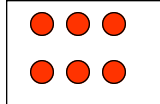




Concentration

Place all 25 integer expression cards and their matching illustration cards face down on the floor. Many students may play this memory game. Be sure to distinguish the illustration cards from the expression cards. Player with the most pairs wins!



$$(+2) \times (-3)$$

Illustrated Expressions

Using the concentration cards, create a new deck with the corresponding illustration card glued or printed to the back of the expression card. Students can test *themselves* on illustrating expressions or determining the algebraic expression for a given illustration. The answer is on the back!

In the Loop



A quick review of integer operations is easy with a class set of loop cards. Everyone listens for the question to their answer! **Differentiated:** a different color secretly identifies basic, midrange and high level questions.



Sans problème!

Celebrate the 100th Day of School or challenge the class to solve 100 integer operation questions with this worksheet.

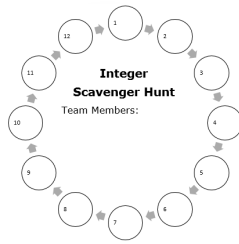
Connect 4

Players alternate picking an integer and placing a counter on the sum of the two integers. First 4-in-a-row wins. A multiplication version is available. Class tournament anyone?

Finding Meaning Scavenger Hunt



Post the Scavenger Hunt cards around the classroom. Create mixed groups of 2 to 3 students. Each group starts at a different question. After they have solved the word problem, they record their answer on their worksheet and then locate the card with that integer.



Repeat until the circuit of 12 integers is complete.

Word problems can be unbundled and used separately.

JEOPARDY!

You're Alex Trebek and every student is a contestant. In turn, each student selects a category and point value, you read the "answer" and all students write the "question". Correct as you go or do a mass correction at the end. Great as a unit review!

Who am I?	What's My Equation?	Fill in the Blank	Ready to Order?	Wordsmith
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Putting a Positive Spin on Negative Numbers

Set List

- ♪ Mini golf (representation, addition)
- ♪ Fashion Show (representation)
- ♪ BINGO (representation, all operations)
- ♪ Integer Recital (addition, subtraction)
- ♪ Out of Order (placement)
- ♪ Mystery Phrase (placement)
- ♪ Number Line Hop (all operations)
- ♪ Cauldron (addition, subtraction)
- ♪ Concentration (all operations)
- ♪ Illustrated Expressions (all operations)
- ♪ In the loop (all operations)
- ♪ Sans problème! (all operations)
- ♪ Connect 4 (addition, multiplication)
- ♪ Finding Meaning (all operations)
- ♪ Jeopardy (all operations)

N C T M
ANNUAL CONFERENCE
SAN ANTONIO 2017

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Mini Golf



Play mini golf at a local course and keep the card. Your students can then play a virtual round. Each roll of a 6-sided die is their score for the hole but they must record their score with respect to par! At the end of the front nine and back nine, they calculate their scores. Don't tell them how! Let them figure out a way. A great introduction to the concept of integers and addition.



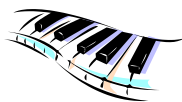
Fashion Show

Represent integers in style! Have students bring in their green and/or red clothes. In groups, have students create a fashion commentary for their integer. A walk down the Integer Runway will give integers a whole new look for this math season!

B-I-N-G-O



Everyone loves BINGO! Get students comfortable with pictorial models of integers with a fun game of BINGO. Have them create their own card with integers ranging between -5 and +5 for each column. Show integers silently. Keep everyone in the game by naming each integer after each BINGO row.
Extension: addition and subtraction.



Integer Recital



Group *novices* with musical *experts*. Each duo chooses a melody, the expert writes it using music notation and then records the sequence of each note on keyboard paper. Novices **transpose** the notes on the keyboard; the expert writes the new version on staff paper. Have each duo perform the before and after melodies of their "integer".

Extension: Perform recital using real keyboard, guitar, or band instruments.

Out of Order



Divide the class in two or more groups. Place an integer sticker on each student's forehead. First team to place themselves in order, from least to greatest, win. NO TALKING allowed.

Extension: Use integer expressions.



Mystery Phrase

Practice moving along a number line by using the clues to place letters of the mystery phrase. **Extension:** DIY Swap!

Number Line Hop

Solve integer operations on a giant number line. Once students have mastered the number line hop, the transition to paper is a cinch!



Cauldron



This game enables students to connect addition and subtraction of integers with a context they understand—temperature. They know when you **add ice** or **remove heat**, the **temperature will drop**. Similarly, when you **remove ice** or **add heat**, the **temperature will rise**.

The deck of cauldron cards contains heat units (1-10), ice units (1-10) and target temperature cards. Target cards are shuffled separately and one is drawn. The player who gets the cauldron to this target wins! The deck of heat/ice cards is shuffled; players are dealt 3 cards.

Version 1: In turn, each player adds a card to the cauldron, then must update the group's thermometer and draw another card from the deck.

Version 2: Cards may be removed from the cauldron— subtraction. If a player takes a card out of the cauldron, a card from their hand must be put back in the deck.



Thermometer $0 + (-5) = (-5)$ $(-5) + (+2) = (-3)$

Recording each change in temperature symbolically is key to connecting this context to its symbolic equation.