# UPEN <br> Online Physical Education Network 



# TOOLS FOR LEARNING FITNESS RUNNING 



The Virginia Standards of Learning Project
The amp Lab Mrtland

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# TOOLS FOR LEARNING FITNESS RUNNING 

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In Partnership With


RISING
NEW YORK
ROAD RUNNERS
Rising New York Road Runners is the flagship youth program from New York Road Runners. Its mix of fun fitness activities and running is designed to teach kids of all abilities the necessary skills to learn to love physical activity. Everything is free and application for enrollment is open to schools PreK through grade 12 across the US. New York Road Runners serves nearly 600,000 runners of all ages and abilities annually through hundreds of races, community open runs, walks, training sessions, and other running-related programming, with nearly 250,000 youth participating in free fitness programs and events nationally through Rising New York Road Runners.

In partnership with the SUNY Cortland AMP Lab.
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## TOOLS FOR LEARNING FITNESS RUNNING

 MODULE OVERVIEWAccording to statista.com, fitness running is one of the most popular physical activities in the United States with almost 56 million people participating in 2017. That number is an increase of approximately 14 million people since 2007. With that in mind, OPEN and the New York Road Runners have teamed up to bring you an outcomes-based approach for preparing your high school students to enjoy a lifetime of fitness running.

| RESOURCES | FOCUS OUTCOMES \& STANDARDS | PAGE |
| :---: | :---: | :---: |
| Module Overview |  | 1 |
| Required Materials List |  | 5 |
| Activity Plans |  |  |
| [Warm-up 1] RPS Victory Lap | Standard 2 | 7 |
| [Warm-up 2] Around the World RPS | Standard 2 | 9 |
| [Cool-down] Walk/Talk Cool Down | Standard 2 | 11 |
| Double Line Pursuit | Standard 1, 2, 5 | 13 |
| 1600 Meter Prediction Run | Standard 1, 2, 3, 5 | 15 |
| Uphill Challenge | Standard 1, 4 | 17 |
| Checkpoint Destination | Standard 2 | 19 |
| Casino Royale | Standard 2, 4, 5 | 21 |
| Renegade Outlaws | Standard 1, 3, 4 | 23 |
| Vocab Scavenger Hunt | Standard 1, 2 | 25 |
| 3K: The One with the Most | Standard 3 | 27 |
| Sample First Lesson Plan |  | 29 |
| Academic Language Posters |  | 70 pages |
| RPS Dynamic Warm-Up Cards |  | 4 pages |
| Checkpoint Pattern Worksheets |  | 4 pages |
| Track Meter Interval Signs |  | 8 pages |
| Casino Royale Scorecard |  | 1 page |
| Scavenger Hunt Academic Language Sheets |  | 30 pages |
| Academic Language Sheet Definition Key |  | 1 page |
| Scavenger Hunt Score Cards |  | 1 page |
| Universal Design Adaptations |  | 1 page |
| Heart Rate Zones Chart |  | 1 page |
| Perceived Exertion Card |  | 1 page |
| Student Assessment Tools |  |  |
| Fitness Running Portfolio |  | 12 pages |
| Holistic Performance Rubric |  | 1 page |
| Academic Language Quiz |  | 1 page |
| Movement Concept Self Analysis |  | 1 page |
| Self-Efficacy and Social Support Inventory |  | 1 page |
| Teacher Self-Evaluation \& Reflection Guide |  | 1 page |

## MODULE OVERVIEW

About New York Road Runners<br>Rising New York Road Runners is the flagship youth program from New York Road Runners. Its mix of fun fitness activities and running is designed to teach kids of all abilities the necessary skills to learn to love physical activity. Everything is free and application for enrollment is open to schools PreK through $12^{\text {th }}$ grade across the US. New York Road Runners serves nearly 600,000 runners of all ages and abilities annually through hundreds of races, community open runs, walks, training sessions, and other running-related programming, with nearly 250,000 youth participating in free fitness programs and events nationally through Rising New York Road Runners.

