Name_____ Date_____ Per_____

2015-2016
JAE (Journal Article Evaluation) Grade Checklist

1. NEW &/OR REVIEW VOCABULARY: (5 points)
   - Define and explain at least 5 terms that are unfamiliar, not previously used in class, or were used in class sporadically. These include (but are not limited to): scientific terms, methods of statistical analysis, types of equipment, and uncommon verbage.

2. CONTENT REVIEW and BIG IDEA (8 points)
   - Identify and state one of the Big Ideas that relates to the content of the article. (2 pts)
   - Explain in at least 1 paragraph how the article relates to the big idea. (3pts)
   - Explain in at least one paragraph why this article is important to science as a whole. (3pts)
   -

3. HYPOTHESIS (3 points)
   - If (independent variable), then (dependent variable)…
   - Include proper parameters of independent variable
   - If more than 1 DV, include up to 3

4. DATA, STATISTICAL ANALYSIS, AND CONCLUSION (10 points)
   - Explain the concept of p-value and the threshold for significance. Use percentages in yourexplanation. Be sure to include the following in your discussion: probability, independent variable,dependent variable, significance. (3 pts)
   - Which quantitative data are important for drawing conclusions based on the hypothesis stated? Statethe data points and or data trends for each dependent variable measured in the experiment. (2 pts)
   - How does this information support or reject the hypothesis? What is the general conclusion of the experiment(s)? (3 pts)

5. ANNOTATED ARTICLE ATTACHED (5 points)
   - Every page with highlighting/underlining; Every page with written annotations
   - Underline or highlight important terms
   - Write definitions in the margins
   - Clarify confusing statements in the margins
   - Label aspect of experimental design (IV, DV, Sample Size, Control Group, etc.)
   - Number steps in the experimental process
   - Upload written portion of JAE to www.turnitin.com by the deadline

Name_____ Date_____ Per_____

6. Graphical Evaluation of Experimental Design (30 points)

Control group (4 pts)

- Drawing/picture
- Label
- Explain why it is used

Experimental group (4 pts)

- Drawing/picture
- Label
- Explain why it is used

Constants defined with numbers (4 pts)

- State at least 4 constants and describe how each is maintained throughout the experiment

IV (how manipulated, quantifiable is possible) (4 pts)

- Manipulation clearly stated
- Drawing/pic/graphic
- Labeled in control and experimental groups

DV (what, how measured, how often, for how long) (6 pts)

- What was measured
- How was it measured
- How often was it measured
- Duration
- Drawing/pic/graphic
- Labeled in control and experimental groups

Sample size (1 pt)

- Quantitative

Number of trials (1 pt)

- Quantitative (If not stated, use a question mark)

1 "Good" aspect of design (and why it's good) (3 pts)

- Refers to knowledge of valid experimental design
- Brief explanation of why it is good
- Arrow pointing to the part of the graphic that shows the aspect

1 "Bad" aspect to be improved (and how to improve it) (3 pts)

- Refers to knowledge of valid experimental design
- Brief explanation of why it is bad
- Arrow pointing to the part of the graphic that shows the aspect

Note
If the all items are not clearly labeled and identified on your graphic, you will not earn point(s) for that aspect.