

# AAHPERD National Convention Charlotte, NC

# From Oil Spills to Dr. Seuss: Interdisciplinary Teaching in Elementary Physical Education







# **Presenters:**

Ms. Cathy Hill
hillcg@comcast.net
Dr. Fran Cleland – West Chester University
fcleland@wcupa.edu
Martha Harris
martha@fizikagroup.com
Whitney Sharp – West Chester University

# Interdisciplinary Station Descriptions

# Station 1: SPELL IT Grades 1 & 2

Interdisciplinary Focus: Language Arts

Skill Theme: Locomotor

Movement Concepts: Space Awareness - direction, pathway

Equipment Needed: spelling cards, locomotor cards, cones, masking tape, laminated

alphabet

Equipment Set-up: Alphabet letters are taped onto small cones and positioned throughout the general movement space: spelling words (provided by classroom teacher) and printed on word cards are placed in four different hula hoops on each side and end of the movement space.

Activity Directions: each students selects a spelling word card from their designated hula hoop; the spelling word is kept by the student while they perform the movement skill to the corresponding alphabet letter; once the word is spelled they travel back to their hoop and place their word card back in the hoop; activity could be extended to practice manipulative skills also such as bouncing a ball with hands; music could accompany this activity; the teacher announces the locomotor skill to be performed.

**Teacher Feedback**: observe and correct technique of locomotor skill performance **Sample Assessment** 

Sample Assessment					
	K-2 Summative Assessment Rubric for Versatile Performance of				
	Galloping				
Rating	Body	Space	Effort		
Advanced	Mature Performance (as described below)  Can gallop with either foot leading	Can gallop with increased flight phase thus gaining more height  Gallops along	Can purposely vary amount force exerted performing small & large range galloping		
		zig-zag pathways			
Proficient	Consistent Mature Performance Galloping is rhythmically coordinated; can gallop with right foot as lead-foot 3 or more times in sequence and left foot as lead-foot 3 or more times in sequence Preparation: Step forward on lead foot; arms begin back	Gallops along straight and curved pathways	Gallops to an external beat/music		

	and bent at elbows  Main Action: Step-together with trail leg touches the heel of lead foot; push-off of trail- foot is forceful enough to achieve a flight-phase with feet; arms swing forward in a coordinated fashion with legs to achieve distance and height  Recovery: Lands on ball of lead foot with trail foot behind lead foot  Entire Action is Step- Together-Step with a flight phase on during "Together"		
Developing	Inconsistent Mature Performance Gallops are somewhat rhythmically coordinated; galloping in a sequence is inconsistent Preparation: Step forward on lead foot/leg; arms begin back and bent at elbows Main Action: trail leg sometimes moves beyond the heel of the lead leg; arms swing forward inconsistently to achieve forward distance and height  Recovery: Lands on ball of lead foot with trail foot	Gallops along a straight pathway	Gallops inconsistently to an external beat/music
Beginning	Emerging Elementary Performance Gallops are not rhythmically coordinated and cannot gallop on either leg; gallops are not sequenced Preparation: Step forward on lead foot/leg; no arm action Main Action: trail leg moves beyond the heel of the lead leg; no arm swing forward Recovery: Lands on both feet thus not achieving steptogether-step action	Gallops forward and covers short distance	

# Station 2: MATH COLLAGE Grades 4 & 5

Interdisciplinary Focus: Mathematics

Skill Theme: Balance/Nonlocomotor; countertension; counterbalance; partner supports

Movement Concepts: Space Awareness - levels; Relationship - over/under; on/off

Equipment Needed: Task cards with criteria for collage, gymnastic mats

**Equipment Set-up:** Mats are positioned in on perimeter of gymnasium so the teacher can be positioned in the middle

**Activity Directions:** students are provided with a taskcard that explains they will be creating a collage of balances on different body parts; the following math problems provide the guidelines for creating the balances in the collage

- 1) One performer must do a balance on the number of body parts equal to the dividend of 12/4.
- 2) Two performers must perform a partner support in which the equation  $4 \times 4$  is represented.
- 3) One performer must create a symmetrical balance.
- 4) One performer must create an asymmetrical balance.
- 5) ALL PERFORMERS MUST DO THEIR BALANCE <u>TANGENTAL</u> TO ANOTHER PERFORMER.

