

## Activities Handout

### Piggy Bank

#### Identifying and counting money

**Object of the game:** To have the “piggy bank” with the most money. Players race to the Federal Reserve (hula hoop in the center of the playing area holding a variety of paper coins) one player at a time, one coin at a time and return it to their “piggy bank”.

**Extension:** With a piggy bank of money, each team tries to improve their banks holdings by taking coins from other banks. Again only one player at a time may take only one coin each turn.

### What’s Your Problem?

#### Operations and Algebraic Thinking - PEMDAS

**Object of the game:** Solve the given equation by collecting the number of objects to represent the answer. Teams collect the number of items reflecting the answer to the presented math problem.

**Extension:** Return the object by tossing and catching, carry without using hands,

### Stack Masters

#### Creating and Copying Patterns

**Object of the game:** Copy the stack pattern one bucket at a time. A master stack is built by teacher, each team rebuilds their own stack one bucket at a time copying the master stack.

**Extension:** each team has a master game card and must build that pattern one player at a time one bucket at a time. Vary the way students travel and carry the buckets back to their stack.

### \$25,000 Pyramid

#### Solving addition/subtraction/multiplication/ < or > problems

#### Counting & Cardinality

**Object of the game:** To advance through the pyramid of hula-hoops after winning the dice math challenge at each level. When a player wins the level challenge they advance upward to the top of the pyramid. If they lose they wait for a new challenger or complete the challenge circuit around the perimeter return and re-enter the game.

Each hula-hoop needs a pair of dice and a function symbol. ( + - x < > ) The top winner gives their team a point, completes the circuit and begins again.

Activities around the circuit include agility ladders, measurement strips, and or number lines.

## **Shape it Up**

### **Geometry**

**Object of the game:** Copy or create two dimensional shapes using jump bands or Chinese jump ropes. Each group must be 4 or more players. Each player takes a turn retrieving a shape card to their group. The remaining members of the group use body parts to make the shape. Once the shape is completed the player with the shape card jumps over and out of the shape on all sides. Once completed a new player chooses a shape card from the selection pile.

## **Multi Dome Treasure Hunt**

### **Order of numbers/memory/ problem solving**

**Object of the game:** to find numbers hidden under a multi dome or poly spot grid and return them to your team placing them in number order.

Each team member takes a turn hunting for a number to complete their sequence. Players may be challenged to count by 2's , 3's 5's etc. Younger students may be looking for a 5# sequence beginning with 17.

Team members waiting their turn should be watching the game to help with choosing the next multi-dome.

## **Tangram Mission Impossible**

### **Geometry with Tangrams**

**Object of the game:** To solve tangram puzzles and complete a corresponding activity challenge to score the most points.

Equipment: Master selection of Tangram patterns, score sheets, 5 activity stations, 12 tangram puzzles, tokens, game boards, and color cones.

Rules – When students complete a tangram they raise their hand, and the teacher checks their work. If correct they receive one colored token. Students then put the token on their game board and perform the corresponding exercise. After completing the exercise students then get a new tangram.

## **Crack the Code**

### **Icebreaker~ Process of elimination.**

All participants have a sticky note with a number stuck to their back  
(20 players/1-20#'s) Numbers can also be clothes pinned on

On the go signal players attempt to identify other players numbers to learn their own number by process of elimination.

Each time a player learns of another's number they write it down on an index card placed out of the boundary lines. Once they have identified 19 different numbers, they put them in number order to reveal what their own number is.

## Math Scrabble

### Operations and Algebraic thinking

**Object of the game:** Students work in partners or groups of 3 to create number sentences in a scrabble formation. Number operations of addition/subtraction/multiplication/division, depending on the grade level, are built.

Set up: Each group is given a set of Math Scrabble Symbols placed inside their own hula hoop. (2, each + - = X ÷) Math scrabble numbers are scattered face down opposite the players at the end of the playing area. One set 0-9 for each group.

