OAHPERD

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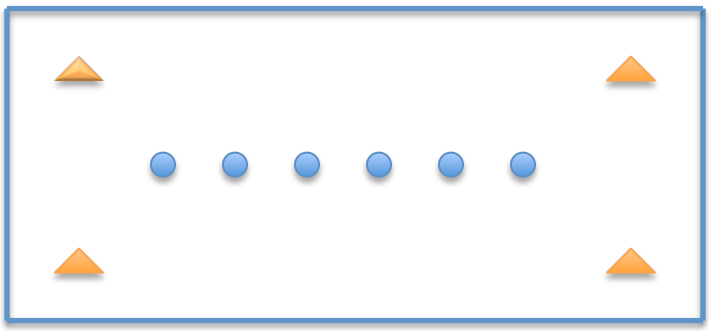
STEM in PE?
As PE teachers, we are asked (required) to incorporate literacy and STEM in our classes. Come find out an easy to use solution to implement both in your curriculum. You will walk away with numerous ideas on how to do both in the PE class while the students are at a consistent MVPA. You and your principal will love it!

Bucket Warm Up
Equipment- 26 Task Cards, 6 buckets (4 Task Cards in 4 buckets, 5 Task Cards in 2 buckets)

Set Up- 6 buckets set up, evenly spaced, in the middle of the gym, 4 cones set up in the corners (leave enough room for students to be able to go around them)



How to Play-As the students come in, pair them up and send them to a numbered bucket (make sure they don't start at the same bucket). They will go to a bucket, pull out a task card, take it to their own space and perform the exercise (assign them the blue, red or green number on the card). After they perform the correct number of repetitions, 1 person runs the card back to the bucket where it came from, and the pair does 1 lap around the cones

(different locomotor movements can be done around the cones as well). Once the lap is completed, one person runs up to the next bucket and pulls out another card and repeats the sequence until the establish time is complete.

STEM Tag

Each player starts out with one STEM card. Spread out around the gym. Once the start signal happens, the players go around the gym, using a locomotor skill that has been decided, tagging each other. Once a person tags someone, the person **that was tagged must ask their STEM question.** If the person being asked gets it correct, they will get that card, and continue with the game. The person who lost their card keeps trying to find people that have cards to tag. The game continues until the teacher gives the stop signal. Then, the teacher will ask how many STEM cards people have.

STEM Card Jog

Students have a partner and are standing side by side on the volleyball court boundary lines or the basketball court boundary lines. All the Skillastics® STEM Cards are scattered in the middle of the floor. On a signal, the partner on the outside begins to jog around the court in a counter clock direction. At the same time, the inside partner jogs to the center to get a STEM card and then jogs to his partner. While they are jogging together, the partner with the card reads the question and his partner tries to answer it. If it is not answered correctly, they keep the card but if it is answered correctly it is returned to the stack. Either correct or not, the partner on the outside then jogs to the center and gets a new card, and the partner that was in the inside begins to jog counter clockwise around the court, repeating the process. At the end of the activity, the partners review the cards that were missed

Options:

Different locomotor movements maybe used. Make sure to remind children NOT to try to run away from their partner. This is a cooperative activity. Also, make sure to remind children to WATCH where they are running, so that they don't run into anyone trying to retrieve a card in the middle of the floor.

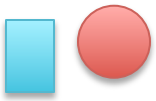
STEM Relay

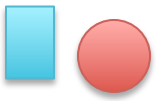
Place the 6 mini mats at one end of the gym evenly spread out, put one box of STEM cards across the gym and in line with the mat. The cards need to be scattered in the area with the **question side up**. Divide the students up and assign them a mat to stand behind. They will number off to see who goes 1st and so on. On your signal, the game will start. The first person runs (or any other locomotor skill) down to the cards and picks one card, and then runs back to his/her group. While the first person is doing that, the other students waiting pick out an activity on the mat to complete until the runner returns with the card. Once the runner returns, he/she will ask the group the question. They must come up with one answer. When they answer the question, the runner will show them the answer on the card. If they are correct, the card is placed on the S for Science, T for technology, E for engineering, and M for math- depending on the type of card answered. If the group is wrong, the next person returns the card to the pile and then picks up another card, and the cycle continues. Continue the game until the teacher would like to stop. Once the game is complete, the number of cards the groups correctly answered will decide the winner. This can be a total number of cards, the number of science cards, the number of technology cards, the number of engineering cards, or the number of math cards answered correctly. The game can be played again when the groups return the cards to the pile with the question up. Once the activity is complete, have the students put the STEM cards in categories and return them to the box.

STEM Continuous Relay

Make groups with 5 students in a group. Each group will have 4 dots (5 feet away), 1 task card at each dot, a pack of STEM cards, and a STEM board. 1 person starts at the STEM board, and 1 person at each dot with a task card. The stem cards are separated into stacks according to their categories (science, technology, engineering, and math) at the other end; face down. On the go signal, the 1st student at the STEM board will run to the cards pick the top card from the Science stack, while the other students are doing the activity on the task card at their dot. The 1st student will go to each of the students at a dot, starting with the first one, and ask that student the question. If the answer is correct, the 1st student runs to the STEM board and places the card on the S. The students will then rotate. The person on the dot closest to the board will be the runner, every student will then move one dot back. The 1st person will run up to the dot by the cards. The runner will then repeat the process with the Technology, Engineering and Match cards. But, if the answer is not correct, he/she goes to the next dot and tries. If no one answers the question correct, it goes to the next person that is the runner to return to the bottom of the pile and grab another card from the same pile. Repeat until the question is answered correctly.