## Virginia State Standards

- Standard 1 [9.a,f] Demonstrate proficiency and refinement in locomotor, non-locomotor, and manipulative skills through appropriate activities (e.g., outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, individual performance activities, games and sports [net/wall, striking/fielding, and goal/target]) (a); Demonstrate competency in one or more specialized skills in health-related fitness activities (f).
- Standard 1 [10.a] Demonstrate skill attainment in one or more lifetime activities (a).
- Standard 1 [11/12.a,c] Demonstrate mastery in all basic skills and movement patterns required for the selected activity and the ability to use the skills with consistency in the appropriate setting (a); Demonstrate advanced movement patterns in self-selected movement or activity (c).
- Standard 2 [9.a] Explain and apply selected scientific principles, to include physiological (warm-up, cool down, overload, specificity, and progression) and biomechanical (levers, types of muscle contractions, and force) that aid in the improvement of movement skills (a).
- Standard 2 [11/12.a,b,c,d,e,f,g,h] Explain and apply biomechanical and physiological principles that aid in the improvement of skills and performance in specialized movement forms, to include laws of motion, leverage, balance, weight transfer, speed, timing, accuracy, force, cardiac output, maximal oxygen consumption (VO2 max), energy systems (aerobic and anaerobic), heart rate (resting, target, and recovery), caloric cost of activity, muscle contraction, static versus dynamic flexibility, and muscular strength versus muscular endurance (a).
- Standard 3 [9.a,d,f] Demonstrate program-planning skills by assessing and analyzing personal fitness levels, setting goals, devising strategies, making timelines for a personal physical fitness plan, and evaluating the components and progress of the personal fitness plan (a); Explain the relationship between heart rate, training zones, and exercise intensity, to include measures (e.g., heart rate monitors, pedometers, accelerometers) and appropriate training zones to meet exercise and personal fitness goals (d); Calculate resting heart rate, target heart rate, and blood pressure (f).
- Standard 3 [10.a,c] Create a fitness and activity plan for the present and a potential plan for the future (postsecondary education, college/career) to address the health-related components of fitness (a); Identify fitness needs to prevent health concerns in the present and into the future (c).
- Standard $3[11 / 12 . a, b, c]$ Assess individual level of health-related fitness using a variety of appropriate measures (e.g., criterion-reference wellness tests, BMI, Fitnessgram®) and technology (heart-rate monitors) (a); Evaluate and adjust activity levels to meet personal fitness goals (b); Design and critique a personal fitness program, using available technology (e.g., electronic portfolios, tracking applications) and resources, to improve or maintain personal fitness levels in relation to the five components of fitness (c).
- Standard 4 [9.a,c,e] Identify and demonstrate proper etiquette, respect for others, integrity, and teamwork while engaging in a variety of activities (a); Apply conflict-resolution skills in physical activity settings (c); Apply communication skills and strategies that promote positive team/group dynamics (e).
- Standard 4 [10e] Evaluate opportunities for social interaction and social support in a self-selected physical activity or dance (e).
- Standard 4 [11/12.f] Demonstrate the ability to work cooperatively to accomplish a group goal (f).
- Standard 5 [10.b] Evaluate current activity and intensity levels (b).
- Standard 5 [11/12.f] Apply rate of perceived exertion and pacing to a conditioning plan that meets the needs of a self-selected physical activity (f).


## MODULE OVERVIEW

ASSESSMENT

Each skill-building activity in this module is meant to be one part of a complete lesson. The authors recommend the following formula for creating a 30- to 45minute lesson:

Instant Activity / Warm-Up 5-10 minutes

+ Skill Activity with Debrief
+ Cool-Down Activity
+ Debrief / Portfolio Completion

15-25 minutes
5 minutes
5 minutes

Important: Suggestions are what they say they are - suggestions. All OPEN materials are offered in MS Word format so that you can easily modify our suggestions to meet the needs of your students.

