



Using the LAP strategy to Teach Addition and Subtraction of Fractions. Lesson I

Objective: To teach students to solve addition and subtraction problems involving fractions.

Setting and Materials:

Settings: Special Education Resource Classroom

Materials:

- Notecards of Fractions
- Notecards with the letters L, A, P on them.
- Notecards for Zap game (16 cards, 5 with the letter L, 5 with the letter A, 5 with the letter P, and one that says Zap)
- Paper
- Pencil
- Dice

Content Taught

Teach students to use a mnemonic strategy to add and subtract fractions.

Teaching Procedures

1. *Pair students by ability level for this lesson.*
2. *Introduce the strategy to students in a whole group setting.*
3. *Provide each pair of students with an index card with the mnemonic strategy listed on it.*
 - a) *(L) Look at the denominator and sign.*
 - b) *(A) Ask yourself a question "Will the smallest denominator divide into the largest denominator an even number of times?"*
 - c) *(P) Pick your fraction type.*
4. *Use guided practice and read aloud the steps with the students.*
5. *Tell students to read aloud the steps individually in their pairs.*
6. *Each pair of students works together to practice each letter of the LAP mnemonic. They can play either LAP Fraction Baseball or Zap.*
 - a) *LAP Fraction Baseball*
 - 1) *Students pick up a card from their stack that have a letter printed on it (L, A, or P)*
 - 2) *Based on the letter on their card, they state the meaning.*

- 3) *If they answer correctly, the student rolls a dice. If they roll a 1 or 2 they get a single, 3 or a 4 a double, 5 triple, and 6 they are out.*
 - 4) *If they answer incorrectly, the student is given an out.*
 - 5) *Students play until they get three outs.*
 - 6) *The payer with the most runs at the end of the game wins.*
- b) *Zap*
- 1) *Zap cards are used for this game (16 cards: 5 with the letter L, 5 with the Letter A, 5 with the letter P, and 1 with Zap on it)*
 - 2) *Shuffle the cards and place them in the middle of the table.*
 - 3) *Set a timer for 30 minutes.*
 - 4) *Students take turns drawing cards from the stack.*
 - 5) *Students tell what the letter on the card they choose stands for.*
 - 6) *If they answer correctly they get to keep the card.*
 - 7) *If they answer incorrectly they put the card back.*
 - 8) *If they draw the Zap card, they have to put all of their cards back.*
 - 9) *When the timer sounds the student with the most cards wins.*
7. *Check to see if each pair of students can state the LAP Fractions strategy correctly.*
 8. *Give each pair students' flash cards with fractions on them.*
 9. *Each pair practices together using the LAP strategy to identify the denominator of the fractions on the flashcards.*
 10. *The pairs practice this for 30 minutes.*
 11. *At the end of the 30 minutes, pull each student individually and give them an 8 item LAP Fractions Strategy Test.*
 12. *Give each student the test until they reach 100% mastery.*
 13. *Move to Lesson 2.*

Evaluation

An 8 item LAP Fractions strategy test

Lesson Plan Based on:

Test, D.W., & Ellis, M. F. (2005). The effects of LAP fractions on addition and subtraction of fractions with students with mild disabilities. *Education and Treatment of Children*. 1, 11-24

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