Bureau, Henry, Stark Regional Office of Education #28

21st CCLC

Brain Games!

Includes 20 Lesson Plans

Illinois 21st CCLC Spring Conference
May 9, 2019

Drum Rhythms

Site Coordinator: Dayton Ince
Grade(s): Kindergarten & 1st+

Date: October 2018

Lesson/Engagement: Students are all given a bucket & rhythm sticks. The teacher creates a beat for the students to imitate. While doing this, music terms can be discussed such as:

- *Beat*: The steady, underlying pulse in the music.
- *Dynamics*: The various levels of volume in music, which may be consistent or change gradually or suddenly.
    - forte: loud
    - mezzo: medium
    - piano: soft
    - crescendo: gradually get louder
    - decrescendo: gradually get softer
- *Rhythm*: A pattern of short and long sounds and silences. The rhythm is usually superimposed over an implied steady beat. Rhythm is the end result of starting with a beat, establishing a tempo for the beat, putting a pattern of accents on the beats; then, working with those elements as a base, composing/ improvising a rhythmic pattern that rides on top of the beat, tempo, and meter.
- *Rhythm Instruments*: Simple classroom instruments that are played by striking: drums, rhythm sticks, maracas, claves, triangles, cymbals, castanets, tambourines, tone bells, xylophones, cow bells, jingle bells, etc.

Standard(s):
MU:Pr4.1.K.c: With guidance, demonstrate awareness of expressive qualities (for example, voice quality, dynamics, tempo) that support the performers' expressive intent
MU:Re7.1.K.b: With guidance, demonstrate how a specific music concept (for example, beat, melodic direction) is used in music.
MU:Cr1.1.1.a: Improvise rhythmic and melodic patterns and musical ideas for a specific purpose.

Materials: buckets & rhythm sticks

Objective: Students will learn music terms while creating melodies with simple classroom instruments.

Assessment: Students should be able to imitate the musical patterns done by the teacher.

The Feel Good Game

Site Coordinator: Jill Meier
Grade: Junior High (can be played with 3rd-HS)

Date: March 2019

Lesson/Engagement: The goal of The Feel Good Game is to have students help build Totems for each other by assigning "Spirit Animals" to each other. Each student is dealt 7 cards that have animals on the cards and strengths that are associated with those animals. They then take turns going around the circle and hand their peers the card that they feel best describes the student whose turn it is from the 7 they currently have. Once the student receives cards from everyone who is playing, they then rank the animals from those they think describe them the least to the most (a.k.a. build their Totem) and the student who gave them each card explains the reason why they thought that animal was a good representation of their personality.

Standard(s):
1A.3E: Practice expressing positive feelings about others.
2C.3F: Practice reflective listening.
2A.1I: Recognize ways to share and reciprocate feelings.

Materials: Totem Cards, https://totemteam.com/en/card_game

Objective: Students will build their self-esteem while discovering their strengths through other people's eyes.

Assessment: Being able to express positive attributes of others, while actively listening to others share their positive thoughts of them.

Blocks Rock!

Site Coordinator: Darla Ball
Grade(s): Kindergarten through High School

Date: April 2019

Lesson/Engagement:
From Blocks Rock! "Blocks Rock! is the competitive, educational game in which two players, or two teams of players, compete to build a color and shape-specific structure in the shortest amount of time. The game is played by choosing a card with the structure to copy, building the structure out of colored blocks, and ringing the bell to end the round. Accuracy is key, and a player or team only wins when the structure is completed successfully. At the end of the deck, the winner of the game is the player with the most cards or with the most points as indicated on each card.

Proven to aid in spatial ability and STEM development skills. Experts believe that Blocks Rock! can help improve spatial ability, identified as an important component of STEM learning - Science, Technology, Engineering and Math – essential in our globally competitive world. Connections have been found between spatial ability and early learning of Math, as well as elementary and high school success in Math and Science.

