Build and Compare

Strand: Number and Number Sense

Topic: Comparing two sets using the terms *more, fewer*, or the *same as* (*equal to*)

Primary SOL: **K.NS.2 The student will identify, represent, and compare quantities up to 30.**

f) compare two sets containing up to 30 concrete objects or pictorial models, using the terms more, fewer, or the same as (equal to).

Related SOL: K.NS.1

Materials

- Number cards for each pair of students (attached below)
- Linking cubes (at least 30 cubes for each pair of students)

Vocabulary

more, *fewer*, *same*, *equal to*, *same as, bigger*, *smaller*, *one (1), two (2), three (3), four (4), five (5), six (6), seven (7), eight (8), nine (9), ten (10), eleven (11), twelve (12), thirteen (13), fourteen (14), fifteen (15), sixteen (16), seventeen (17), eighteen (18), nineteen (19), twenty (20), twenty-one (21), twenty-two (22), twenty-three (23), twenty-four (24), twenty-five (25), twenty-six (26), twenty-seven (27), twenty-eight (28), twenty-nine (29), thirty (30)*

Student/Teacher Actions: What should students be doing? What should teachers be doing?

1. Share number cards 1 to 30 with students. Discuss the ten frames on the cards as well as the numerals. Ask them to tell you something about each number shown. Using 10 as an example, students might count the number of fingers they have or point out that 10 is a number bigger than six. Try a few different numbers to get students talking and sharing what they know about each number.
2. Have two students hold up different number cards and compare their numbers. Ask, *"Which has more/fewer dots? How do you know?"*
3. Teach students the game of "Build and Compare." Shuffle a deck of cards and deal the cards evenly between the two players (face down in two piles). Players say in unison, "1, 2, 3, compare," as each turns over the top card.
4. Each player states their number. "I have ____." and "I have ___." Then the players call out, "Build it!" and use linking cubes to build a tower to represent their numbers. After the towers are built, the two players compare their towers and their numbers using *more*, *fewer*, and *same (equal to)* vocabulary. For example, "Six cubes are more than four cubes" and "Four cubes are fewer than six cubes." The two number cards are then put into the used pile and another set is drawn. The game ends when all the cards have been compared. Shuffle and play again.
5. As students play, ask them to reflect on whether the dots on the cards match the number of cubes in the tower. Also ask them how they know if their tower has more cubes or fewer cubes than their partner.

6. To provide closure to the activity, bring the students back together. Ask some of the following questions: *Did you and your partner ever have towers that had the same number of cubes? What did your towers look like when they were the same? How did you feel when your tower had more (fewer) cubes than your partner? If one person had more cubes in their tower, what comparing word describes the other person's cubes?*

Assessment

- **Questions**
    - How do you know whether one tower has more (or fewer) than another?
    - If I have a tower of twelve cubes, and you have a tower that shows the same, how many cubes are in your tower?
    - What do you notice about the two towers?
- **Journal/writing prompts**
    - Draw a picture of two different cube towers. Write "M" below the tower that has more cubes. Write "F" below the tower that has fewer cubes.
    - Draw two cube towers that each have the same number of cubes.
- **Other Assessments**
    - Have students make more/fewer/same (equal to) collections based on a number. For example, if the student's number is 14, they would make a pile of counters to show more than 14, a pile to show fewer than 14, and a pile to show the same as 14.
    - Have students use dot cards or dominoes to find pairs that show the same quantity. You could also have students find a card that shows a quantity that is more than or fewer than a quantity shown on a given card.

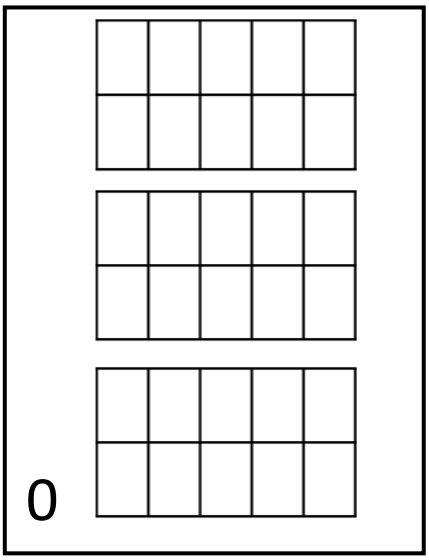
Extensions and Connections (for all students)