The game continues until one team has 1 card from each of the 4 categories. It can also be played for a determined amount of time, and then a winner is the group with the most cards, or the most Science cards, the most Technology cards, the most Engineering cards, or the most Match cards



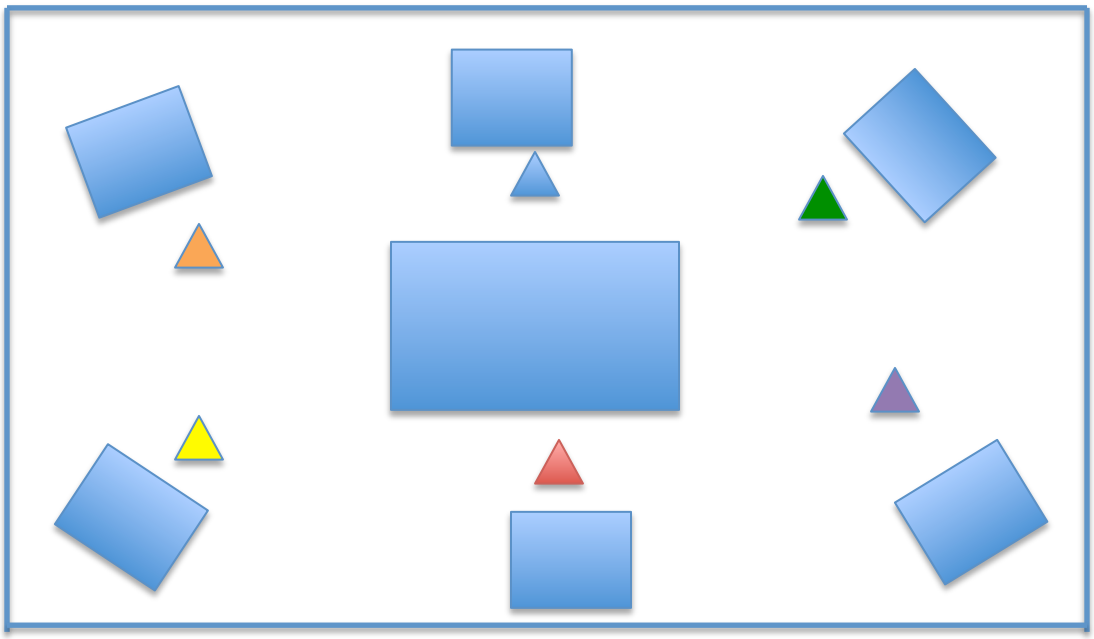


STEM

Activity- Skillastics Game

Equipment- Large game mat, 6 colored foam dice, 6 beanbags, 6 mini-mats, 6 colored cones (red, blue, purple, orange, green, yellow) or poly spots

Set Up- Place the large activity mat in the center of the space, put the colored bean bags on the activity just above the same colored start location, and place the dice below the beanbag. Place the 6 mini mats around the perimeter of the playing area with a colored cone in front of it (this is that teams color of dice they roll.) Divide the class in 6 teams, place them at a mini mat, and assign team color.

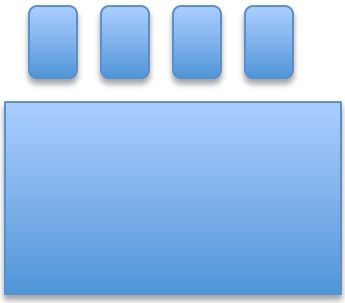


How to Play- Have each team member number off to determine the order in which the players will go to the big mat to roll the die. The teacher will tell them the color of repetitions to complete (blue, red, or green). When the teacher says "Go", the first person from each group will go to the large mat, roll the die, and move teams bean bag that number of spaces counter-clockwise. The roller picks up the die and places it by the moved beanbag. Then, they will look at the exercise landed on, return to the group, tell them the number of the exercise and complete the number of repetitions required for that exercise. As soon as the group is done, the next person runs to the mat and does the same process the first person completed. While the runner is going up to the mat and back, they remaining group members continue with the exercise or do some other exercise the teacher has previously determined. The game is stopped when a designated stop time is determined.

Activity- STEM Skillastics
Equipment- same as above, but add the 6 colored boxes of STEM Cards

Set Up- Save as above plus give each team a set of STEM cards that match their teams' color. Have the students open the box and place the 4 different categories in for separate piles in front of their mat, question side

down. (science in one stack, technology in another, engineering, and math). Below is what it would look like at the mini mat:



How to Play- Play the same way as above, but incorporate the cards. Once the team completes the exercise they landed on, look at that exercise on the mini mat and determine the color of the border around the exercise. If the border is blue, the person that rolled the die will take a card from the science (blue) pile and read it to their group. The group will come up with one answer to the question. If the group is correct, place the card in the middle of the mini mat, and if the group was incorrect, place it on the bottom of the pile from which it came. (if the border was red, a technology question would be drawn, and so on) Once the question is answered, the next person runs to the mini mat and completes the same process. The game is stopped when a designated stop time is determined. Then, the teams count how many STEM questions they answered correctly. The game can then be reset and played again.