

1135-VF-1107 **Elizabeth W. Fulton*** (elizabeth.fulton@montana.edu), Department of Mathematical Sciences, Montana State University, P.O. Box 172400, Bozeman, MT 59717-2400. *Ways that the mathematical modeling cycle differs for different grade levels.*

Mathematical modeling is encouraged in grades K-12 by reports and standards such as CCSSM and the GAIMME report. The process of mathematical modeling is often described with various components, such as Make Assumptions and Define Variables. This talk will describe qualitative case study research that studied four elementary teachers and their implementation of mathematical modeling in classrooms. I will describe how many components of mathematical modeling were present in elementary classrooms, but how some components differed from description in the literature. I propose that young students ask clarification questions, which is related to, but different from, making assumptions and defining variables. (Received September 19, 2017)