

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Assessment Master 14**

# Fair Test Rubric

**Investigation:** \_\_\_\_\_

Element	Level 1	Level 2	Level 3	Level 4
<b>Initiating and Planning</b>				
1. Asks a question for the investigation.	Asks an inappropriate question.	Asks an unclear question.	Asks a question.	Asks a clear question.
2. Predicts what thinks will happen.	Includes an inappropriate prediction.	Provides an appropriate prediction with no reasoning.	Provides an appropriate prediction with some reasoning.	Clearly states an appropriate prediction with clear reasoning.
3. Selects appropriate materials and apparatus.	Selects few materials and apparatus; some are inappropriate.	Selects some appropriate materials and apparatus; some are missing.	Selects all appropriate materials and apparatus.	Selects all needed materials and apparatus; may help others make appropriate selections.
4. Correctly identifies an appropriate manipulated variable.	Identifies inappropriate manipulated variable.	Identifies a manipulated variable, but the identification is not clear.	Correctly identifies an appropriate manipulated variable.	Clearly identifies an appropriate manipulated variable.
5. Correctly identifies one or more responding variables.	Identifies incorrect responding variable(s).	Identifies responding variable(s), but the identification is unclear.	Correctly identifies 1 responding variable.	Clearly identifies more than 1 appropriate responding variable.
6. Controls all other variables.	Controls 1 other variable.	Controls 2 other variables.	Controls 3 other variables.	Carefully controls 3 or more other variables.
7. Describes any safety concerns and identifies the needed safety equipment.	Lists a few safety concerns and pieces of equipment.	Lists some but not all safety concerns and pieces of equipment.	Describes all safety concerns and equipment.	Clearly describes and explains all safety concerns and equipment.
8. Writes a numbered step-by-step plan for the investigation and gets it approved.	Creates an unorganized step-by-step plan. Many steps are missing. Does not get approval.	Creates a numbered step-by-step plan but some steps are missing. May not get approval.	Creates a complete, numbered, step-by-step plan. Gets approval.	Creates a complete, clear, numbered, step-by-step plan and gets it approved.
<b>Performing and Recording</b>				
9. Follows the steps carefully and in order.	Proceeds without a clear idea of steps or order.	Proceeds with some idea of steps and order.	Follows the steps carefully and in the correct order.	Systematically follows the steps in the correct order.

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(continued)

<b>Element</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
<b>10.</b> Manipulates only one variable and controls the others.	Controls only the manipulated variable and is not aware of others.	Controls the manipulated variable and is aware of 1 other variable.	Controls the manipulated variable and 1 responding variable.	Controls the manipulated variable and more than 1 responding variable.
<b>11.</b> Accurately measures the responding variable(s).	Inaccurately measures responding variable(s).	With some inaccuracies, measures the responding variable(s).	Accurately measures the responding variable(s).	Accurately measures and clearly records data for the responding variable(s).
<b>12.</b> Uses instruments effectively, accurately, and safely.	Does 1 of the following: • uses instruments effectively • uses instruments accurately • follows safety procedures.	Does 2 of the following: • uses instruments effectively • uses instruments accurately • follows safety procedures.	Uses instruments effectively, accurately, and safely.	Uses instruments effectively, accurately, and safely, and may encourage others to do the same.
<b>13.</b> Makes and records detailed observations using a data table or chart.	Makes or records limited number of observations.	Makes and records some observations, but includes few details or does not use a data chart or table.	Makes and records observations with some details, using a data chart or table.	Makes and records detailed observations in a data chart or table.
<b>Analyzing and Interpreting</b>				
<b>14.</b> Interprets patterns and trends in data.	Attempts to compile data, but does not identify patterns and trends.	Compiles data incorrectly or misinterprets patterns and trends.	Compiles data and interprets patterns and trends.	Compiles data and interprets patterns and trends appropriately and clearly.
<b>15.</b> Uses what was learned to state findings and conclusions.	May state a conclusion, but does not relate it to findings.	States 1 or more findings that are inappropriate or identifies an inappropriate conclusion.	States findings and identifies appropriate conclusion(s).	Clearly states findings and provides explanation(s) for appropriate conclusion(s).
<b>16.</b> Identifies areas where could have improved.	Fails to identify areas where could have improved.	Identifies areas where could have improved, but does not explain how could have improved them.	Identifies areas where could have improved and explains how could have improved them.	Clearly identifies areas where could have improved and provides full details on how could have improved them.