Teacher Feedback: observe and correct technique of balances created

Sample Assessment: See rubric provided below

MATH COLLAGE RUBRIC			
	YES	NO	
One performer must do a balance on the number of body parts equal to the dividend of 12/4			
Two performers must perform a partner support in which the equation $4 \times 4$ is represented.			
One performer must create a symmetrical balance.			
One performer must create an asymmetrical balance.			
Performers are tangential to one another			

# Station 3: CLEAN UP THE OIL SPILL 4TH & 5TH GRADERS

Interdisciplinary Focus: Science

Skill Theme: Balance & Locomotor Skills

Movement Concepts: Space Awareness - levels; Relationship - over/under; on/off Equipment Needed: polyspots, hula hoops, carpet squares, ropes, scooters, taskcard

with the directions as to how the equipment can be used, worksheet(s)

### Equipment Set-up:

Activity Directions: The people are "oil" polluting a body of water. In order to clean the water the "oil" must be cleared out of the water. To accomplish this, the "oil" (participants) uses the equipment to travel across a specified space using the equipment in pre-specified ways. No one, that is the "oil", is permitted to touch the floor; the "oil" can STAND ON OR BE IN the available equipment. The equipment can be reused and transported across the water.

Successfully traveling across the space signifies removing the oil from the polluted body of water. When the "oil" arrives they must complete a worksheet.

**Teacher Feedback:** observe and see that students (that is the "oil") understands the criteria to solve the problem; facilitate by providing ways to successfully use equipment to cross the space without touching the floor

Sample Assessment: See worksheet below; see group collaboration rubric below

# Sample Worksheet Questions

#### True or False:

a. How fast a cleanup crew can reach a spill -- along with other factors, like waves, currents and weather -- determines what method a team uses to clean a spill.

Answer:		
AUSWELL		

b. Containment and skimming is the most environmentally "friendly" way to clean up an oil spill.

Answer	•

# Personal & Social Responsibility Rubric - Oil Spill

Level 3: All participants offered verbal ideas on how to solve the problem; all group participants stay physically active while solving the movement problem; participants used positive words of encouragement with each other

Level 2: Most participants offered verbal ideas on how to solve the problem; most group participants stayed physically active while solving the movement problem; participants used some positive words of encouragement with each other

Level 1: Participants experienced difficulty sharing ideas on how to solve the problem; a few participants were not physically involved and stood off to the side

# Station 4: DAILY 5

Interdisciplinary Focus: Language Arts (Cathy Hill, Newburyport School District, MA) Skill Theme: Our classroom teachers use the teaching strategy called Daily 5. I decided to take the basic idea of the structure and use the same vocabulary that the students were learning (and the teachers were excited about) in the classroom to help make my students more independent and have choices in Physical Education

The following is a definition from Daily 5 K-5 Literacy Connection website (http://k-5literacyconnections.weebly.com/daily-5.html)

"The Daily 5 is a series of literacy tasks which students complete daily while the teacher meets with small groups or confers with individuals. The Daily 5 is a structure that will help students develop the daily habits of reading, writing and working with peers that will lead to a lifetime of independent literacy".

This definition intrigued me from the 2 Sisters website

(http://www.the2sisters.com/the\_daily\_5.html) "designing a structure that would ensure all children were working at their level of challenge while taking responsibility for their learning and behavior, and that would provide meaningful instruction blocks. Thus **The Daily 5**<sup>TM</sup> was born".

Using daily 5 classroom curriculum framework with fitness lessons in <a href="mailto:physical">physical</a>
<a href="mailto:education">education</a>; specifically the health-related fitness components: Muscle endurance/strength & stamina, Cardio-respiratory stamina, Flexibility</a>
<a href="mailto:Equipment Needed">Equipment Needed</a>: For convention—Daily 5 student cards, posters; if taught in a PE class in mats & station exercise equipment are needed</a>
<a href="mailto:Activity Directions">Activity Directions</a>: Daily 5 is a framework used in the classroom to break the students into small independent working groups that are focused on specific ELA activities (reading and writing) so that the teacher can work with small groups or individuals. The students build stamina and charts that describe what the station work will look like as reminders. I have taken this idea and have changed it for use in the</a>

gymnasium. Students relate to it easily and well because they know all about it through the work the classroom teachers have done. They know how to go to stations, know what the expectations are for independent work and this gives me the time to get to individuals that need more focused attention and help with proper alignment, motivation, encouragement and questions. My long term hope is that students will be able to remember the concepts of Daily 5 in PE (warm-up/muscle work/cardio/flexibility/cool down) over time and it will become a lifetime acquired skill.