Five types of assessment are provided as a part of this module. However, there are many different ways for teachers and students to assess and evaluate student learning and skill development.

## Fitness Running Portfolio

This journal-style portfolio provides one work page for every lesson, with a focus on helping students understand and process the concepts of physiological response, movement skill refinement, and social and emotional learning.

## Holistic Performance Rubric

The holistic rubric can be used as both a formative and summative assessment within the module. Providing students with the rubric's criteria early in the module will allow for discussion and formative evaluation throughout activities and lessons.

## Academic Language Quiz

One short quiz is provided to help evaluate student retention of a small sample of academic language vocabulary words. If many students miss a question covering a specific word, review that word, its meaning, and proper context in future lessons.

## Movement Concept Self Analysis

The SHAPE America outcomes call for students to be able to "use movement concepts and principles (e.g., force, motion, rotation) to analyze and improve performance of self and/or others in a selected skill (S2.H2.L1)." This self-analysis provides a simple framework in order to prompt students to formally document how critical concepts apply to skill performance and improvement.

## Self-Efficacy and Social Support Inventory

As students enter high school and beyond, self-efficacy and social support systems play a role in regular participation in health-enhancing physical activity. This short inventory is designed to provide formative feedback on student development, as well as inform curriculum and planning decisions to physical educators based on content relevancy to the students being served.

## MODULE OVERVIEW

| Skill Activity |  |  |  |  |  | Suggested Academic Language |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |

# TOOLS FOR LEARNING FITNESS RUNNING 

 MATERIALS LIST

HIGH SCHOOL

| QTY | NAME | CODE | UE Cames <br> USGAMES.COM |
| :---: | :---: | :---: | :---: |
| 24 | Polar M200 Wrist Based HRM \& Running Watch | 1399697 | Link to e-Store |
| 12 | Large Cones | 1245875 | Link to e-Store |
| 4 | Stopwatches | 1376385 | Link to e-Store |
| 48 | Bean Bags (or Tennis Balls) | 1064179 | Link to e-Store |
| 6 | Foam Dice | 1135589 | Link to e-Store |
| 12 | Task Tents | 1389878 | Link to e-Store |
| 5 | Decks of Playing Cards | 3065 | Link to e-Store |
| 8 | Plastic Buckets | 1393491 | Link to e-Store |
| 12 | Low Profile Cones | 1255690 | Link to e-Store |
| 1 | Pen/Pencil per Student |  |  |
|  |  |  | UPENPhysEd.org |
|  | Fitness Portfolios |  | OPENPhysEd.org |
|  | Various Assessments |  | OPENPhysEd.org |
|  | Academic Language Posters |  | OPENPhysEd.org |
|  | Printable Activity Resources (see activity plans) |  | OPENPhysEd.org |

Note on Heart Rate Monitors: When purchasing heart rate monitors, it's okay to start with a small number (even 1 or 2) and gradually build your inventory when funds become available. Students may also have their own smartwatch devices. If you don't have enough for the entire class, rotate the HRMs each lesson and pair students as they analyze each other's' heart rate data. Our recommendation for this module is the Polar M200 because it is a watch commonly worn by runners. However, the Polar A370 is also a great choice.

NOTES

# TOOLS FOR LEARNING FITNESS RUNNING 

## RPS VICTORY LAP (WARM-UP)

## STUDENT TARGETS

- Skill: I will demonstrate proper exercise form, focusing on warming up my muscles.
- Cognitive: I will discuss why it's important to warm up my muscles before participating in vigorous physical activity.
- Fitness: I will remain actively engaged.
- Personal \& Social Responsibility: I will follow the protocols and etiquette of physical education class.


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 4 large cones
- 4 task tents
- 4 Dynamic Warm-Up Exercise Posters


## Set-Up:

1. Using 4 large cones, create a medium square activity area on the infield of the track.
2. Place task tents on the cones with exercise posters displayed.
3. Students begin the activity scattered inside the cones.

