

## Lesson Inquiry Lesson Pathway and Notes:

### Things we value as a teachers:

- Make math meaningful
- Help students identify as learners, readers, mathematicians, do-ers...
- Develop positive relationships with kids.
- Students interacting and cooperating on learning opportunities.
- Students using manipulatives as a tool.
- Students using academic vocabulary.
- Students focused on a worthwhile learning task.

### Lesson on Common Factors:

**Objective:** Students will be able to find common factors of numbers.

#### **Into:**

- “Write as many numbers as you can that have a factor of 6.”
- Students write responses on white boards.
- (Anticipate the misconception:  $2 \times 3 \dots$  What question did this answer?)
- Ask students: How do you know that 6 is a factor for your number? Turn to your elbow partner.
- Share as a whole group. Review vocabulary as necessary.

#### **Thru:**

- Write about 5 student responses on the board.
- “We’ve been practicing finding factors of numbers. What are the factors for each of these numbers? Are there any patterns?”
- Students work in pairs/groups to write the factors (in an ordered list?).
- “What do we notice about the lists of factors for these numbers?”
- Possible answer: They all have 6 as a factor. They all have 2 and 3 as a factor. Greater numbers have more factors. Even numbers can have lots of factors.
- Talk about common factors. Circle them.

#### **Beyond:**

Find the common factors for:

12 and 16 (for struggling students), 15 and 45, 64 and 96 (for stronger students)

Word Problem :

For our next field trip, we need to divide all the 4th grade classes into equal groups. Ms. Argueta has 24 students, Ms. Munoz has 28 students, and Mrs. Alvarado has 32 students. How big can the teachers make the groups if each group of students is the same size? What other sized groups can they make?