## Daily 5 in PE:

1—whole group warm-up

2,3,4 stations are set up for muscle, cardio, flexibility

5—whole group cool down

# Station 5: Interdisciplinary Field Day Examples

Interdisciplinary Theme: Using school wide themes for Field Day

**Focus:** Helping students relate with the yearlong school wide theme by using Field Day stations to reinforce concepts taught throughout the school year.

# Equipment Needed:

Examples in Field Day 3 ring binders:

-- Year of Science -- Discovering Newburyport

--Treasure Hunt --Celebrating Different Abilities

--Going Green --The United States of America

--Multicultural --Fun & Wellness

--Responsive Classroom (Teaching Children to Care)

#### Teacher Directives:

This will just be an opportunity to look at some of the integrated themed Field Day events done at our school

# Station 6: Educational Gymnastics Sentences

Interdisciplinary Focus: Language Arts

Skill Themes: balance, rolling, jumping/landing, transfer of weight

Activity Directions: I have combined the skills in our educational gymnastics lessons with language arts sentence structure to help reinforce what the students use in their writing and reinforce why they do so. We review what a written sentence needs to have -capital letter to start, nouns, verbs, adverbs, and a punctuation mark to show it is finished. We also talk about why these are used --to tell the reader a new idea is starting, (capitol) to tell the reader it is finished (punctuation mark), has to make sense, be interesting, keep the reader's attention and needs to have (nouns, verbs). We keep going back to each of these while we are working on our gymnastics skills.

Once we are ready to put together our final gymnastics sentence students are given a checklist to help them make sure they have each element they need to have.

A beginning pose ("capitol")
2 balances,
2 rotations,
"Needs to have" such as nouns, verbs, adjectives
flight move,
transfer of weight,
An ending move ("punctuation mark")

This is a copy of the checklist the students have in their journals.

My gymnastics sentence has			
a Beginning shape the "Capital letter"			
2 Rotations			
2 Balances on body parts Symmetrical Inverted			
Flight - I landed on 1-foot2 feet			
an Ending shape the "punctuation mark"			
I used suggestions from my coach: Yes No			



# ALPHABET HUSTLE



Larry Carr & Lou Ann Miller Mohawk Elementary

# ABCDEFGHIJKLMNOPQRSTUVWXYZ

Class Size: 15-20

Grade Level: Preschool, Kindergarten

Equipment Needed: 26 cones, 26 polyspots A-Z, 52 bean bags A-Z (two of each

letter), four buckets or containers.

Set Up: Scatter the polyspots letter up on the gym floor. Place a cone directly on top of the polyspot (You will not be able to see the letter). Place the buckets or containers in the four corners and randomly place equal number of bean bags in each bucket.

Object of game (activity): Get all the beanbags out of the four containers and match the bean bag to the polyspot.

How to Play: After you have set up the activity, tell them to spread out in personal space. Upon your whistle (cue) they start the activity. They run and get one bean bag at a time out of a bucket and then attempt to find the same letter by lifting up a cone. If it does not match, they continue moving from cone to cone, lifting it up until they find the polyspot that matches. Once they find it, they place the bean bag on the polyspot, place the cone on top of it and run to get another bean bag from a bucket. Once all the bean bags are gone from the buckets, students can help other students who still have a bean bag and have not yet found a match. Depending on how much time you have, you can play a couple rounds.

Clean Up: Students are asked to go to one cone at a time, lay the cone on its side, pick up the two bean bags and bring them to us. When they hand us their two bean bags they must tell us what letter they have and a word that starts with that letter. This is done until all the cones are laying on their side (so we know we have all the bean bags). When the next class arrives, we ask them to go around the gym and set all the cones on the polyspots while we put the bean bags back in the four buckets.

