

## AP Calculus BC Unit 1 Kaleidoscope Review Rubric

The Unit 1 Kaleidoscope Review Project is a unique strategy to assist students in learning how to interpret math. This method will also give students a chance to think and internalize previous knowledge and newly acquired concepts.



1. Each class will create a “Clean and Legal” 10 – minute mathematical presentation.
2. There will be 6 **groups** that cover the Unit 1 concepts.
3. Each group will use the “Wheel Decide” to select presentation topics from the list below:

Separating the Variables/Differential Equations	Integration by Parts	Implicit Differentiation
Euler’s Method	Slope Fields	Functional Growth Rate
Integral Review	Partial Fractions	Limit Techniques – (u-sub, trig sub, quadratic/completing the square, & trig inverse)
Logistic Growth	L’Hopital’s Rule	Particle Motion









4. (Circle the two selected topics for each group.)
5. After each presentation, the class will rank the presentations.
6. Each group will make an engagingly creative 10 minute presentation.

### 7. Grading Scale:

30 pts	Math Concepts
20 pts	Creativity & 2 Technological links uploaded to the Google Doc by <b>Feb 13<sup>th</sup></b>
20 pts	Oral Presentation. Organization, & Time Management (5 - 10 pts deducted for over or under usage of group’s time limit)
10 pts	Teamwork /Group Participation / Class Involvement
10 pts	Group Ranking (10, 8, 6, 4, or 2 pts)
10 pts	Promptness – on time, meeting due date, technological readiness, adequate presentation pace – due <b>Feb 12<sup>th</sup> = Upload Link(s) &amp; Feb 13<sup>th</sup> = Presentation</b> )

8. Each group will demonstrate the mathematical concepts that are in pre-selected topics in a creative, informative, and engaging oral presentation.

(Keep in mind the following Learning Styles, Learning Pyramid Techniques, & 21<sup>st</sup> Century Skills.)

Learning Styles					
Verbal / Linguistic	Logical / Mathematical	 <b>Nature Smart</b> <i>(Naturalist)</i>	 <b>People Smart</b> <i>(Interpersonal)</i>	 <b>Number Smart</b> <i>(Logical/Mathematical)</i>	 <b>Picture Smart</b> <i>(Spatial/Visual)</i>
Visual / Spatial	Bodily / Kinesthetic				
Musical / Rhythmic	Intrapersonal				
Interpersonal	Naturalist				
9. Good Luck & Have Fun!		 <b>Self Smart</b> <i>(Intrapersonal)</i>	 <b>Body Smart</b> <i>(Bodily-Kinesthetic)</i>	 <b>Music Smart</b> <i>(Musical)</i>	 <b>Word Smart</b> <i>(Linguistic)</i>

Learning Pyramid (Retention Rates)	
<i>Lecture</i> 5%	<i>Demonstration</i> 30%
<i>Reading</i> 10%	<i>Discussion Group</i> 50%
<i>Audio-Visual</i> 20%	<i>Practice by Doing</i> 75%
<i>Teach Others/Immediate Use of Learning</i> 90%	
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21 <sup>st</sup> Century Skills	
<i>Creativity</i>	<i>Critical Thinking</i>
<i>Communication</i>	<i>Collaboration</i>