## Activity Procedures:



1. Today we will play RPS Victory Lap as our dynamic warm-up.
2. The object of RPS Victory Lap is to do as many victory laps as you can during our 5-minute warm-up.
3. On the start signal, find any partner. Play a game of RPS. The winner of the game will jog to a cone, read the first warm-up task, and then perform that task to the next card. Repeat until you complete a lap and then re-enter the game and find a new partner.
4. If you do not win a round of RPS, quickly find a new partner and try again.

## Standards \& Outcomes:

Standard 2 [9.a] Explain and apply selected scientific principles, to include physiological (warm-up, cool down, overload, specificity, and progression) and biomechanical (levers, types of muscle contractions, and force) that aid in the improvement of movement skills (a). TOOLS FOR LEARNING FITNESS RUNNING


## STUDENT TARGETS

- Skill: I will demonstrate proper exercise form, focusing on warming up my muscles.
- Cognitive: I will discuss why it's important to warm up my muscles before participating in vigorous physical activity.
- Fitness: I will remain actively engaged.
- Personal \& Social Responsibility: I will follow the protocols and etiquette of physical education class.


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 4 large cones
- 4 task tents
- 4 Dynamic Warm-Up Exercise Posters


## Set-Up:

1. Using 4 large cones, create a medium square activity area on the infield of the track.
2. Place task tents on the cones with exercise posters displayed.
3. Divide the students into 4 even groups. Each group at a cone.


## Activity Procedures:

1. Today we will play Around the World RPS as our dynamic warm-up.
2. The object of Around the World RPS is to move "around the world" from cone to cone as many times as possible during our 5-minute warm-up.
3. On the start signal, find any partner at your cone. Play a game of RPS. The winner of the game will perform the warm-up exercise on the card as they move to the next cone. The player who didn't won will stay, find a new partner, and then play again.
4. Continue until you hear the stop signal.

## Standards \& Outcomes:

Standard 2 [9.a] Explain and apply selected scientific principles, to include physiological (warm-up, cool down, overload, specificity, and progression) and biomechanical (levers, types of muscle contractions, and force) that aid in the improvement of movement skills (a).

# TOOLS FOR LEARNING FITNESS RUNNING 



HIGH SCHOOL

## STUDENT TARGETS

- Skill: I will practice mindful breathing techniques while cooling down my heart and muscles.
- Cognitive: I will talk with my walking partners while cooling down my body.
- Fitness: I will discuss the importance of cooling down.
- Personal \& Social Responsibility: I will follow the rules and etiquette of physical education class.


## TEACHING CUES

- Breathe Mindfully for 200M
- Talk with Partners for 200M
- Walk with Balance \& Posture


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- None


## Set-Up:

1. Students in pairs or small discussion groups.


## Activity Procedures:

1. It's time to cool down our hearts and muscles by walking one 400M lap.
2. For 200 M , walk silently and focus on mindful breathing to help your heart rate decrease.
3. For the second 200 M , talk to your partners about 1 of the academic language vocabulary words introduced in today's lesson.

## Standards \& Outcomes:

Standard 2 [9.a] Explain and apply selected scientific principles, to include physiological (warm-up, cool down, overload, specificity, and progression) and biomechanical (levers, types of muscle contractions, and force) that aid in the improvement of movement skills (a).

NOTES

## TOOLS FOR LEARNING FITNESS RUNNING

## DOUBLE LINE PURSUIT

## STUDENT TARGETS

- Skill: I will demonstrate proper running form, focusing on pace and stride.
- Cognitive: I will discuss the importance of pacing.
- Fitness: I will find a comfortable pace that allows me to remain actively engaged during this activity.
- Personal \& Social Responsibility: I will communicate with my team to determine and hold a pace that everyone can maintain.


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 4 large cones
- Running Form 101 Videos
- 1 Fitness Running Portfolio for each student


## Set-Up:

1. Place a cone at each 100 M mark on the track.
2. Divide students into groups of 4 , each group in a single-file line behind a cone.


