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TSL4943

Academic Language Development Lesson Plan/Unit and Parent Involvement Strategies

Content area: Math, fractions

Lesson title: Understanding and Creating Fractions

English language proficiency: 4 intermediate (plus six native English speakers)

Grade level: 3rd

Sunshine State Standards and Benchmarks:

- *CCSS.Math.Content.3.G.A.2:* Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.
- *MA.3.FR.1.1:* Represent and interpret unit fractions in the form $1/n$ as the quantity formed by one part when a whole is partitioned into n equal parts.

Content objective:

Students will be able to (SWBAT)...

- Deepen their understanding of the concept of fractions through using manipulatives, the pattern blocks. They will connect these manipulatives to word problems and equations and be able to visualize how fractions are formed.

Language objective:

SWBAT...

- Use key vocabulary (fractions, pattern blocks, partition, area model, unit fraction) to describe the formation of fractions using pattern blocks, and how each unit is used to represent a different fraction of a whole.

- Define and represent fractions in the form of $\frac{1}{n}$ as the quantity formed by one part when a whole is partitioned into n equal parts.
- Explain to a partner or write under equations the breakdown of pattern blocks to represent a fraction of a whole number.

Materials (attach any clip art files, handouts, or other print materials you reference in the lesson): pattern blocks (physical manipulatives), white boards and markers, [task cards](#)

Length of lesson: 1 hour

Procedures:

- Motivation (introduction/activating background knowledge)
 - Warm Up Questions – open class discussion about what a whole number is and what is a fraction; recall decimal numbers and their relation to fractions.
- Presentation (presentation/providing input)
 - Review the objectives of the lesson with the students and introduce them to using pattern blocks. Have them practice sorting the shapes out and putting different shapes together to make a hexagon. Explain to the students that they will be given different fractions that they must then use the pattern blocks to represent said fraction, and vice versa, by creating fractions using the pattern blocks and writing the fraction that was formed.
- Practice/application (guided practice/interaction)
 - The beginning of the lesson will be whole group instruction, with the teacher writing fractions at the front of the classroom and the students arranging their pattern blocks to represent that fraction. Then, the students will be broken up into pairs, where the students will alternate between giving fractions and representing

those fractions through pattern blocks. The teacher will rotate around the classroom and may work one-on-one with some students who may have difficulty with the lesson.

- Review/assessment (evaluation/output)
 - Distribute task cards to students and have them solve the equation on the task card given. When they are done, they will raise their hand for the teacher to come to them and evaluate their solution to check if it is right or not. Provide enough time for all students to answer the task card equation and evaluate their performance to see if they understand the lesson objectives.
- Extension (follow-up activities)
 - At the next class, have students use the pattern blocks again to arrange them into different fractions that the teacher will write on the board (warm up activity).

Instructional technology: [Build a Fraction website](#), [Seashell Fractions game](#)

Rationale: Both Broward and Orange County have large populations of foreign-born persons and households where another language other than English is spoken. Respectively, foreign-born persons make up 34.8% and 22.3% of the population of these counties. Further respectively, households where another language other than English is spoken make up 41.9% and 37.5% of the population of these counties. Because of the large number of foreign-born and non-English speaking populations in these counties, it is important to create lesson plans that are accessible to ELLs, with adaptive and understandable vocabulary and the usage of visual and tactile manipulatives for understanding the lesson objective. Accordingly, over 88% of all households in Broward and Orange County have a computer and a broadband Internet subscription, which

allows families to be able to use these technology-based games for their children to practice what they've learned in the lesson at home and with their parents.

Parent involvement strategies: Instruct their children to use the website [Build a Fraction](#) or [Seashell Fractions game](#) to practice their familiarity with understanding and creating fractions at home. This is a game where they can collect stars and level up through engaging activities.

Parents can work with their children to create different fractions in the lab and complete activities together.