The game's educational benefits include:
• Color Identification: Players match the colored blocks to the colors on game cards.
• Shape Identification: Players match block shapes to the shape of blocks on game cards.
• Spatial Learning: Players must build a structure to match the structure on the card.
• Hand-Eye Coordination: Hand-Eye coordination is key to building a block structure in the shortest amount of time.
• Math Skills: Points on the cards can be added up at the end of the game to determine the winner, or younger players can count the number of cards each player has to find the winner.

Blocks Rock! is thought to also develop skills in estimation, measurement, patterning, part-whole relations, visualization, symmetry, transformation and balance."

Standard(s):
K.G.A.2: Correctly name shapes regardless of their orientations or overall size.
2.G.A.1: Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
MS-ETS-1-2: Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
1C.3a: Set a short term goal and make a plan for achieving it.
1C.3b: Analyze why one achieved or did not achieve a goal.

Materials: Blocks Rock kit, www.blocksrock.com

Objective: Students will strengthen time management, stem, spatial thinking, & mental rotation skills

Assessment: Each card that is won will prove that the objective is being met.

Interactive Storytime Children's Yoga

Teacher: Lori Hendrickson
Grade: K - 2

Month: November, 2018

Lesson/Engagement:
Everyone sits in a circle with ample room for movement.
The teacher acts out the story below and participants mirror him or her:
*Ok, everyone get in your **cars** (staff pose), we are going on a trip.*
*It's starting to rain! We better use our **windshield wipers** (feet side to side).*
*Uh oh! We got a flat tire! Good thing we have a **bicycle** in the trunk.*
Let's ride our bicycles to the train station and take the train as far as we can.
*(**chug-a-chugga, chug-a-chugga, choo-choo!**)*
*This train is powered by laughter. The more we **laugh**, the faster it will go.*
*Good job! We made it to the coast! Now we can take a **boat** to the island.*
*But, our boat is sinking, so we'll have to **swim**.*
*Look out for that **shark!***
*Thank goodness the dolphin's (**dolphin presses**) have come to help us.*
Whew! We finally made it to shore.
*Do you see all the **butterflies**?*
*They are drinking nectar from the **flowers.***
*I just want to curl up on that big **boulder**.*
*But there's a **cobra** (snake) behind it.*
*We better back away slowly, turn around, & **walk** away carefully (opposite arm & leg raises).*
*Are you tired, yet? Let's stretch out and **relax** for a little while.*
Systematic Relaxation

Variations: Let's get tall as a giraffe, and then small as a mouse, Tree, Ballerina, Airplane & Rocket Person, Mountain/Volcano/Rag Doll, Plank, Puppy/ (Barking) Dog, Child's Pose, Meow & Moo, Warrior Sun Salutations, Children's Yoga Videos - Rodney Yee's children lead salutations, Children take turns sharing favorite poses or using the spinner, Guided Relaxations & Meditations

Standard(s):
21.A.1a Follow directions and class procedures while participating in physical activities.
19.A.2a Demonstrate control when performing combinations and sequences in locomotor, nonlocomotor, and manipulative motor patterns.

Materials:
Yoga Story (above) and Yoga Music (optional) - [cosmickids.com]

Objective:
Students will practice following directions while performing yoga postures as they are led through an interactive story.

Assessment:
Students will follow directions and demonstrate the different yoga positions.

Lego STEM Challenge

Site Coordinator: Janis Mahan
Grade(s): Junior High (Can be adapted to other grades)

Date: April 2019

Lesson/Engagement: Students are given a Lego set and challenged to create a vehicle that will move the fastest when tested against his/ her peers. Within the sets, students are able to follow directions to build from the instructions, or they may create their own vehicle. Once all students have made their vehicles, they will test them out by pushing them across a table. Students may revise their designs and race again.

Standard(s):
MS-ETS1-2: Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
MS-ETS1-3: Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

Materials: Lego Education Wheels Set

Objective: Students will use the engineering design process to create the fastest vehicle out of Legos.

Assessment: Students will be assessed by who had the fastest car, and whether they are able to tweak their designs to become faster once they realize their design needs improvements.

