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**Coordinating units at the candy depot.**

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Summary: In general, units coordination refers to the relationships that students can maintain between various units when working within a numerical situation. It is critical that middle school students learn to coordinate three levels of units not only because of their importance in understanding fractions but also because of their implications for multiplicative reasoning and algebra readiness. Students begin coordinating units and developing multiplicative reasoning while learning about whole numbers. Students can then reorganize these units coordinations in establishing knowledge of fractions and algebraic reasoning. In middle school, educators can expect to find students coordinating units at any of three stages, depending on the number of levels of units they can coordinate at once. In this article, the authors describe how they used variations of a bars task to assess students' stages of units coordination. Using the CandyDepot app, an educational game designed by the Learning Transformation Research Group at Virginia Tech, they adapt the bars task to involve other contexts involving three levels of units. The context involves placing candy bars into bundles and placing bundles into boxes. CandyDepot is an educational game designed to address the critical need for students to develop units coordination. With proper implementation – including opportunities for reflection and discussion – teachers can use the app to support students' units coordination activity across multiple contexts, including fractions knowledge and multiplicative reasoning. (ERIC)

*Classification:* F43 U73

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<http://www.nctm.org/Publications/Mathematics-Teaching-in-Middle-School/2015/Vol21/Issue5/Coordinating-Units-at-the-CandyDepot/>