____
 - (4) The distributive rule for products (for exponents) _____
 - (5) The distributive rule for quotients (for exponents) _____
 - (6) What a zero exponent is _____
 - (7) The rules for negative exponents _____
 - (8) What fractional exponents mean _____
- (e) Be as creative as you wish. You may (and should) include pictures or descriptions of the planet, just make sure to include all the math on the list above. _____
- (f) Handwriting should be neat and legible, the brochure should be well organized, and there should not be any smudges, crumples or erasures. AKA: It should be a FINAL draft! _____
- (g) The rubric you will be graded with is on the next page. _____

Rough Draft Due: Monday, January 28 and Tuesday, Jan 29—BRING FOR FEEDBACK

Final Draft Due: Monday, February 4



Score out of 30 /30	5	4	3	2
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.	The rules are neatly presented, named and “proved” (show why each rule works) and most include examples of using the rule.	Most of 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, or only some are complete.
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 11 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 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 and the aliens, 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	No spelling and punctuation errors 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.
Neatness	Your brochure is well organized with titles for each new section, captions for each picture, page numbers, and it looks professional. No mistakes are present on final brochure.	Your brochure is pretty well organized. May have 1 or 2 minor errors. Not as neat and professional as it could be.	Your brochure is a little disorganized. It’s hard to tell where the different rules are or where different sections are. It may be crumpled or smudged or have multiple mistakes.	Your brochure is very disorganized. It’s unclear where your rules are or where examples are. Pictures are irrelevant or aren’t well explained. Your brochure may look like a rough draft.