Hedbanz

Site Coordinator: Janis Mahan
Grade(s): Elementary

Date: April 2019

Lesson/Engagement: Up to six students may play at a time. They are all given a headband and a card to insert into their headband without looking at it. Students have to figure out if they are an animal, food, or a man-made object. There are 72 cards with the game. Students take turns guessing what they are by asking yes or no questions until they get it right or until another player guesses correctly. The first player to guess correctly wins the game. Students have to work cooperatively to play the game.

Variations: Incorporate spelling words or vocabulary words from science, reading, or math text and write them on notecards. Students will play the same way as above, but with these notecards instead. Students will have to learn or have an understanding of what each word means to be able to answer others' questions, as well as to guess their own word.

Standard(s):
CCSS.ELA-LITERACY.L.3.4: Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.
2A.B.6: Demonstrate an ability to listen to others
1A.E.6: Practice handling pressure situations (e.g., taking a test, participating in a competitive activity).

Materials: Hedbanz (+notecards, markers if creating additional words)

Objective: Students will use deductive reasoning, learn new vocabulary words, and will work on playing cooperatively with peers.

Assessment: Knowledge and understanding will be shown when students are able to guess their word correctly.

Xylophone Math

Site Coordinator: Reyna Barto-Colvin
Grade(s): PreK - 4th

Date: November 2018

Lesson/Engagement: Using addition, students create musical compositions. Numbers are written on each key, and students choose sequences of notes that add up to 100 (this number can be different each time the activity is done). Students will write a sequence, do the math, & then play the sequence aloud to peers.

For younger students, write letters of their name and have them make a song putting their name together in the right sequence (In this case, they get to choose where they want their letters placed.)

Standard(s): K.CC.A.1: Count to 100 by ones and by tens.
MU:Cr1.1.1.a: Improvise rhythmic and melodic patterns and musical ideas for a specific purpose.

Materials: Xylophones, tape, marker

Objective: Students will practice their counting, number writing, and addition skills while creating a musical piece.

Assessment: Knowledge of the lesson can be seen by adding the notes of each students' composition and seeing if it equals 100 correctly.

Monopoly

Site Coordinator: Becca Herrmann
Grade(s): High School

Date: April 2019

Lesson/Engagement: The teacher will ask who all has played the game of monopoly before. The teacher will then ask the students what the goal of the game is, and how it relates to a business monopoly.

Step by Step:

1. The teacher will break the students up into five groups and each group will receive 4 $500, 3 $250, 5 $100, and 4 $50s and a game piece.
2. The students will then roll the dice and play monopoly. The students will remain in their chairs, but one of the players will move their item the correct amount of spaces.
3. Each time the group lands on a game piece, they will have to explain what that piece means. They will read or summarize the facts of that placard to the class. Players may purchase properties they land on if unoccupied, paying the price on the placard sign.
4. The students may buy a hotel for their property before starting their next turn, only if they gain ownership of all included in that set.
5. Players landing on a property owned by another member must pay a fine listed on that card, to that member.
6. The teacher will spend the last five minutes of class discussing how the game relates to monopolies, corporations, trusts and big business.

Standard(s):

CCSS.MATH.CONTENT.HSS.MD.B.5.A: Find the expected payoff for a game of chance.
CCSS.MATH.CONTENT.HSS.MD.B.7: Analyze decisions and strategies using probability concepts
SS.EC.FL.2.9-12: Explain how to make informed financial decisions by collecting information, planning, and budgeting
1A.4a: Analyze how thoughts and emotions affect decision making and responsible behavior.

Materials: Monopoly board game

Objective: The students will be able to explain the concept of a monopoly, while strengthening math & social-emotional skills.

Assessment: The teacher will ask the students some questions about the game. Students will think about ways in which monopolies work, and consider some modern day monopolies. Students will exhibit their understanding by playing the game and answering questions concerning monopolies.

Imaginary Traveler Alphabet Game

Site Coordinator: Patrick Peach
Teacher: Mrs. Palm
Grade(s): 2nd & 3rd

Description: Phonics Fun - Imaginary Traveler. This game is simple but so much fun! A simple brain exercising game that you can play anywhere. This activity helps students to think quickly, develop communication, improve decision-making skills, and build their confidence.

