# Middle School Math Games

#### **Number Line Games**

Make a big number line using a strip of paper Have one student on each side of the number line holding a chip or marker Call out a problem such as "6-2" The students then race to put their chip on the correct answer You can pause between rounds to ask the students' reasoning for picking their answers Variation: Make a large number line using chalk or tape on the ground Have students stand on the 0 Call out a problem such as "6-2" The students then race to be the first to stand on the correct answer The goal of the game is for the students to run to the correct answer at the same time http://www.teachforever.com/2009/10/ultimate-number-line-game-number-sense.html

#### **Guess the Rule**

Teaching point: using the number line for performing simpler number operations

You think of a rule, e.g. 'add 4'. Do not tell the children what it is. They have to guess it!

The students can point to a number on the line. Choose a child to write that number on the board. You draw an arrow and apply your rule, writing the answer after the arrow.

The children can discuss what they think your rule is and then 'test' their theory by pointing at another number on the line and waiting to see what the answer is when you apply you rule.

When they feel sure they know what your rule is, you can point to the number on the line, and they must apply your rule and tell you what the answer is!

Variations: Use simple multiplication or subtraction to make it harder.

http://www.learninglive.co.uk/teachers/primary/numeracy/teaching/number line ativities.pdf

### **Absolute Value War**

Take the face cards and aces out of a deck of cards, and shuffle it- the red cards are negative numbers, and the black cards are positive

Divide the deck among the players, keeping the cards face down

The players will flip the card at the top of their deck- the one with the highest absolute value (largest distance from 0 on the number line) wins and gets to keep all of the cards (set to the side)

Keep playing until all of the cards have been played- the student with the most cards wins

http://www.scribd.com/doc/88144982/absolute-value-war

## **Exponent Battle**

Decide who the dealer will be by rolling a die. The person with the higher number is the dealer.

- All of the cards are dealt face down, one at a time to each player until there are no cards left. Each later should have an equal number of cards.
- Each player will then their top face up at the same time. This card will represent the base for each player.
- Each player then turns over their next card. This card represents the exponent for each player.
- After each round of turning cards over, the player with the highest product, wins that round and collects each of the player's cards that have been turned over that round and sets them aside.

So that means the winner of each round will get a total of two cards from each player, their base and exponent cards.

• In case of a tie after a round, the players involved in the tie will need to do a face-off. For the face-off, gather the all of the cards that were turned over for that round together in a pile and shuffle.

Turn the cards face down and spread out so that each player in the face-off can draw one card. This is to determine who will shuffle and deal the cards for the face-off.

The player that draws the highest card will be the dealer for the face-off. The face-off is done just like a normal round. The winner of this face-off round is then the wins the tie-breaker and collects all the cards that were turned over in that round.

- Play continues until all the cards are turned over.
- The winner of the game is the player that has collected the most cards!

http://www.learn-with-math-games.com/exponent-game.html