

### WHW Grading Rubric

<b>Key Elements</b>	<b>2 Points</b>	<b>1 Points</b>	<b>0 Points</b>
<b>Reflection</b>	Reflection is relevant and detailed.	Reflection is vague and non-specific.	Reflection does not exist.
<b>Problem solving strategy</b>	Proper use of the four -step problem solving method is used on all non-conceptual question problems	The four-step method is used on some but not all problems, or it is used but not laid out clearly	The four-step method is not used at all, or it is used incorrectly.
<b>Physics concepts</b>	Key ideas were correctly identified for each problem, no unrelated ideas were identified as “key ideas”	Some key ideas were identified but not all, a few unrelated concepts were listed 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 used more often than not, but not always.	Appropriate equations were never or rarely used.
<b>Math</b>	No major mathematical misconceptions or arithmetic errors	Minor or occasional arithmetic errors, no major mathematical misconceptions	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.	Assessments are missing a unit check or does not use an appropriate strategy.	No assessment attempt was made or the assessment reasoning is nonsensical or circular.