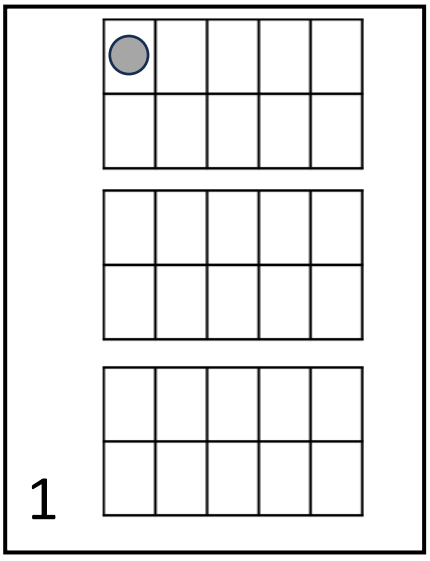
- Try the game with three partners instead of just two to give students practice when comparing three numbers.

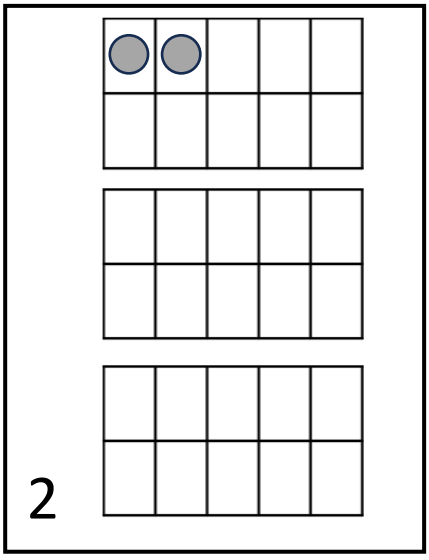
Strategies for Differentiation

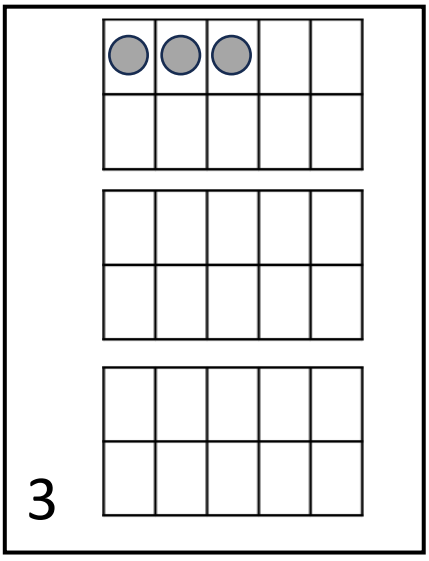
- Provide grid paper for drawing cube towers to help students keep the size of their cubes consistent.
- Sentence frames can be used when asking students to form responses.
- Students may work with the teacher if they need more assistance while playing the game.
- For students who are not yet ready to compare through 30, use a smaller range of cards.

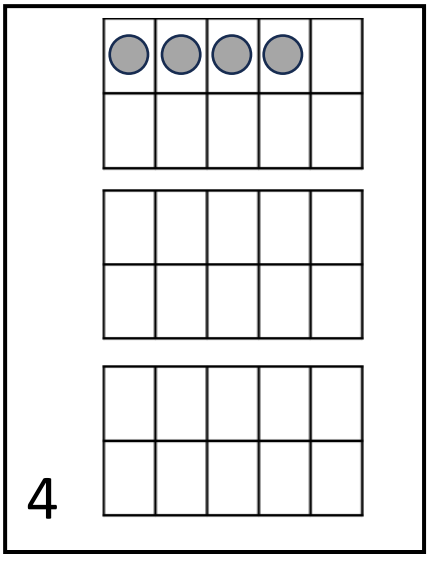
Note: The following pages are intended for classroom use for students as a visual aid to learning.