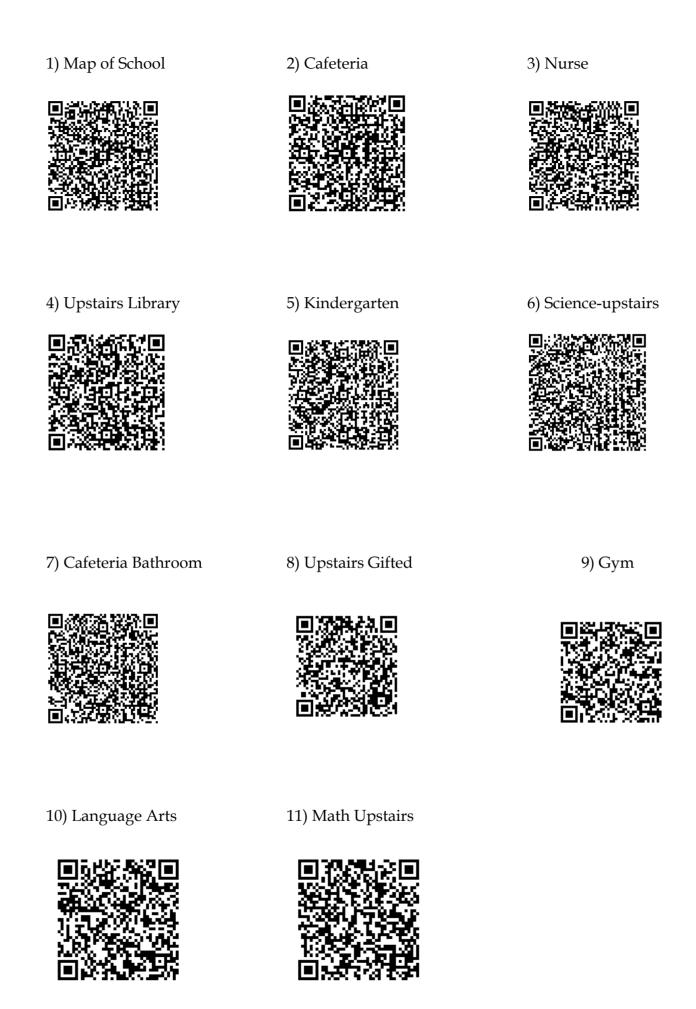
Variations: You can do the same activity using numbers and colors. You can add more

cones, polyspots and beanbags.



# Scavenger Hunt Mohawk Elementary - BODY SYSTEMS SCAVENGER HUNT

- 1) Today we'll put your knowledge of the school to the test. But first: take a picture of something that will help you on your quest.
  - -Map of the school Downstairs
- 2) If you want to learn how to get that super hero look, Head upstairs to check out a Muscular System Book.
  - -Upstairs Library
- 3) When your Digestive System starts to rumble, your teacher takes you here, so that you won't grumble.
  - -Cafeteria Downstairs
- 4) If you spend lots of time here, learning equations, and chemical compounds to make things explode, your brain might start hurting cause your Nervous System is in Overload.
  - -Math/ Science hallway/Upstairs
- 5) To stop you from dying and riding home in a **hearse**, when your Immune Systems not working, you go visit the school \_\_\_\_\_\_.
  - -Nurse's office Downstairs
- 6) When you go here to learn about how to speak, your Respiratory System may feel tired from all the steps you leap.
  - Language Arts Upstairs
- 7) On days 1 & 4, 2 & 5 and 3 & 6, you go to this special to work on your Cardiovascular Endurance just for kicks.
  - Gym Downstairs
- 8) If you forget the equations to this classes test, your Corculatory System may start beating in the side of your chest.
  - Math Upstairs
- 9) In the Cafeteria you eat and drink and laugh with glee, but when your Urinary System starts working, you'll be running here to ---
  - Bathroom outside of cafeteria
- 10) If your Nervous System functions faster then the rest, you may be placed in this program, because your "the Best" (smartest).
  - -Upstairs Gifted
- 11) When you arrive here, your Skeletal System is small, but soon it will grow larger and you'll graduate from this hall.
  - Kindergarten Wing Downstairs





# Dr. Seuss West Chester University HPE-Teacher Candidate Lauren Ciccocioppo



**PDE Standards 10.5.3.** *A.* Recognize and use basic movement skills and movement concepts

**PDE Standard 1.1.2.C.** Use meaning and knowledge of words across content areas to develop a speaking and reading vocabulary.

