

## Assessment 6 Theory Change and Scientific Progress

### Self-Assessment Rubric

Please use the following rubric to assign a point value to your essay. For each category—Style, Description, Assessment—assign the point value that best characterizes your essay. To calculate your grade, add up the assigned point values, and then multiply this sum by 4. (For example, if Style = 3, Description = 8, and Assessment = 7, your grade would be 72%. First, sum these numbers:  $3+8+7=18$ , and then multiply by 4:  $18*4=72$ .)

Read your essay aloud, at full volume, as if you were reading to someone else. The extra sensory input—aural and visual—will help make salient to you the relevant features of your essay.

<b>Style</b>	<b>Comments</b>
<b>5.0: A</b>	The paper has few to no grammatical mistakes (no spelling errors, fragments, excessively long sentences, obscure sentences, etc.). The paper is clearly written (avoids unfamiliar or complicated words when familiar or simpler ones will do, avoids ambiguous terms, gives illustrative examples, etc.). It avoids rhetorical questions and uses paragraphs in an intelligent way (one key idea per paragraph). There are proper citations. Each sentence is necessary to support or explain some other sentence.
<b>4.0: B</b>	The paper contains more than a few minor grammatical errors (an occasional misspelled word or misplaced comma, etc.). There are some awkwardly phrased sentences or other minor stylistic deficiencies.
<b>3.0: C</b>	The paper has a few significant, or minor but recurring, grammatical errors. The paper has a large number of awkwardly phrased sentences, bad transitions, or unhelpful citations. The paper uses rhetorical questions as a way to make claims.
<b>2.0: D</b>	The paper has many significant, recurring grammatical errors. The author's meaning is difficult to discern because of awkward writing.
<b>1.0: F</b>	The paper is a stylistic disaster.

Description	Comments
<b>10.0: A+</b> <b>9.0: A</b>	There is a clear and correct <i>description</i> of a philosophical account of theory change and scientific progress. There is at least one example that illustrates a change the account deems to be rational, and there is at least one example that illustrates a change the account deems to be not rational.
<b>8.0: B</b>	There is a clear and correct <i>description</i> of a philosophical account of theory change and scientific progress. However, either there is not at least one example that illustrates a change the account deems to be rational, or there is not at least one example that illustrates a change the account deems to be not rational.
<b>7.0: C</b>	There is a correct <i>description</i> of a philosophical account of theory change and scientific progress. However, either the description is unclear, or there is neither an example that illustrates a change the account deems to be rational nor an example that illustrates a change the account deems to be not rational.
<b>6.0: D</b>	There is a <i>description</i> of a philosophical account of theory change and scientific progress. However, the description is incorrect.
<b>5.0: F</b>	There is an utter failure to describe any philosophical account of theory change and scientific progress.



Assessment	Comments
<b>10.0: A+</b> <b>9.0: A</b>	<p>There is a listing of at least three major challenges to physical theory during the period 1880-1910. There is a description of the way in which scientists responded to each challenge. For each response, there is a thesis regarding whether that response was rational according to the chosen account of theory change and scientific progress. There are reasons given to support each such thesis. Finally, there is an overall assessment of the account of theory change and scientific progress.</p>
<b>8.0: B</b>	<p>There is a listing of at least three major challenges to physics during the period 1880-1910. There is a description of the way in which scientists responded to each challenge. For each response, there is a thesis regarding whether that response was rational according to the chosen account of theory change and scientific progress. However, the reasons given to support some of the theses are poor reasons, or there is not an overall assessment of the account of theory change and scientific progress.</p>
<b>7.0: C</b>	<p>There is a listing of at least three major challenges to physics during the period 1880-1910. There is a description of the way in which scientists responded to each challenge. However, for some of the responses, there is no thesis regarding whether that response was rational according to the chosen account of theory change and scientific progress; or the reasons given to support most of the theses are poor reasons.</p>
<b>6.0: D</b>	<p>While there is a listing of some major challenges to physics during the period 1880-1910, and a description of the way in which scientists responded to each challenge, there are fewer than three challenges or fewer than three total responses.</p>
<b>5.0: F</b>	<p>There is an utter failure to provide any elements relevant to assessing the extent to which the chosen account of theory change and scientific progress shows that changes in physics between 1880 and 1910 were rational.</p>

