



Singapore Math with Dawn Swartz

Lesson 6: The Value of Math Games; Sample Games

Outline:

Math Games

- “Good morning, class! Today we are going to play a game!”
- Some of the games help the students to draw conclusions on their own and also bring delight.
- Schedule games into the time when you are teaching math (hopefully 60 minutes for teaching Singapore Math).
- The games are good for understanding place value
- Materials for most games: **A deck of playing cards, keep the aces, remove the face cards (or purchased number cards, which includes a 0 in the deck)**



Math Games that Require Few Materials

- Games about Making Ten – First & Second Grade Teachers
 - **Go Fish, Making Ten (6:00)**
 - Materials: **deck of cards**
 - Purpose: Make 10 from your hand
 - Rules for Play:
 - Each player is dealt 5 cards.
 - Keep the remainder of the cards as a “Fishing Pile”
 - Lay down a card or cards that make 10.
 - Winner: The child with the most make 10 pairs at the end of the game.
 - **Around the World (7:50)**
 - Materials: **ten frame cards**
 - Purpose: Make ten using ten frame cards
 - Rules for Play:
 - Ask what number is needed to make 10 on the card.
 - You can also ask students what you need to make 20.
 - Winner: The child who has the most cards when the deck has been used up wins the round.
 - This game can provide movement and interaction.



- **Idea:** Line children in front of the teacher in two rows. The teacher holds a card and the students try to answer first. The students move to the back of line for the next pair.
- **Idea:** Play around the world or game with two lines with **number bond cards (17:00)**.
- **Playing War (13:15)**
 - Materials: deck of cards
 - Purpose: Recognize numbers that make 10.
 - Rules for Play:
 - All the cards are dealt out to 2 players.
 - Each player places their first cards on the desk.
 - The person who has the highest value on the card takes the cards.
 - *When you get a set a cards laid down that add to 10, declare war!*
 - **Other version for practicing math facts:** *Each player places two cards down and they have to multiply the numbers to see who has the highest answer. You can also do this with sums.*
 - Winner: The child who gets all the cards wins.
 - This is played in first or second grade, or higher grades with new students.
- **Linking Cube Carousel Game (19:30)**
 - Materials for each station:
 - Bag filled with a predetermined number of **linking cubes**.
 - Label each bags with a number (for reference to how many are in each bag).
 - In advance, make a sheet for the group to write down in columns how many 10s and how many 1s and what is the value of each of these columns. What is the total value? You could spell out number words as a word bank to provide for them as well.
 - Purpose: Practice place value.
 - Rules for Play:
 - Students move around the room to stations after a certain amount of time.
 - Students dump linking cubes out onto the floor.
 - Students build as many 10 sticks as possible to figure out how many linking cubes are in the bag through making tens.
 - Before the carousel moves, they group has to disconnect the cubes for the next group.
 - This is a good game for movement.



- **Make 1000 (25:50)**
 - Materials:
 - Place value chart (stored in student's binder depending on their grade)
 - Deck of cards – playing cards or number cards
 - Place value disks
 - Make a die for +1, +10, +100 (could also use a dice with -1, -10, -100)
 - Purpose: To make 1000 on the place value chart. Practice and understanding of place value.
 - Rules:
 - Deal out 3 cards to each student.
 - The card on top goes in the hundreds place.
 - The next card goes in the tens place.
 - The last card goes in the ones place. Be consistent so the students don't stack their decks.
 - Students put disks on the place value chart to represent the numbers on the cards.
 - Student rolls the die for +1, +10, or +100.
 - Student adds the disk they rolled to the place value chart.
 - Rename when you reach a group of 10 in a place value.
 - Winner: The winner is the first to reach 1000
 - **Alternative (31:55):** Play a subtraction game. Start with everyone's board filled with the same amount. Work on renaming that is used in subtraction. The winner is the first to reach 100.
- **Make Ten Rumi (33:30)**
 - Materials: Deck of cards
 - Purpose: Practice making ten.
 - Rules:
 - Each player in the group is dealt 5 cards.
 - Place extra pile in the middle.
 - Begin turn by drawing from middle pile.
 - In the hand, players need to find 2 cards to make 10 and 3 card to make 10.
 - Discard to end turn.
 - Winner: The first player to make 10 with a pair of cards and three cards.
- **Disk Blink (35:20)**
 - Materials:
 - Disks
 - Purpose:
 - Rules:



- Place disks under document camera covered with a sheet of paper.
- Remove the sheet of paper covering the disks to show the children the disks for 3 seconds.
- Students estimate how many disks they saw.
- Students write down their estimates.
- A series of clues are given, and you may either keep your guess the same or change your answer.
- Winner: Anyone who uses the clues to find out the correct number of disks they saw.

Games with Students

- Make games purposeful.
- Sometimes games with preparation are a great way to reinforce concepts.
- Schedule games into your math lessons.
- Enjoy and delight your students with games!