Lesson/Engagement: Everyone playing takes turns to continue with consecutive letters of the alphabet, and fill in the following:
I am going_____ and I am taking _____.

Standard(s):
CC.2.R.F.3.e Phonics and Word Recognition: Identify words with inconsistent but common spelling-sound correspondences.
CC.3.SL.6 Presentation of Knowledge and Ideas: Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language standards 1 and 3 on page 26 for specific expectations.)

Materials: Printout of letters A-Z.

Objective:
Students will demonstrate the phonemic awareness ability to say words that start with their corresponding letter.

Assessment: (did the students know about this prior, what did they learn after the lesson?)
Did the students stay on task for the whole alphabet?
Did the students correctly identify both a place and object for each corresponding letter?

HIT THE TARGET

Site Coordinator: Corey Tavares	**Grade Level**: 7^{th}-12^{th}
Topic/Activity: "Hit the Target" using regular playing cards	**Site**: Galva Jr/Sr High School

Lesson/Activity: Students will play a card game called "Hit the Target". This game requires participants to use order of operations, in order to find the "target" number from five, randomly, drawn cards. This game can be played individually or as teams. The object is to correctly find the target number quicker than your opponents.

COMMON CORE or IL State Standards:

HSN.Q.A.2: Define appropriate quantities for the purpose of descriptive modeling.

2C.3b: Demonstrate cooperation and teamwork to promote group effectiveness.

1C.4b: Apply strategies to overcome obstacles to goal achievement.

Rules:

- Aces are worth one point, Jacks-11, Queens-12, Kings-13 and rest are face value.
- Cannot use aces to multiply by one or to the power of one
- Answer must be written down using order of operations.
- Must draw five cards but may replace one card from top of deck, if desired or needed.
- First to five wins!

Objective:

- Students will apply classroom knowledge, in order to solve equations.
- Student will develop quicker mental math skills, working through problems.
- Students will demonstrate cooperation with one another working as teams.

Assessment:

Game-play will be used as a guide for assessment. Several rounds will show improvement on quicker mental math and the development of better strategies. Also, interaction between teammates and competitors will demonstrate social and emotional learning skills.

ELECNO SNAP CIRCUITS

Club/Activity: Homework Help- Enrichment Activity
School Name: AlWood MHS
Supervisor: Litton, Steider, Winters
Site Coordinator: Bernadette Melow

Intended Learning Outcomes:

- Students will learn to work together cooperatively
- Students will complete project to specifications or create their own functioning project

State Standards:
HS-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known.
HS-PS3-2 Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as either motions of particles or energy stored in fields.
HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy

Activity: Students may use the Elenco Snap Circuits Sets (Motion, Light and Original) after completion of their daily homework assignments. Sets should be used independently or cooperatively to create either the projects modeled in the instruction book or projects designed by the students. Up to 4 students may work together using each set.

Materials: Elenco Snap Circuits; Light,Motion, and Original sets instruction booklets

Assessment: Whether the student can successfully create a circuit

Buzzing Around

Site Coordinator: Monico Nunez
Grade: K - Junior High

Date: September 2018

Lesson/Engagement: GROSSOLOGY - Buzzing Around
Students will take part in a presentation on Flies, with emphasis on fly eyes and how they eat.

Information to be presented prior to activity: A fly has two compound eyes, and each eye is made up of thousands of individual lenses. In a human eye, the pupil controls how much light enters the eye; however, fly eyes do not have pupils. Flies are unable to focus on images.
Flies do not have teeth, so they are unable to chew food. Instead they have a long tongue that sucks up their food as if it were a straw.
Flies taste with their feet, they land on something they think taste good, they use their stomach juices to liquefy it so they can suck it up with their tongue.