Play: Players take turns traveling to the scatter of math scrabble cards at the end of the playing area. Each time a player retrieves a card they must use a different loco-motor movement as mode of travel. Players continue this pattern until all cards have been retrieved. Once cards have been collected, partners or groups make as many math problems as possible using the cards they have. Cards are used as in scrabble, vertical or horizontal. Symbols and numbers may be used for multiple equations.

Math Scrabble <b>0</b> Zero	Math Scrabble <b>1</b> One	Math Scrabble <b>2</b> Two	Math Scrabble <b>+</b> Plus	Math Scrabble <b>+</b> Plus	Math Scrabble <b>=</b> Equal
Math Scrabble <b>3</b> Three	Math Scrabble <b>4</b> Four	Math Scrabble <b>5</b> Five	Math Scrabble <b>x</b> Times	Math Scrabble <b>x</b> Times	Math Scrabble <b>=</b> Equal
Math Scrabble <b>6</b> Six	Math Scrabble <b>7</b> Seven	Math Scrabble <b>8</b> Eight	Math Scrabble <b>-</b> Minus	Math Scrabble <b>-</b> Minus	Math Scrabble <b>÷</b> Divided by

Extensions: This game may be played by adding scooters as a mode of travel of performing sport fitness skills while waiting turns.

## Domino Rally

### Identifying number and picture representation of numbers using dominoes

**Object of the game:** collect as many dominoes as possible by performing a motor or manipulative skill after recognizing the numeric representation of the domino picture.

Students go to the bone yard (loco-motor movement) and select a domino. Next they find the # that represents each side of the domino. At each # they perform another motor or manipulative skill at each # spot. They return to their home base with their domino. After each turn and domino collected they attempt to create a domino pathway.

## Fun with Fractions

Participants will complete the skill station activities and respond to the fractions questions by writing answers on their whiteboard. When introducing the lesson, remind students that today we will see how fractions can be used in sports. 3<sup>rd</sup> and 4<sup>th</sup> graders working with fractions should be reminded that a fraction is a part of a whole. When setting up the problem remember \_\_\_\_ of \_\_\_\_.

**Activity station 1** - Tossing and catching. Begin with 8 ghost balls, toss each ball at the target. When you have completed the challenge record the # of balls landing in the target in fractional terms.(example \_\_\_ of eight or  $\frac{3}{8}$ )

**Activity station 2** – Shuttle bucket run. With your partner or team member run to the cup/buckets and return with one at a time. Repeat this taking turns until 8 buckets/cups have been collected. Write a fraction for each color collected. Which color was the largest fraction of the whole?

Example:

R G R B Y B R Y - red  $\frac{3}{8}$ , green  $\frac{1}{8}$ , blue  $\frac{2}{8}$ , yellow  $\frac{2}{8}$  – challenge? What 2 colors represent  $\frac{1}{2}$

**Activity station 3** – Basketball shooting Each player will get 8 shots at the hoop. Your partner or team mates will record the made shots on the score sheet. When finished you will complete the questions on your score sheet.

Color in 1 ball for every shot made

Shots

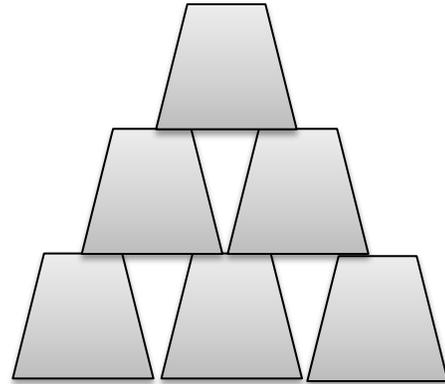
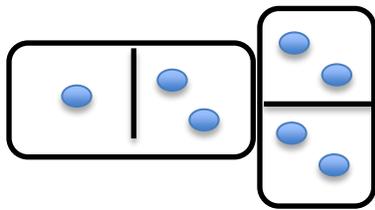


What fraction of the shots did you make? \_\_\_\_\_ What fraction did you miss? \_\_\_\_

**Activity station 4** – Bowling/rolling to target. 10 bowling pins are set for this station and players get 2 rolls to complete the challenge. Fill in fractional # knocked down on the score sheet.



# Movement Math &



# Mayhem