# Lesson Objectives:

- a) Students will properly perform locomotor skills including hopping and skipping.
- b) Students will perform the balance skill of walking across a wide wooden bench.

# Equipment Needed:

- A) Educational Materials:
  - -Worksheet per student
  - -Pencils for each student
  - -Poster for each station with book covers and titles
  - -Paper plates with different colored fish
    - One #1 fish
    - One #2 fish
    - One #3 fish
    - One #4 fish

-Letters that spell Hop on Pop (multiple sets depending on how many children are at each movement station)

- -Signs to go on gymnastics equipment "Oh the Places You'll Go"
  - Mountain
  - Rock
  - Hill

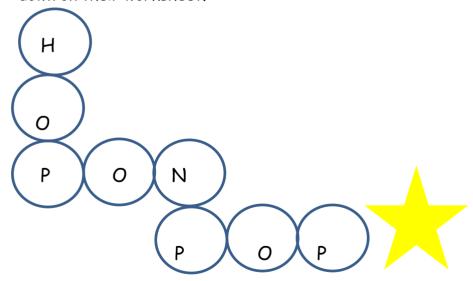
# B) Physical Education Equipment:

- -Wide wooden bench
- -2 normal Frisbees
- -green fluff balls
- -1 rainbow shaped ladder (gymnastics equipment)
- -orange polyspots
- -incline mat
- -1 gymnastics block
- -gymnastics mats

## Teacher Directives:

# Station #1: Hop on Pop

Students will hop on one foot from polyspot to polyspot saying the letter they land on. When they spell a word they are going to say it and continue on. Once they rech the star at the end of the polysots they will say the full title of the book, "Hop on Pop". Students are also completing their worksheet as they move throughout the stations and at this station they will write "Hop on Pop" on the designated lines. Students are working on reading and writing by spelling the title and writing I down on their worksheet.



# Station #3: Green Eggs and Ham

Students will walk across the wooden bench holding a Frisbee upside down with 2 green fluff balls and 1 green paper ham. The students are giving "Sam I Am" the green eggs and ham back. Say, "I like green eggs and ham" and pick up a slip of paper and finish the sentence from the book. Students will read the slip they choose and complete the sentence. They will also practice writing by filling in the rest of the sentence on their worksheet.

Slips of paper would state: "on a boat" or "with a fox"



# Station #3: 1 Fish, 2 Fish, Red Fish, Blue Fish

Students will be paired up and each group will start from a different polyspot. One partner at a time will skip out to the bunch of paper plates placed face down in the middle of the gym. This student will ;pick a plate up and run it back to their home base polyspot. If a plated picked up duplicates on they already have, the place is placed back down in the middle of the plates and the child returns back to their home ployspot and their partner goes out to find another plate. The object is for the studnets to find 4 different paper plates corresponding to 1 Fish, 2 Fish, Red Fish, Blue Fish. When the partner groups have all 4 plates, they will put them in order and yell out "1 Fish, 2 Fish, Red Fish, Blue Fish". Then students complete the worksheet that corresponds to this station.

# Station #4: Oh, The Places You'll Go

Students will climb the mountain, get over the rock, and roll down the hill. At each of the "places" the students will read the word of what they are climbing, going over, or rolling down. Students are working on more literacy at this station. They will do the activities and decide

what they do where (example, "Where it says "Roll down\_\_\_\_\_"
they will write hill."



# Closure:

Bring all students back to the center of the gymnasium by "calling all kdis". Review the books we talked about today, have students shinish their worksheet.

# Dr. Seuss Worksheet

Station #1:
Station#2: Green Eggs and Ham
Station #3:
Fish
Fish
Blue
Station #4: Oh, the Place You'll Go!
Climb over the
Hike over the
Poll down the

# INTERDISCIPLINARY LESSON Dr. Fran Cleland West Chester University

## Medics on the Move

**NASPE Standard 2**: Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities

<u>PDE Standard: 10.5.6.F</u> Identify and apply game strategies to basic games and physical activities.

• fleeing from an opponent

## **Objectives - The student will:**

1. dodge (change speed, level & direction) the players designated as traffic jams, potholes, and detours while traveling through the "city" (general space – specifically from one end of a gymnasium to the other) while tossing a bean bag among teammates and maintaining space among players. (P)

# **Prerequisite Knowledge:**

### **Assessment Strategy**

Formative assessment of body systems will be used during game play.