Activity: Divide the students into two teams. To prevent crowding at one end of the playing field, try having the two teams start at opposite ends. This will also remove some of the competitive edge if you are playing with varying grade levels. Place one pink and one green bucket at each end of the playing field. One of the buckets will contain water. Each team will have one pair of Fly Eyes glasses and a turkey baster. Have the students line up behind their empty bucket. When the teacher says "Go" the first player from each team will race down to the water bucket, use the turkey baster to suck up water, and then race back to deposit the water into the empty bucket. The team that has the most water in their bucket after each team member has gone at least once is the winning team.

Standard(s):
5-LS2-1: Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
MS-LS1-5: Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.
19.A.1a: Demonstrate control when performing fundamental locomotor, non-locomotor, and manipulative skills.
19.A.2a: Demonstrate control when performing combinations and sequences in locomotor, non-locomotor, and manipulative motor patterns.
21.A.1a: Follow directions and class procedures while participating in physical activities.

Materials: Images of Fly Eyes found in Appendix of Grossology book, 2 pair Fly Eye Glasses, 2 turkey basters, 4 buckets, and masking tape

Objective: Students will obtain 30 minutes of the 60 minute daily exercise recommendation from the US Department of Health and Human Services

Assessment: Ask and answer questions to check for knowledge and understanding.

Stick Together - Mosaic Sticker Art

Site Coordinator: Amy Jackson
Grade(s): Pre K - Adults

Date: September 2018

Lesson/Engagement:
The students will work as a group to fill in the grid poster and create a work of art. Students will discuss what they think the final project will look like throughout the process. They will figure out a process of who will start the projects and the best ways to go about efficiently working as a group/ team. Students will need to communicate with each other to help meet their common goals.

Step 1: Unpackage the kit. Kit contains a color key grid, stickers (each are ½ in squares) and poster grid sheet. (Please note that each packet comes with 5% extra stickers in case some get lost along the way.) As students begin, have them make hypothesis as to what the final project may be when completed. This may also occur multiple times during the lesson.
Step 2: Hang or place the paper grid in the work area with the color key grid and stickers nearby. Review with students that each color has a letter that corresponds with a square on the paper grid.
Step 3: Allow the students to begin placing stickers onto the poster. Not all students may be able to fit around the paper at one time, toa encourage the students to work out a process for team building which allows all to be involved.
Step 4: Display your final work of art to be hung in the school or your facility with the names of all the students who helped to make the final creation. Pictures may be taken along the way to show progress and teamwork.

Here are some general guidelines:

- The average 'stickerer' applies 10 – 12 stickers per minute.
- 3 – 5 participants can finish a Standard Format 'StickTogether' in less than 3 hours of continuous sticking.
- example: At a Maker Faire event, with a large crowd passing through, a Standard Format image was completed in 2.5 hours, and the Large Format in 5 hours.
- example: At a family gathering of 32 relatives, with 5 children working continuously and adults circling in an out of the activity, a Large Format image was completed in one evening!
- example: In an office of ~100, with the image placed on the way to the Break Room, a Standard Format image was completed over 3 days.
- example: In a School Library, a Standard Format image was completed over 2 days.

Standard(s):
VA:Cr1.2.2a: Engage in self-directed creative art making. a. Engage collaboratively in creative art making in response to an artistic problem. a. Use observation and investigation in preparation for making a work of art. a. Make art or design with various materials and tools to explore personal interests, questions, and curiosity

CCSS.ELA-LITERACY.RF.K.1.D: Recognize and name all upper- and lowercase letters of the alphabet.

Apply Decision-Making Skills To Deal Responsibly With Daily Academic And Social Situations.
3B.1a Identify a range of decisions that students make at school.
3B.1b Make positive choices when interacting with classmates.

CCSS.ELA-LITERACY.CCRA.SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

Materials:
Kit from "Let's Stick Together" which includes: color key grid, sticker, and poster grid. Information and options of artwork can be found at https://www.letsticktogether.com/. There are two size options: Standard Format 40" x 36" poster / 3,996 stickers. Large Format 60" x 36" poster / 7040 stickers.

The grid paper is regular paper thickness. If you plan to use over multiple days or weeks it is suggested to mount paper on to heavier cardstock or mounting board so it is more durable.

