1046-Z1-1779 **Heather Cavell** (hcavell@email.arizona.edu), CEMELA Central Office, Dept. of Mathematics, University of Arizona, 617 N. Santa Rita, Tucson, AZ 85721, **Liana Dawson** (ldawson@math.arizona.edu), CEMELA Central Office, Dept. of Mathematics, University of Arizona, 617 N. Santa Rita, Tucson, AZ 85721, **Kathleen Ross** (ross3141@email.arizona.edu), CEMELA Central Office, Dept. of Mathematics, University of Arizona, 617 N. Santa Rita, Tucson, AZ 85721, and **Belin Tsinnajinnie*** (belin@math.arizona.edu), CEMELA Central Office, Dept. of Mathematics, University of Arizona, 617 N. Santa Rita, Tucson, AZ 85721. *Bilingual and English language learners understanding and solving mathematics problems.* Preliminary report.

English Language Learners confront immense cognitive demand in meeting the linguistic demands of mathematical tasks, and in negotiating the demands of academic language in mathematics class. To be adequately prepared for college preparatory mathematics coursework in middle school and high school, academic language used in the context of mathematical discourse offers benefits and challenges for all students, but also requires consideration of the additional cognitive demands for students with linguistic needs. In this study, students were given items modified from the National Assessment of Educational Progress (NAEP) mathematics assessment. A task-based interview protocol was used to investigate students' understanding of the problems and their solution strategies, and provide opportunities to ask questions about problem wording. We will discuss the preliminary findings from interviewing 7 sixth graders. Language usage and preference data will inform analysis of the variability of experiences depending on level of English language acquisition, using grounded theory and constant comparison qualitative methods. (Received September 16, 2008)