#### **Introductory Information**

Suggested Grade Level: 4/5th grade

Class Size: 25

Facility: Gymnasium

**Lesson Time:** 30-45 minutes

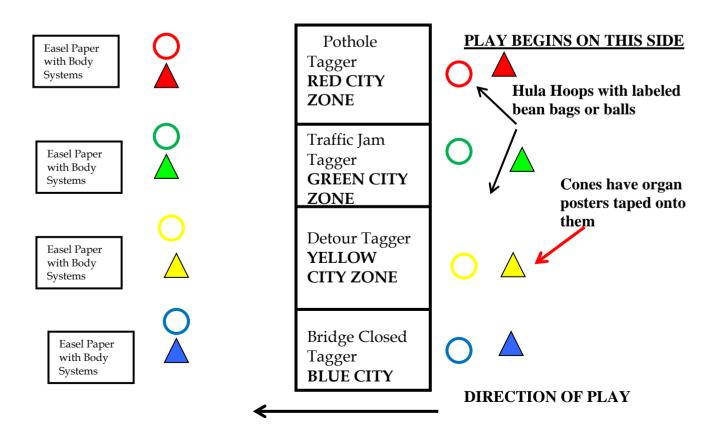
**Equipment Needed:** 8 hula hoops, 4 cones, pinnies for entire class in red, blue, yellow, green, laminated pictures of body parts, 56 bean bags, easel paper or poster with systems written on it, 4 black magic markers, masking tape, polyspots (used to divide playing area into 1/3's)

#### Equipment Set-up and Materials Needed for Lesson:

1. Large piece of easel paper or poster with the systems written on it in grid form. This poster or paper is placed on a sideline at the MEDIC TEAM'S HOSPITAL ZONE. Cones can be placed on the sidelines with a colored piece of construction paper around them to identify the color of the MEDIC TEAM, a colored balloon or colored cones could be used. Systems chart is below:

CIRCULATORY	RENAL/EXCRETORY	DIGESTIVE	RESPIRATORY
SKELETAL	NERVOUS	MUSCULAR	

- 2. Teacher needs to have the list of questions and responses.
- 3. Posters (8x11) of Body Parts (4 sets) taped to cone matching the color of the medic Team. (See end of this lesson)
- 4. The playing area is divided into **FOUR CITY ZONES. EACH TEAM STAYS IN THEIR ZONE DURING PLAY. POLYSPOTS COULD BE USED TO DIVIDE GYM.**



## **Instant Activity**

#### **Medics Get Ready to Move!**

### IA Description - a chasing and fleeing activity that incorporates tossing & catching.

- 1. In this IA, students work with a partner. Partners stand a comfortable distance away from each other (15 ft.). Students are asked to find a space within the general playing space of the gymnasium prior to the start of the IA.
- 2. The teacher explains that students will toss or throw the bean bag (or any tossing/throwing object) to their partner back and forth when signaled to begin by the teacher.
- 3. When the teacher announces, "Medics on the Move", the partner in possession of the bean bag uses a fast-paced walk to chase their partner throughout the general space. The **object of the game** is the tag their partner with the bean bag. If they successfully tag their partner with the bean bag prior to the teacher stopping the round of play, they give the bean bag to the partner they were chasing. That partner then becomes the chaser and the original partner the fleer. The new chaser should count to 3 prior to chasing their partner.
- 4. Teacher stops round of play after 45 seconds 1 minutes of chasing & fleeing and begins another round.
- 5. Music could be used during this IA

### **Content Development**

### **Introductory Task/Set Induction:**

The teacher should briefly highlight the objectives of the lesson. "Today we will be playing a game that involved chasing & fleeing, quick changes of direction, changes of speed and awareness of other players around you. You will also be challenged to apply the information you have been studying in your health class about body systems."

# Directions for Game: The game will need to be "talked through" so students can learn how to play it. The game can then be played for several rounds.