Objective:
Students will work collaboratively with multi-age groups that are all-inclusive as a team to complete a common goal of creating a work of art from a structured play that is created device free, which can be displayed for the school community.

Assessment:
- The completion of the work of art
- Reviewing initial guesses of outcomes for accuracy and effective team building an efficiency
- The pride of the students seeing their displayed artwork

What Am I?

Site Coordinator: Cindy Ehnle
Grade(s): 6th Grade

Date: February 2019

Lesson/Engagement: **What Am I?**
Students will play "What Am I?" In this game a vocabulary word written on an index card is taped to each students back. They are to go around and ask one yes/no question to each person. Example: "Am I noun?" First person to figure out and say their word wins! You can also keep students playing until everyone has guessed their word. Students will sit down as soon as they figure out their word.

Variations: Can be geared toward any subject using math, science, social studies, physical fitness, art, or health vocabulary terms.

Standard(s): CCSS.ELA-LITERACY.L.6.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 6 reading and content, choosing flexibly from a range of strategies.

Materials: index cards, tape

Objective:
- Students will determine the vocabulary word by asking yes/no questions.
- Students will improve their knowledge of their vocabulary words.

Assessment: Students will show mastery of their knowledge of their vocabulary words.

Pringle Challenge

Site Coordinator: Cindy Ehnle
Grade(s): 6th Grade

Date: April 2019

Lesson/Engagement: Each set of partners or small groups will use one can of Pringles to create a circle. This activity requires a lot of trial + error & teamwork.

Standard(s):3-5-*ETS*1-1: Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
3-5-*ETS*1-2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
*MS-ETS*1-2: Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
*MS-ETS*1-3: Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

(*You could also incorporate Language Arts by having students write about their plan to create the circle. Have them give details about chip placement, the base, and how they plan to build the sides.*)

Materials: 1 can of Pringles per small group/ partners

Objective: Arrange the pringles to create a circle

Solution: The key to success is to layer the chips like fish scales, but keep this a secret from your students until they've done tried on their own!

Assessment: Whether the students are able to successfully create a Pringle circle or not

Rock, Paper, Scissors, Hula Hoop

Site Coordinator: Cindy Whipple
Grade(s): PreK - Junior High

Date: September 2018

Lesson/Engagement: Rock, Paper, Scissors, Hula Hoop
Set Up: Arrange hula hoops in a squiggly path across the floor; each hoop should touch the next to prevent tripping.
Divide into two groups; each group in a single file line.
Each line of players will start at one end of the hula hoop course.
Review the rules of Rock, Paper, Scissors.
Make sure students know where to go if they win or if they get out.

How to Play: The goal of the game is for a player from one line to make it to the start of the opposite team's line. When the leader starts the game, the first player of each line begins moving walking, skipping, hopping, or running) on the path toward each other. When the two players encounter each other on the path, they will stop & Rock, Paper, Scissor until one person wins. The winner will continue on the path in the same direction, while the other side allows their next player to begin. The loser will get off the path and go to the end of their team's line. Again, when the players encounter each other, they will do Rock, Paper, Scissors until one player wins. The game continues until one player makes it all the way to the other side. Then that player will rejoin his/ her line and two new players continue.

Variations: Make the path longer or shorter.
Try playing in a straight line instead of squiggly.
Tally scores by giving a point to the team whose player makes it from one side to the other.
Give players a category to name one thing from as they meet in the middle. For example, each side has to yell out the name of a fruit or vegetable, a natural environment, a State, etc before they can play Rock, Paper, Scissors. This variation is great for teachers who want to reinforce class learning in an active way.

Materials: Hula Hoops (the more the better)

Standard(s): 19.A.3a Demonstrate control when performing combinations and sequences of locomotor, nonlocomotor, and manipulative motor patterns in selected activities, games, and sports. 1A.b5: Demonstrate a range of emotions through facial expressions and body language.

Objective: Students will develop listening skills, positive competitive skills, work on their large motor skills, manage their emotions, and build relationships with peers to work together as a team.

