

Jigsaw Grading Rubric - Solve

Key Elements	1 Point	0 Points
Explanation	Explanation is relevant and detailed.	Explanation does not exist or is not clear or helpful.
Problem solving strategy	Proper use of the four -step problem solving method	The four-step method is not used at all, or it is used incorrectly.
Physics concepts	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
Physics applications	Appropriate equations were used for each step.	Appropriate equations were never or rarely used.
Math	No major mathematical misconceptions or arithmetic errors	Evidence of clear mathematical misconceptions, major or frequent arithmetic mistakes.
Assessments	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
“Lecture”	Took part actively in the teaching demo, explaining a part of the problem alongside writing the process on the board.	Did not participate in the teaching demo or only did a part of the demo that was not solving the problem (e.g. just writing the problem statement on the board)
“Q&A”	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
Participation	Student was present for the “Learn” portion and asked at least one question about a problem.	Student was not present or did not ask questions.
Problem solving strategy	Proper use of the four -step problem solving method	The four-step method is not used at all, or it is used incorrectly.
Physics concepts	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
Physics applications	Appropriate equations were used for each step.	Appropriate equations were never or rarely used.
Math	No major mathematical misconceptions or arithmetic errors	Evidence of clear mathematical misconceptions, major or frequent arithmetic mistakes.
Assessments	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