Background

For the past three weeks, the students in room 22 have been introduced to the operations of multiplication and division, a unit that has been complemented by my simultaneous unit on multiplication word problems. Pedagogically, Patty believes that multiplication and division must be taught at the same time; likewise, we have combined our study of the pure mathematical operations of multiplication and division with the practice of word problems. Throughout, we have focused on employing several models to show our thinking instead of relying on math facts or recitation of the multiplication table to arrive at an answer. Additionally, we have employed discussions to practice using words in order to explain how we achieved a certain answer to a problem.

To support student fluency with word problems, we have scaffolded their learning in several ways:
1. An early introduction to math vocabulary and constant refreshers of these new words.
2. A reintroduction to the same word problem strategies we employed with addition and subtraction word problems.
3. A graphic organizer and chart to display these supports.
4. A lesson and discussion on student-developed reasons as to why we choose certain operations.
5. Constant modeling of how to employ the number line, arrays, and equal groups.
6. Extensions that demand the students go deeper instead of simply answer more questions of the same difficulty that they have demonstrated that they can complete quickly.
7. The use of both ability level groups and heterogeneous groupings.

Focus of the Learning Activity

The focus of the learning activity of this lesson is a certain number or multiple. Student pairs will receive a packet that centers either on the number 3, 5, 6, or 7, based on their ability level. Each packet revolves around the same theme of a thanksgiving party; however, the ability level groups are organized to ensure that students are tasked to manipulate factors, products, and quotients that are appropriate for their development. High-flyers will be working with the multiple 7, while less confident students will be working with the easier multiple of 5. Two pairs will be working on the multiple 3 with Patty so that she may assist with decoding the English that they will undoubtedly struggle to read independently. Given that this lesson falls at the very end of my unit, the packet requires that students employ a variety of multiplicative and division skills.

Undoubtedly, you will notice student preference for certain models or even simply using their knowledge of the facts to solve instead of “showing” how they got the answer. However, all students will be able to
- Demonstrate their ability to manipulate a given multiplication fact;
- Decode word problems and correctly produce a number sentence and product or quotient;
- Express the flexibility of their understanding by answering extensions that modify the original question or require a slightly different task be completed.

We will achieve these goals by reviewing our vocabulary, models, and strategies, working in carefully-selected ability pairs, and debriefing that will allow reflection and growth.