

Box Cars & One-Eyed Jacks

Mathletics

Math Games Workshop Aug. 11&12

Review & Summary

- Presenter – John Felling
- Website documents
 - www.boxcarsandoneeyedjacks.com
 - www.members.shaw.ca/JohnFelling

Based on July 2008

Washington Math Standards.

Math Games Are Effective Teaching

- Engaging
- Forgiving / Non-judgmental (don't talk down)
- Activate more portions of the brain than do traditional paper/pencil activities
- Provide repetition necessary for mastery

To Get The Most Out Of Math Games

1. Have students work in pairs or small groups (talking activates the: listening, socializing, processing, verbalizing portions of the brain)
2. Level the game by leveling the manipulatives.
 - Use higher/lower value cards or dice to raise or lower difficulty
 - Adjust rules/variations to make the math more complex/less complex as required by the students' needs.

To Get The Most Out Of Math Games (continued)

3. Pair similar students when speed is a factor
4. Pair dissimilar students when speed not a factor
 - One student gains increased understanding when having to explain game or strategy to another
 - Sometimes having something explained by a peer is clearer than when explained by an adult

To Get The Most Out Of Math Games (continued)

5. Have students record their work
6. Have students “jot-note” the basics of the games for future reference
7. Have students explain
 - What their strategy was and what the math was behind the strategy
 - How to make game fair in a lop-sided situation

To Get The Most Out Of Math Games (continued)

8. Help the behaviorally challenged student learn strategies for “staying in the game”.

- These types of students are often the ones who benefit from/need these types of activities.

Why Cards and Dice

- Tactile (they have a “feel” to them)
- Provide opportunities to move and re-arrange that doesn't require “erasing and redoing”
- Provide visual cues beyond just the number
 - symbols on the manipulative give a visual (pips vs numerals)

What's Next?

- Pick a game to use within the first week
 - Need to start somewhere
- Find a colleague to compare how things “went” and to share ideas
 - Don't do it alone
- Have Fun With It!