



Activity 11.1 BUILD IT AND BREAK IT



Select a problem such as 23×18 . Use base-ten blocks or grid paper to build the corresponding area model. Then, have students show and record as many ways as possible to “slice” the array into pieces. For example, they could cut the array into $23 \times 10 + 23 \times 8$. What other vertical or horizontal slices can be made? What property does this link to? Before launching the activity, provide students, particularly ELLs, a labeled visual of an area model that includes the terms *array*, *area model*, *slice*, *vertical*, and *horizontal*. In wrap-up discussion, be sure to focus on the vocabulary of the key concepts (*distributive property*, *decompose*, *strategy*, etc.).

From Van de Walle et. al. (2014). *Teaching Student-Centered Mathematics Grades: Developmentally Appropriate Instruction for Grades 3 – 5* (2nd Ed.). Toronto: Pearson Education, Inc. (p. 145).