

2011-12 Official Scientific Inquiry Scoring Guide Grade 3

	<p style="text-align: center;">Forming a Question or Hypothesis (Teacher-directed*)</p> <p style="text-align: center;"><i>Forms a question or hypothesis, which can be explored through a simple scientific investigation.</i></p>	<p style="text-align: center;">Designing an Investigation (Student-directed with teacher support**)</p> <p style="text-align: center;"><i>Plan an investigation based on a question or hypothesis.</i></p>
<p style="text-align: center;">5/6 Exceeds</p>	<ul style="list-style-type: none"> ▪ Links background information to the question or hypothesis. ▪ Forms a testable question or hypothesis that can be used to guide a complete and detailed design of a scientific investigation. ▪ Communicates the question or hypothesis clearly, with details. 	<ul style="list-style-type: none"> ▪ Presents a plan for a simple scientific investigation that is complete, in an efficient and logical sequence, and clearly addresses the question or hypothesis. ▪ Communicates logical procedures that imply a connection to student's scientific knowledge.
<p style="text-align: center;">4 Meets</p>	<ul style="list-style-type: none"> ▪ Forms a testable question or hypothesis that can be used to guide the design of a simple scientific investigation. ▪ Communicates a complete question or hypothesis understandably. 	<ul style="list-style-type: none"> ▪ Presents a practical plan for a simple scientific investigation that addresses the question or hypothesis. ▪ Communicates a plan that may lack some details.
<p style="text-align: center;">3 Nearly Meets</p>	<ul style="list-style-type: none"> ▪ Forms a question or hypothesis that is of limited use in guiding the design of a simple scientific investigation. ▪ Communicates an incomplete question or hypothesis. 	<ul style="list-style-type: none"> ▪ Presents a plan somewhat related to the topic that may not fully address the question or hypothesis. ▪ Communicates an incomplete plan.
<p style="text-align: center;">1/2 Does Not Meet</p>	<ul style="list-style-type: none"> ▪ Forms a question or hypothesis that cannot be explored through a simple investigation. ▪ Communicates a question or hypothesis that is not understandable. 	<ul style="list-style-type: none"> ▪ Presents a plan that is impractical or does not relate to the question or hypothesis. ▪ Communicates a plan that cannot be followed or the plan is missing.

* Teachers assist students in Forming a Question or Hypothesis for their investigations.

**Teacher guidance in safety and ethics is acceptable and encouraged.

A hypothesis may be stated as a claim.

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	Collecting and Presenting Data (Student-directed with teacher support^{***}) <i>Collect data from an investigation, using measuring tools appropriate to the investigation</i>	Analyzing and Interpreting Results (Student-directed) <i>Use the data collected from an investigation to explain the results and draw conclusions.</i>
5/6 Exceeds	<ul style="list-style-type: none"> ▪ Records accurate and complete data and/or observations consistent with the plan. ▪ Accurately matches all measuring tools and units of measure to their uses. ▪ Designs a data table (or other format) using teacher suggestions. 	<ul style="list-style-type: none"> ▪ Uses accurate results to explicitly address the question or hypothesis. ▪ Explanation of results and conclusions are clearly linked to the data collected. ▪ Presents more than one conclusion or a single conclusion that is both elaborated and detailed.
4 Meets	<ul style="list-style-type: none"> ▪ Records reasonable data and observations generally consistent with the plan. ▪ Matches relevant measuring tools and units of measure to their uses (if needed). ▪ Uses a teacher provided data table. 	<ul style="list-style-type: none"> ▪ Uses the data collected to explain the results. ▪ Presents at least one conclusion related to data collected.
3 Nearly Meets	<ul style="list-style-type: none"> ▪ Records insufficient data and/or records observations inconsistent with the plan. ▪ Incorrectly matches measuring tools and units of measure to their uses. ▪ Uses a teacher provided data table but the data is incomplete or incorrect. 	<ul style="list-style-type: none"> ▪ Communicates results incompletely or with only partial accuracy. ▪ Conclusion cannot be supported by the data.
1/2 Does Not Meet	<ul style="list-style-type: none"> ▪ Does not record data, or observations are unrelated to the plan. ▪ Measuring tools and units of measure were not used, but were required for the investigation. ▪ Does not use a data table. 	<ul style="list-style-type: none"> ▪ No results or conclusions are communicated or the results are completely inaccurate.

***Teacher provides a data table for students to use or students may create their own data display.

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Definition of Grade 3 Score Levels

EXCEEDS = 5/6	The student has enhanced her/his work, making it more complex and detailed. The student not only demonstrates understanding of the concepts, but also has produced work that is above and beyond the “meets” level.
MEETS = 4	The student’s work shows more strengths than weaknesses. The student clearly demonstrates understanding of the work completed.
NEARLY MEETS = 3	The student’s work shows some development. While the student shows some conceptual understanding, additional instruction and practice are needed to earn a “meets” level.
DOES NOT MEET = 1/2	The student’s work shows inaccuracies, is incomplete, and generally is not clear.