- 1) Medic Teams need to be assigned. The teacher can used pre-existing learning teams or squads OR use a novel system to create the 4 medic teams
- 2) Four students are the chasers/taggers and should be given a red, blue, yellow or green pinnie. The taggers are assigned to one zone of the city.
- 3) MEDIC TEAMS begins at their designated hospital zone (i.e., red, blue, yellow or green). See the diagram of the gymnasium or field set-up above.
- 4) The teacher reads a question such as, "What organ filters out impurities from the blood and produces urine"?
  - First the MEDIC TEAM must hold a 30 second consultation with each other to decide what body part they are looking for. Then at the teacher's signal, the MEDIC TEAM uses the designated locomotor skill (e.g., fast walking or jogging) to travel to other side of their city zone.
  - The medic team attempts to toss and catch the bean bag as they jog, fast walk through their city zone. The OBJECT IS TO TRANSPORT THEIR BODY

PART TO THE OTHER SIDE OF THEIR CITY ZONE WITHOUT BEING TAGGED BY A POTHOLE, TRAFFIC JAM, DETOUR, CLOSED BRIDGE, ETC.

- If a medic team player is tagged as they attempt to move across the gym with their medic team tossing and catching their bean bag (body part), THEY TAKE THEIR BODY PART TO THE OTHER SIDE WHERE THE EASEL PAPER & CONE ARE.
- Then they WRITE THE NAME OF THAT ORGAN IN THE SELECTED BODY SYSTEM (PIECE OF EASEL PAPER OR HANDOUT). They put the #1 by the name of that organ since it is the ANSWER TO QUESTION #1. That permits the teacher to check to see if the medic team chose the correct organ. If they DID NOT GET TAGGED THEY WRITE #1 AND THE NAME OF THE BODY PART IN THE SELECTED BODY SYSTEM WITH A + SIGN. THE PLUS SIGN DESIGNATES THEY HAVE EARNED A POINT. IF THEY DID GET TAGGED THEY WRITE #1 AND THE NAME OF THE BODY PART AND A MINUS (-) SIGN NEXT TO IT DESIGNATING NO POINT EARNED.
- 5) Teacher then reads another question and play resumes.

#### **Teaching Suggestions for Game Play**

- 1. Stop play on occasion to provide feedback on tossing and catching technique; how the medics are using personal and general space; if students are quickly and carefully changing directions.
- 2. Ask students if they have any questions and/or game modification suggestions. The medic teams as well as the 3 chasers could "huddle" and collectively devise a game modification.
- 3. Be sure to visually monitor game and provide verbal directives for safety and to reinforce the objectives of the game.

#### 4. TAGGERS SHOULD BE CHANGED WITH MEDIC TEAM PLAYERS

#### **Lesson Closure**

Debrief the assessment used during the game. Have each medic team (have chasers each join a different team) go to one of the pieces of easel paper to see how their team did on matching the chosen body part to a body system.

# THE FOLLOWING INFORMATION IS FOR THE TEACHER TO USE TO PREPARE FOR THIS LESSON

#### **SYSTEMS & CORRESPONDING BODY PARTS:**

**Skeletal:** Skull, Jaw, Spinal Column, Ribs **Muscular:** Biceps, Triceps, Quadriceps **Circulatory:** Heart, Veins, Arteries

Respiratory: Lungs, Trachea, Bronchi, Alveoli

Renal/Excretory: Kidneys, Bladder

**Digestive:** Stomach, Small & Large Intestine **Nervous:** Brain, Nerves, Neuron, Spinal Cord

#### **Questions:**

1) "What organ filters out impurities from the blood and produces urine"?

Kidney

2) "What bone protects the organ that is composed of gray matter?

Skull

3) "What muscle is made up of chambers?"

Heart

4) "What organ controls sight, breathing, and emotions?

Brain

5) "What organ has air sacs"

Lungs

6) "What muscle is made of two main parts and is in your upper arm?

**Bicep** 

7) "What organ aids in digestion and breaks up the food you eat"?

Stomach

8) "What carries impulses from cells to the tissues of your body"?

Nerves

9) "What bone has a hinge joint like a door hinge"?

Jaw

10) "What organ is a reservoir or a "holding tank" for urine?

Bladder

11) "What protects your spinal cord"?

Spinal Column

12) "What muscles bend and extend your leg at the knee joint"?

Quadriceps

13) "What organ is also called your WINDPIPE"?

Trachea

14) "What organ contains undigested, unabsorbed food"?

