

# National Council of Teachers of Mathematics: Correlation to TimeMAPS™ Themes & Lessons

Principles and Standards for School Mathematics	Correlates to TimeMAPS Theme(s):	Correlates to TimeMAPS Lesson(s):
Algebra: Analyze change in various contexts - Increasingly, discussions of change are found in the popular press and news reports. Students should be able to interpret statements such as “the rate of inflation is decreasing.” The study of change in grades 9–12 is intended to give students a deeper understanding of the ways in which changes in quantities can be represented mathematically and of the concept of rate of change.	3,8,9,13	3.3-3.5, 8.2-8.4, 9.1-9.6, 13.1-13.6
Number and Operations: compute fluently and make reasonable estimates	4,6,7,8,9,12,13	4.1-4.3, 6.1-6.5, 7.1-7.3, 8.1-8.4, 9.1-9.6, 12.1-12.5, 13.1-13.6
Problem Solving: solve problems that arise in mathematics and in other contexts	4,6,7,8,9,10,11,12,13	4.1-4.3, 6.1-6.5, 7.1-7.3, 8.1-8.4, 9.1-9.6, 10.1-10.3, 11.1-11.5, 12.1-12.5, 13.1-13.6
Problem Solving: apply and adapt a variety of appropriate strategies to solve problems	4,6,7,8,9,10,11,12,13	4.1-4.3, 6.1-6.5, 7.1-7.3, 8.1-8.4, 9.1-9.6, 10.1-10.3, 11.1-11.5, 12.1-12.5, 13.1-13.6
Connections: recognize and apply mathematics in contexts outside of mathematics.	4,6,7,8,9,10,11,12,13	4.1-4.3, 6.1-6.5, 7.1-7.3, 8.1-8.4, 9.1-9.6, 10.1-10.3, 11.1-11.5, 12.1-12.5, 13.1-13.6
Representation: use mathematical models to represent and understand quantitative relationships - Modeling involves identifying and selecting relevant features of a real-world situation, representing those features symbolically, analyzing and reasoning about the model and the characteristics of the situation, and considering the accuracy and limitations of the model. High school students should study modeling in greater depth, generating or using data and exploring which kinds of functions best fit or model those data.	4,6,7,8,9,10,11,12,13	4.1-4.3, 6.1-6.5, 7.1-7.3, 8.1-8.4, 9.1-9.6, 10.1-10.3, 11.1-11.5, 12.1-12.5, 13.1-13.6