Calculus

Year	Development	Grade	Overview
2000	Geometer's Sketchpad and Related Rates	Calculus	Students will explore a classic related rates problem using the Geometer's Sketchpad animation. They will develop an intuitive understanding of the derivatives in the problem by examining ratios in the geometry problem. The idea of direct variation also plays an important role.
1998	More Pressure, More Work	Grades 11-12	This lesson will model the effect of changes in volume and pressure on the amount of work accomplished in a closed system and demonstrate an application of the fundamental theorem of calculus.
1998	Newton's Law of Cooling	Grades 11-12, Calculus AB and BC	Students will explore Newton's Law of Cooling experimentally using the CBL. Additionally, they will explore the mathematical model for Newton's Law of Cooling using Euler's Method.
1996	Distance, Velocity, Acceleration	Grades 11-12, Calculus	Students will use the ultrasonic motion detector to generate a time versus distance graph of an object dropping.
1996	Locating Information for Calculus Teachers	For Teachers	A major challenge for teachers today is to educate students to use and understand the tools of the 21st Century.
1995	Cooling It with Calculus	Grades 9-12, Calculus	Students will use a temperature probe along with the Calculator Based Laboratory and temperature programs in the TI-82 graphics calculator to determine an equation for the rate of cooling water.