

# MBF-3C Environmental Assessment Activity

	Level 1	Level 2	Level 3	Level 4
<p><b>Knowledge and Understanding</b></p> <ul style="list-style-type: none"> <li>- predictions (M2 #4 and 5)</li> <li>- identify appropriate population, sample, techniques, etc. (M3 #1)</li> </ul>	<ul style="list-style-type: none"> <li>- extrapolated data with limited effectiveness</li> <li>- population, sample and techniques identified with limited effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>- extrapolated data with some effectiveness</li> <li>- appropriate population, sample and techniques identified with some effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>- extrapolated data with considerable effectiveness</li> <li>- most appropriate population, sample and techniques identified with considerable effectiveness and few to no errors</li> </ul>	<ul style="list-style-type: none"> <li>- extrapolated data with a high level of effectiveness</li> <li>- most appropriate population, sample and techniques identified with a high level of effectiveness with no errors and extra insight</li> </ul>
<p><b>Thinking</b></p> <ul style="list-style-type: none"> <li>- choosing how to represent the data (M1)</li> <li>- plan for survey analysis (M3 #3 and 4)</li> </ul>	<ul style="list-style-type: none"> <li>- data represented with limited effectiveness in a variety of ways</li> <li>- analysis plan and summary list of recommendations based on hypothesized results completed with limited effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>- data represented with some effectiveness in a variety of ways</li> <li>- analysis plan and summary list of recommendations based on hypothesized results completed with some effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>- data represented appropriately in a variety of ways with considerable effectiveness</li> <li>- analysis plan and summary list of recommendations based on hypothesized results completed with considerable effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>- demonstrates additional insight when representing data in a variety of ways and with a high degree of effectiveness</li> <li>- analysis plan and summary list of recommendations based on hypothesized results completed with a high level of effectiveness</li> </ul>
<p><b>Communication</b></p> <ul style="list-style-type: none"> <li>- Presentation (M3#5)</li> <li>- Reflection (M3 #6)</li> <li>- uses proper conventions, neat, labeling, etc. (assessed throughout project)</li> </ul>	<ul style="list-style-type: none"> <li>- graphs are included, displayed, and analyzed with limited effectiveness</li> <li>- environmental impact and possible solutions discussed with limited effectiveness</li> <li>- reflection discusses required components with limited detail and effectiveness</li> <li>- infrequently uses mathematical language, symbols, visuals and conventions correctly</li> </ul>	<ul style="list-style-type: none"> <li>- graphs are included, displayed, and analyzed with some effectiveness</li> <li>- environmental impact and possible solutions discussed with some effectiveness</li> <li>- reflection discusses required components with some detail and effectiveness</li> <li>- uses mathematical language, symbols, visuals, and conventions correctly some of the time</li> </ul>	<ul style="list-style-type: none"> <li>- graphs are included, displayed, and analyzed with considerable effectiveness</li> <li>- environmental impact and possible solutions discussed with considerable effectiveness</li> <li>- reflection discusses required components with considerable detail and effectiveness</li> <li>- uses mathematical language, symbols, visuals, and conventions correctly most of the time</li> </ul>	<ul style="list-style-type: none"> <li>- graphs are included, displayed, and analyzed with a high degree of effectiveness</li> <li>- environmental impact and possible solutions discussed with a high degree of effectiveness and extra insight</li> <li>- reflection exceeds required components and discusses a high level of detail and effectiveness</li> <li>- routinely uses mathematical language, symbols, visuals and conventions correctly and efficiently</li> </ul>
<p><b>Application</b></p> <ul style="list-style-type: none"> <li>- Graphing and creation of algebraic math models (M2 #2 and 3)</li> <li>- survey creation (M3 #2) (7-15 questions, open/closed, &gt;1 type of data, demographic data)</li> </ul>	<ul style="list-style-type: none"> <li>- graphing and creation of algebraic math models completed with limited effectiveness</li> <li>- survey meets required criteria with limited effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>- graphing and creation of algebraic math models completed with some effectiveness</li> <li>- survey meets required criteria with some effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>- graphing and creation of algebraic math models completed with considerable effectiveness</li> <li>- survey meets required criteria with considerable effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>- graphing and creation of algebraic math models completed with a high degree of effectiveness</li> <li>- survey meets required criteria with a high degree of effectiveness</li> </ul>