#### **Game Modification**

A simpler version of the game could have a drawing of the human body or a skeleton on easel paper. In this version of the game students are learning about <u>muscles</u>, <u>bones</u>, <u>and organs only</u> correctly locate where they go on the body and then tape them to the skeleton picture. Different questions would need to be asked in this version of the game. Additionally all muscle pictures could be in a yellow hoola hoop, bones in a red hoola hoop and organs in a blue hoola hoop. This would make it easier for the medics to find the correct body part.



#### **References:**

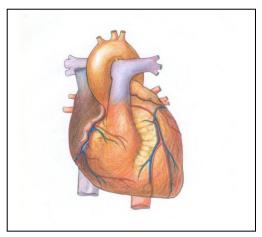
Diabetes and Hormone Center of the Pacific: <a href="www.endocrinologist.com">www.endocrinologist.com</a>

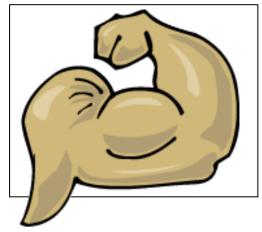
Malecare: men fighting cancer together: www.malecare.com

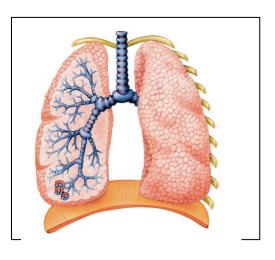
Micki Krimmel: <a href="https://www.mickikrimmel.com">www.mickikrimmel.com</a>
Strong Health: <a href="https://www.stronghealth.com">www.stronghealth.com</a>

The Human Body: www.thehumanbody.ecsd.net

**Source:** Dr. Fran Cleland, West Chester University, West Chester, PA







**HEART** 

cervical

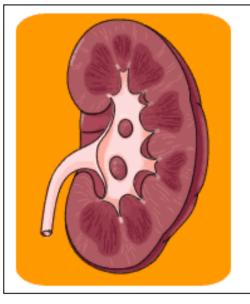
lumbar

sacrum

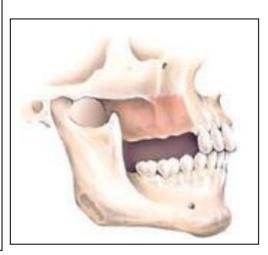
coccyx

thoracic

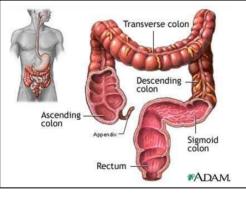
BICEP



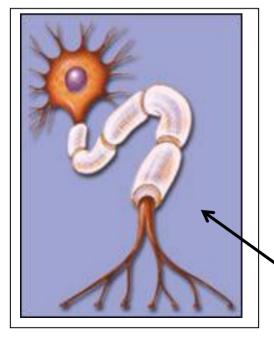
LUNGS



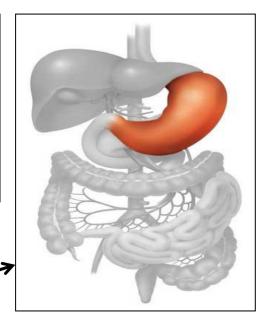
IN

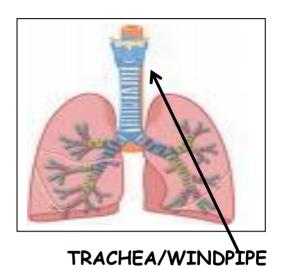


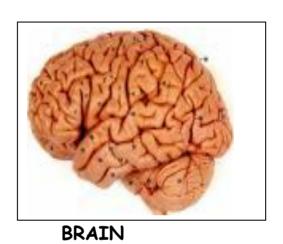
JAW **KIDNEY** 

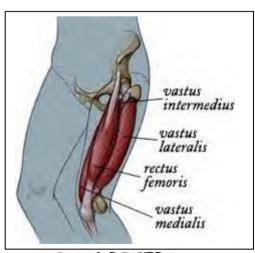








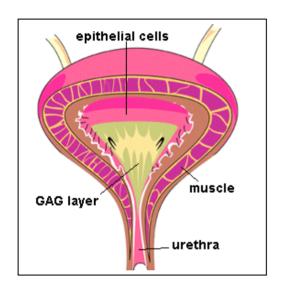








SKULL



**BLADDER**