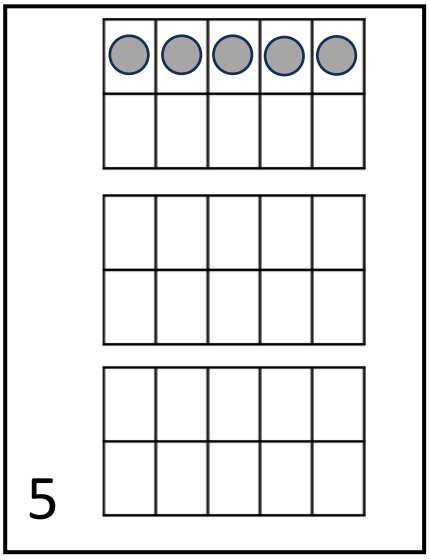

0

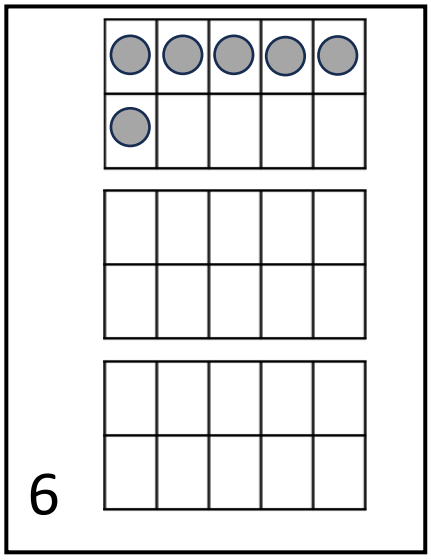

1

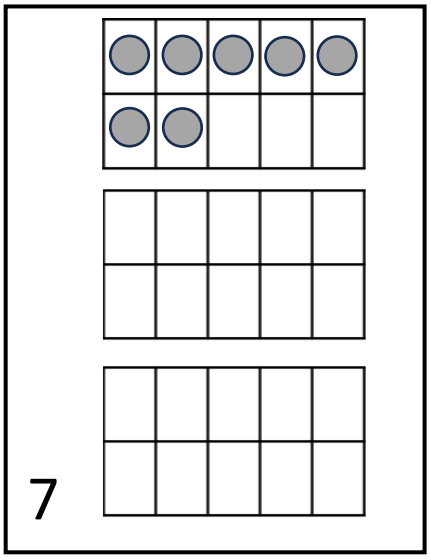

2

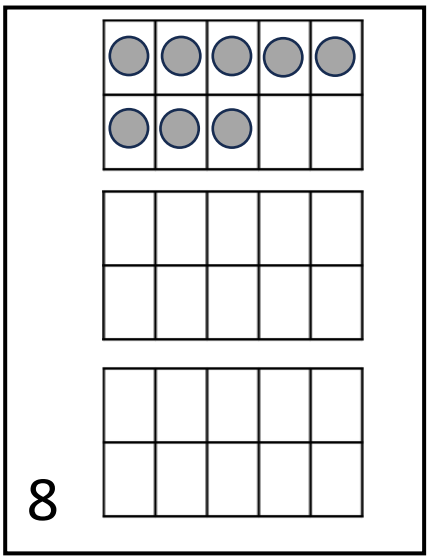

3

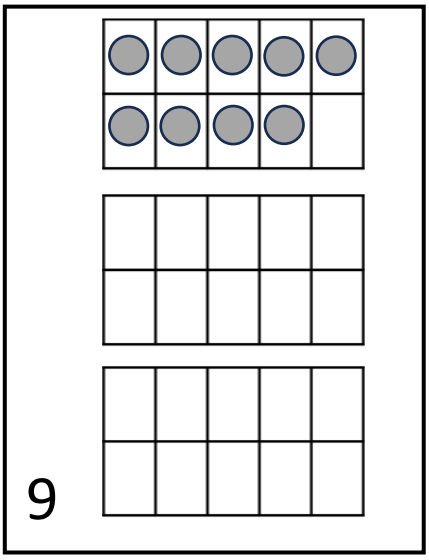

4