BUZZ 7

Site Coordinator: Reyna Barto-Colvin
Grade(s): 3rd -8th (and up)

Date: October 2018

Lesson/Engagement: Students will play "BUZZ 7." This involves students counting in a circle each saying the the sequential number. When a number with 7 in it or a multiple of 7 comes up, the student must say BUZZ. At each BUZZ, the rotation changes directions. If a student says the wrong thing (ie. wrong number, doesn't BUZZ when they should, or delays for more than 3 seconds), that individual must start over with 1.

This game can also be played elimination style where the student who answers incorrectly is eliminated while the others continue until the last man is left standing.

Standard(s): CCSS.Math.Content.4.OA.A.1: Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

Materials: None

Objective: Students will become proficient with multiplication facts and increase focus.

This activity is easy to implement and fun for most. Almost all elementary and Junior high students can benefit from an activity that further enhances their multiplication skills as well as their focus.

Mental Math Stick Stacking Challenge

Site Coordinator: Terrie Landwehr
Grade(s): Junior High / High School (adaptable to any grade level)

Date: April 2019

Lesson/Engagement: Mental Math Stick Stacking Challenge

Each group of students will get a coordinated group of sticks to solve from “start” to “finish”.

Each stick will have an equation written on it with an answer from a different equation on the same stick. Students will have to stack the craft sticks to have each correct answer under the matching equation. The beginning and ending sticks will be clearly marked. The first group to correctly stack all of their equations and correct answers wins.

Variations: individual work/partner work/team work/ timed practice/less sticks/more sticks

Standard(s):
7.EE.B.3: Solve real-life and mathematical problems using numerical and algebraic expressions and equations
HSA-CED.A.2: Create equations that describe numbers or relationships

Materials: Jumbo Craft Sticks, Markers, Answer Key

Objective: Students will strengthen their mental math skills while working together as a team.

Assessment: Correct order for sticks/ answers

Mental Math Stick Stacking Challenge - Sample Problems

Start	$(5^2 + 7)$ x 4
128	$8\,(3^2 – 6 ÷ 3)$
56	1 + 5 x 3
16	$2 + (5 – 1^3 + 9 ÷ 3)$
9	$(8$ x $2^2) + 3$
35	$(8 – 2)^2 ÷ 6$
6	$4 + 5^2 – 2$
27	7 ÷ (42 ÷ 6)
1	20 (3 + 1) – 7
73	$(7^2 - 3^2) + (2^2 + 7)$
51	$59 + 2^2$ x $(4 + 3)$
87	27 + (18 – (3 + 2))
40	$127 + (18 + (3 + 2)^2)$
170	$50 – (5^2 + 5)$
20	Finished

Start	20 – (-9)
29	-7 + (-3)
-10	-6 ÷ -6
1	-6 – 10
-16	-1 – (-4)
3	- 6 + 13
7	6 ÷ -2
-3	6 – 10
-4	15 – (-7)
22	5 – 20
-15	9 x (-9)
-81	-3 + (-9) + (-12)
-24	-3 x 11
-33	Finished

Start	½ of 12
6	How many fourths in ½
2	1/3 is greater than
7	Equivalent fraction for ¾
6/8	5/10 in simplest form
½	Smallest of 3/8, 5/8, 7/8
3/8	Largest of ¼, ¾, 2/3
¾	2/6 in simplest form
1/3	1/3 of 9
3	6/4 in simplest form
1 ½	Equivalent of 28/40
7/10	¼ of 20
5	Finished

Start	Double 9
19	One third of 12
4	9 five times
45	36 in groups of 6
6	8 tripled
24	half of 16
8	5 groups of 4
20	half of 8 times 4
16	27 in equal groups of 9
3	the remainder of 9 ÷ 4
1	groups of 4 in 28
7	Finished

Start	10 more than 65
75	1 less than 50
49	10 more than 33
43	1 more than 28
29	Double 4 + 1
9	9 tens 4 ones
94 ones	4 hundreds 3 tens 8
438	3 tens 2 ones
32	10 more than 422
432	Half of 200
100	1 less than 1,255
1,254	Finished

