

### Jigsaw Grading Rubric - Solve

Key Elements	1 Point	0 Points
<b>Explanation</b>	Explanation is relevant and detailed.	Reflection does not exist.
<b>Problem solving strategy</b>	Proper use of the four -step problem solving method	The four-step method is not used at all, or it is used incorrectly.
<b>Physics concepts</b>	Key ideas were correctly identified, no unrelated ideas were identified as “key ideas”	No key ideas identified, or many unrelated concepts were included along with the key ideas
<b>Physics applications</b>	Appropriate equations were used for each step.	Appropriate equations were never or rarely used.
<b>Math</b>	No major mathematical misconceptions or arithmetic errors	Evidence of clear mathematical misconceptions, major or frequent arithmetic mistakes.
<b>Assessments</b>	Assessments are generally well-reasoned and include a unit check and at least one of the four strategies: using physical intuition and familiar values, solving the same problem a different way, evaluating the formula, examining the extremes.	No assessment attempt was made or the assessment reasoning is nonsensical or circular.

### Jigsaw Grading Rubric - Teach

Key Elements	1 Point	0 Points
<b>“Lecture”</b>	All parts of the problem were explained	Teaching demo was incomplete or did not happen at all
<b>“Q&amp;A”</b>	Questions were answered, with help from an instructor or LA or independently	Questions were ignored or no answer given.

### Jigsaw Grading Rubric - Learn

Key Elements	1 Point	0 Points
<b>Participation</b>	Student was present for the “Learn” portion and asked at least one question of each presenter.	Student was not present or did not ask questions.
<b>Problem solving strategy</b>	Proper use of the four -step problem solving method	The four-step method is not used at all, or it is used incorrectly.
<b>Physics concepts</b>	Key ideas were correctly identified, no unrelated ideas were identified as “key ideas”	No key ideas identified, or many unrelated concepts were included along with the key ideas
<b>Physics applications</b>	Appropriate equations were used for each step.	Appropriate equations were never or rarely used.
<b>Math</b>	No major mathematical misconceptions or arithmetic errors	Evidence of clear mathematical misconceptions, major or frequent arithmetic mistakes.
<b>Assessments</b>	Assessments are generally well-reasoned and include a unit check and at least one of the four strategies: using physical intuition and familiar values, solving the same problem a different way, evaluating the formula, examining the extremes.	No assessment attempt was made or the assessment reasoning is nonsensical or circular.

Points: \_\_\_\_/14

Final grade:

- 0-6: Unsatisfactory
- 7-10: Satisfactory
- 11-14: Excellent