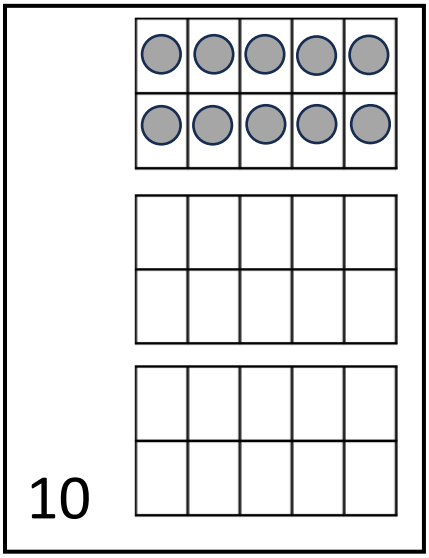

5

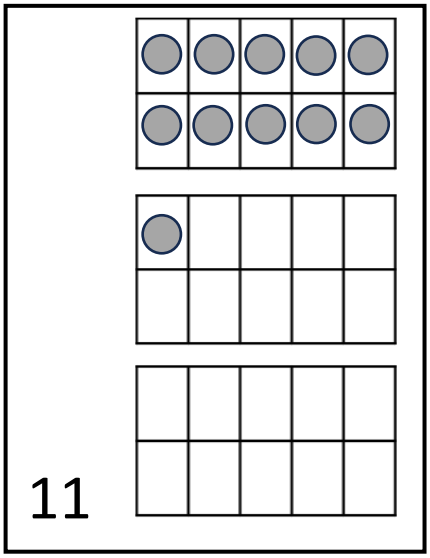

6

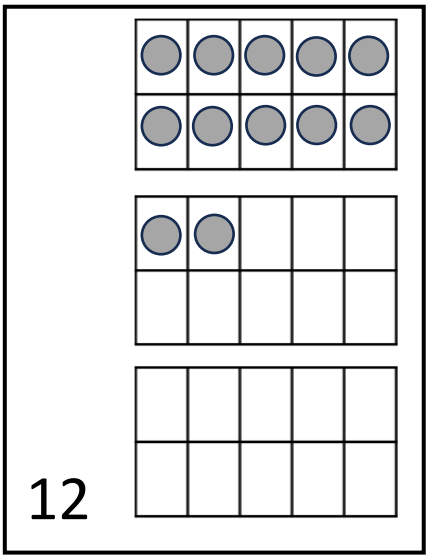

7

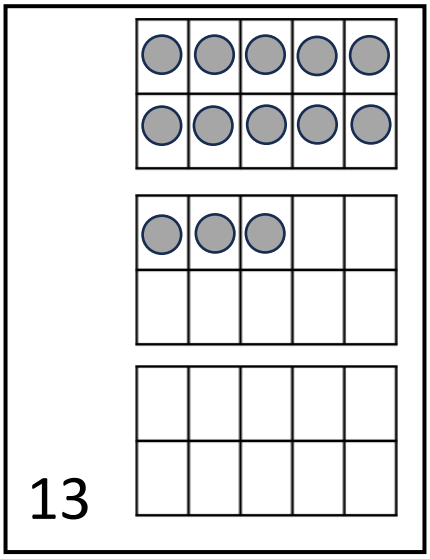

8

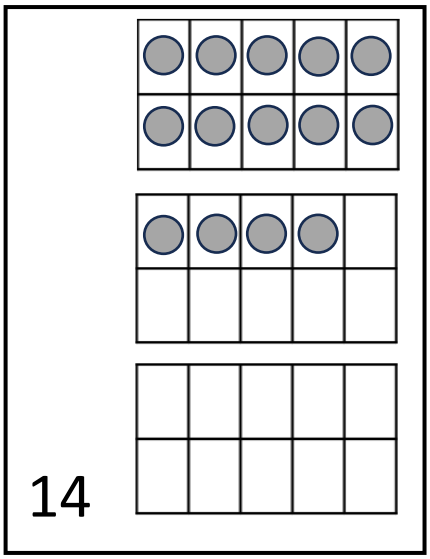

9

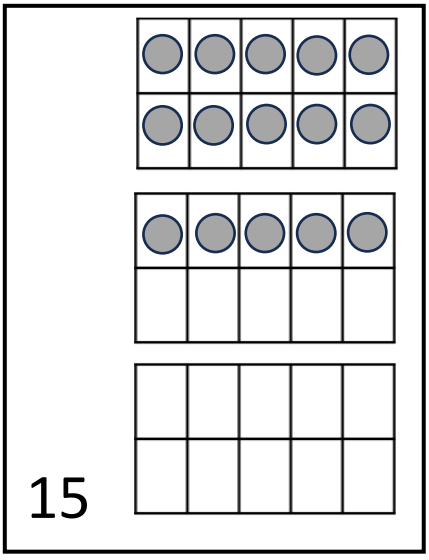