Start	3/12 + 1 ¾
1	19/6 – 10/12
2 1/3	5 1/7 + 9/2
9 9/14	24/3 – 4 ½
3 ½	5/12 + 4/16
2/3	5/2 – 3/7
2 1/14	2 13/16 + 3 19/32
6 13/32	7 ½ - 27/19
6 3/38	Finished

Start	20 – (-9)
29	-7 + (-3)
-10	-6 ÷ -6
1	-6 – 10
-16	-1 – (-14)
3	-6 +13
7	6 ÷ -2
-3	6 – 10
-4	15 – (-7)
22	5 – 20
-15	-1 x -10
10	9 x (-9)
-81	-9 x (-4)
36	0 – 12
-12	Finished

Inicio	Mitàd de 20
10	Doble de 6
12	Nueve más seis
15	Doble de 9
18	8 más que 12
20	3 x 3 x 3
27	13 más que 15
28	7 menos que 43
36	(4+2) x 5
30	la mitàd de 14
7	ʖƐl 7 es un n◦ Primo
Si	20 menos que 6
14	~ Fin ~

SMASH UP

Lesson Date: October 1, 2018	**Facilitator:** Rachel Berger
Grade Level: 9-12	**Site Coordinator:** Briana Jungnickel

Lesson/Activity:

Students will play Smash Up. This game is a shuffle building game that emphasizes strategic decision making and foresight. Smash Up also includes math skills throughout the game. Players must continuously add up points on the cards played in order to fulfill each fort. The object of the game is to be the player to receive 15 points first. You earn points by winning the forts. You win the forts by playing minion cards that each have a point value on them.

Common Core or IL State Standards:

Common Core Standards for Mathematics

Quantities

N.Q.2 Define appropriate quantities for the purpose of descriptive modeling.

MP1: Make sense of problems and persevere in solving them.

Social Emotional Learning Standards:

Goal 2: Use social-awareness and interpersonal skills to establish and maintain positive relationships.

A. Recognize the feelings and perspectives of others.

4a. Analyze similarities and differences between one's own and others' perspectives.

4b. Use conversation skills to understand others' feelings and perspectives.

C. Use communication and social skills to interact effectively with others.

Materials:

- Smash Up Game
- Table
- Paper & Pen (to keep score)
- 2-4 players

(Expansion packs available)

Objective:

- Students will learn to play a new type of game (shuffle building) which many may not have experience with.
- Students will learn how different factions within the game create different strengths and weaknesses.
- Students will apply math knowledge from the classroom in order to solve the math problems in the game.

Assessment:

Effective navigation of game-play will serve as assessment. Several rounds will show how different factions create a different gaming experience each time.

Lesson Plan Index

*Mental Math Stick Stacking Challenge.....Wethersfield Jr/ Sr High School
*Golf - Card Game.....Bureau Valley South
*Stick Together.....Galva Elementary School
*Rock, Paper Scissors, Hula Hoop.....Colona Grade School
*Buzz 7.....Bradford Junior High School
*What Am I?.....Central Elementary, Central Junior High Schools
Pringle Challenge.....Central Elementary, Central Junior High Schools
*Buzzing Around.....Allen Junior High, Van Orin Grade Schools
Elecno Snap Circuits.....AlWood Middle-High School
Drum Rhythms.....Belle Alexander
The Feel Good Game.....Neponset Grade School
Blocks Rock.....AlWood Elementary School
Interactive Storytime - Children's Yoga.....Ohio Grade School, Ohio High School
LEGO STEM Challenge.....Cambridge Jr/ Sr High School
HedBanz.....Cambridge Elementary School
Xylophone Math.....Bradford Elementary School
Monopoly.....Hall High School
Imaginary Traveler - Alphabet Game.....Irving Elementary School
Hit the Target.....Galva Jr/ Sr High School
Smash Up.....LaMoille High School

*Lesson presented during break-out session