

<i>Ability to collect and analyze experimental data</i>					
<b>Scientific Ability</b>		<b>Missing</b>	<b>Inadequate</b>	<b>Needs some improvement</b>	<b>Adequate</b>
<b>1</b>	<b>Is able to identify sources of experimental uncertainty</b>	No attempt is made to identify experimental uncertainties.	An attempt is made to identify experimental uncertainties, but most are missing, described vaguely, or incorrect.	Most experimental uncertainties are correctly identified.	All experimental uncertainties are correctly identified.
<b>2</b>	<b>Is able to evaluate specifically how identified experimental uncertainties may affect the data</b>	No attempt is made to evaluate experimental uncertainties.	An attempt is made to evaluate experimental uncertainties, but most are missing, described vaguely, or incorrect. Or only absolute uncertainties are mentioned. Or the final result does not take the uncertainty into the account.	The final result does take the identified uncertainties into account but is not correctly evaluated.	The experimental uncertainty of the final result is correctly evaluated.
<b>3</b>	<b>Is able to describe how to minimize experimental uncertainty and actually do it</b>	No attempt is made to describe how to minimize experimental uncertainty and no attempt to minimize is present.	A description of how to minimize experimental uncertainty is present, but there is no attempt to actually minimize it.	An attempt is made to minimize the uncertainty in the final result is made but the method is not the most effective.	The uncertainty is minimized in an effective way .
<b>4</b>	<b>Is able to record and represent data in a meaningful way</b>	Data are either absent or incomprehensible.	Some important data are absent or incomprehensible.	All important data are present, but recorded in a way that requires some effort to comprehend.	All important data are present, organized, and recorded clearly.
<b>5</b>	<b>Is able to analyze data appropriately</b>	No attempt is made to analyze the data.	An attempt is made to analyze the data, but it is either seriously flawed or inappropriate.	The analysis is appropriate but it contains minor errors or omissions.	The analysis is appropriate, complete, and correct.