10

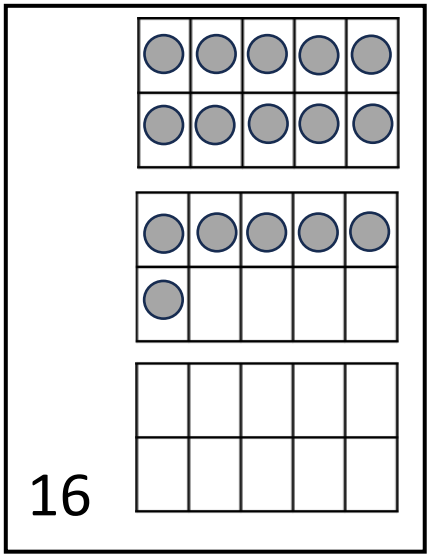

11

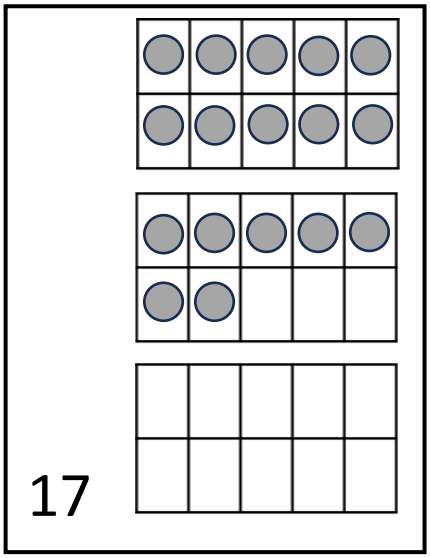

12

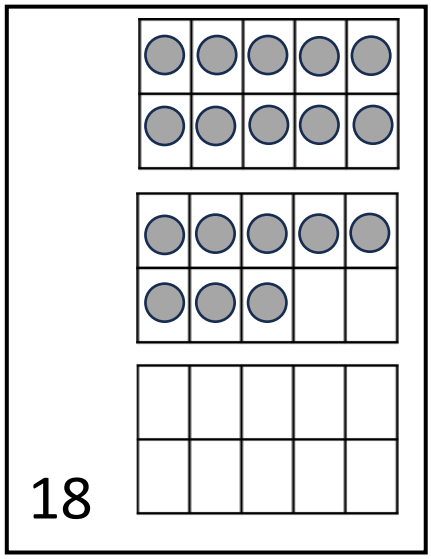

13

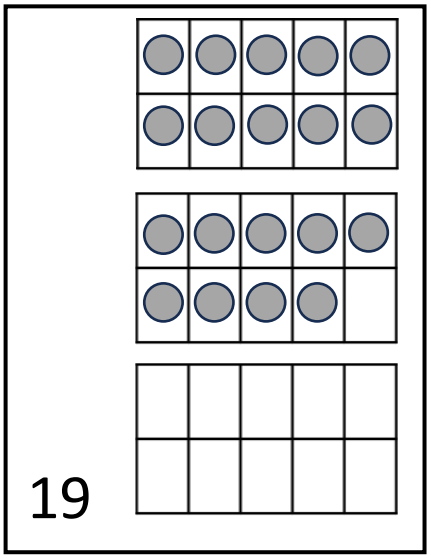

14

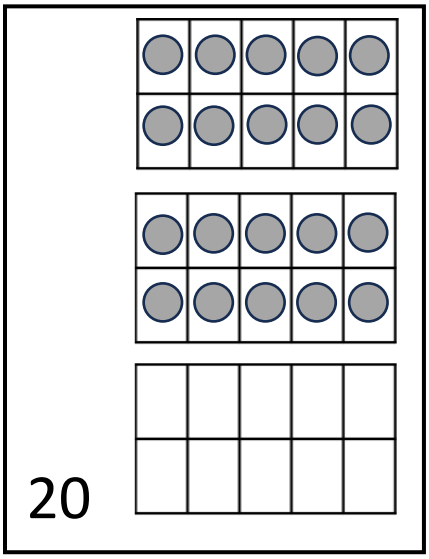

15

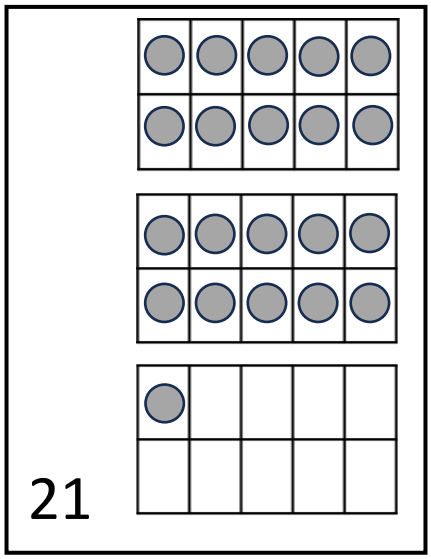

16

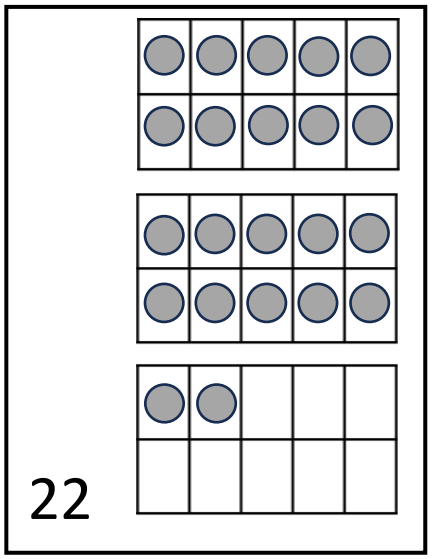

17

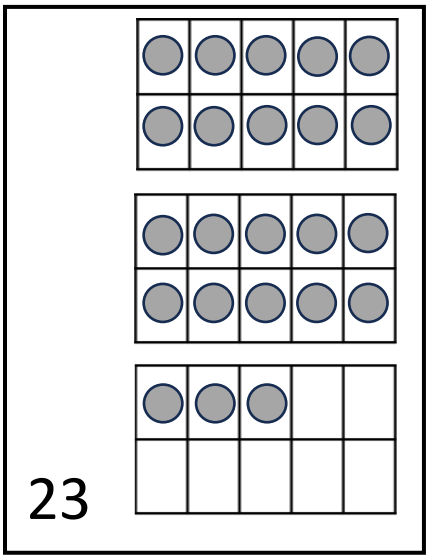

18

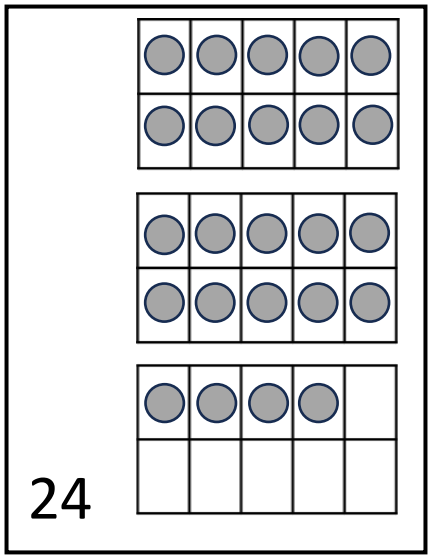

19

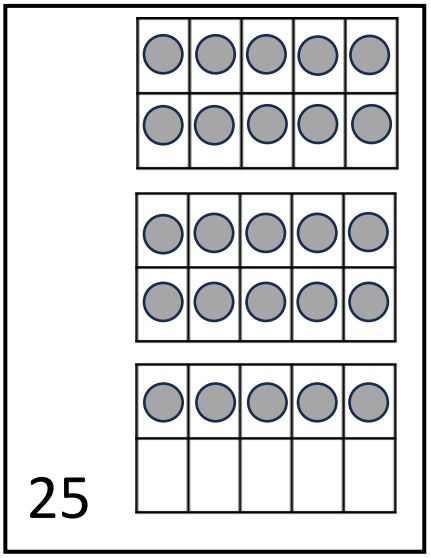

20

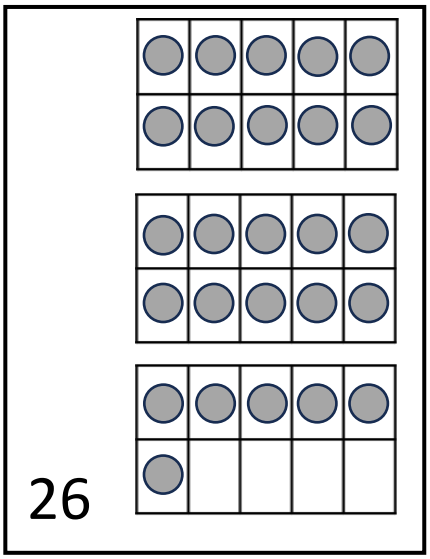

21

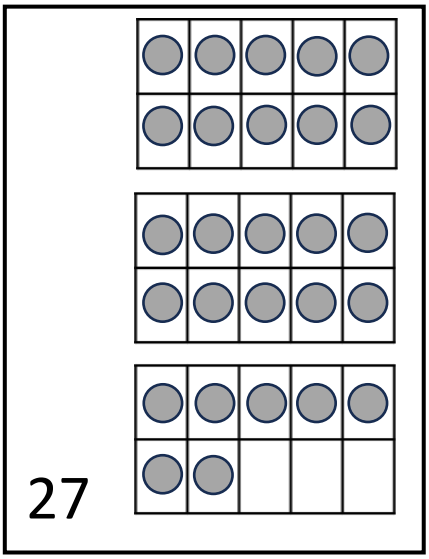

22

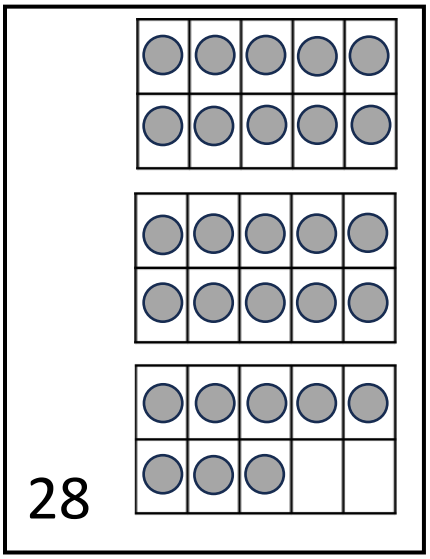

23

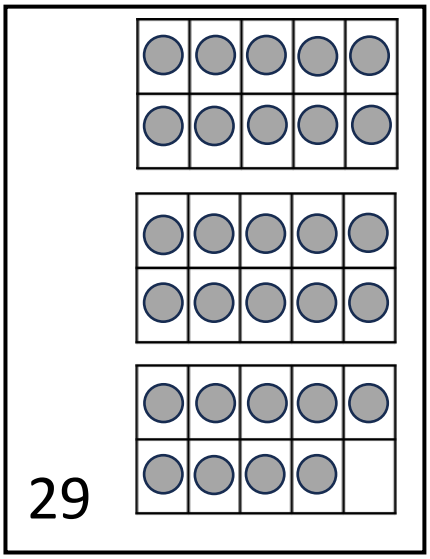

24

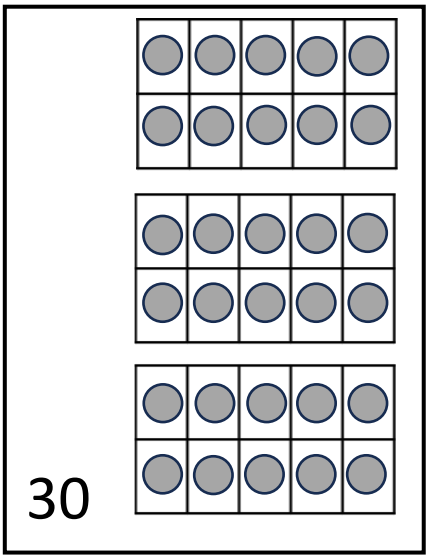

25


26


27


28


29


30