## Activity Procedures:

1. Today we will begin a training program meant to help us prepare for a 5 K community running event. Our plan will focus on running form, pace, and balancing nutrition with training. We'll look at our Fitness Running Portfolios at the end of today's lesson. It is a resource that will guide us through our training.
2. The object of Double Line Pursuit is to move each of your teammates (1 at a time) from your line to the line in front of you until your entire team is back together again. It will be important to work with your teammates to find a comfortable pace that everyone can maintain throughout the entire activity.
3. When you hear the start signal, begin running together at a steady pace. When your team gets to the next cone, the $1^{\text {st }}$ person in each line will increase their pace in order to catch up to the line in front of them. The rest of the team will maintain a comfortable pace.
4. As soon as the next person in your line sees that your teammate has reached the team in front of yours, they will increase their pace to move to that line as well.
5. Continue this pattern until all teams are back together in your original lines.

## Grade Level Progression:

L1: Maintain a steady pace with your team members. When it's your turn to move to the next group, find a pace that's faster than that of your team but still allows you to maintain a steady breath.
L2: Challenge by choice: Increase your pace as you see fit in order to catch up to the line in front of you. Remember to control your breathing.

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ACADEMIC LANGUAGE

STANDARDS \& OUTCOMES ADDRESSED

- Prompt students to walk. Focus on arm and leg movements.

Aerobic, Anaerobic, Cardiorespiratory Endurance, Comfortable, Pace, Stamina, Stride

- Standard 1 [9.a,f] Demonstrate proficiency and refinement in locomotor, nonlocomotor, and manipulative skills through appropriate activities (e.g., outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, individual performance activities, games and sports [net/wall, striking/fielding, and goal/target]) (a); Demonstrate competency in one or more specialized skills in health-related fitness activities (f).
- Standard 1 [10.a] Demonstrate skill attainment in one or more lifetime activities (a).
- Standard 1 [11/12.a,c] Demonstrate mastery in all basic skills and movement patterns required for the selected activity and the ability to use the skills with consistency in the appropriate setting (a); Demonstrate advanced movement patterns in self-selected movement or activity (c).
- Standard 2 [11/12.a,b,c,d,e,f,g,h] Explain and apply biomechanical and physiological principles that aid in the improvement of skills and performance in specialized movement forms, to include laws of motion, leverage, balance, weight transfer, speed, timing, accuracy, force, cardiac output, maximal oxygen consumption (VO2 max), energy systems (aerobic and anaerobic), heart rate (resting, target, and recovery), caloric cost of activity, muscle contraction, static versus dynamic flexibility, and muscular strength versus muscular endurance (a).
- Standard 5 [11/12.f] Apply rate of perceived exertion and pacing to a conditioning plan that meets the needs of a self-selected physical activity (f).
- DOK 1: What would you include on a list about pace?
- DOK 2: How did the pace of the line runners affect the lead runner's ability to catch the line ahead of them?
- DOK 3: How is pace related to race distance? Give details to support your answer for a variety of distances.

Help students identify critical content. The authors of this module have referenced High School development resources provided by the New York Road Runners (LINK HERE). This video series, combined with the SHAPE America Grade-Level Outcomes, identifies the skills and concepts that students and teachers should focus on when learning about and improving overall fitness running performance. Please review all of the NYRR videos and resources during your module planning process and make adjustments based on your students' prior knowledge and experience.

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## 1600 METER PREDICTION RUN

## STUDENT TARGETS

- Skill: I will adjust my pacing based on cues and feedback from my body.
- Cognitive: I will create a plan to improve my 1-mile run time.
- Fitness: I will discuss perceived exertion and how it relates to my run performance.
- Personal \& Social Responsibility: I will focus on my goals and embrace the challenge of improving my run time.


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 1 stopwatch
- 1 Prediction Run Improvement Plan (in portfolio) per student
- Pens/Pencils


## Set-Up:

1. Pair students, each pair with a pencil and 2 Prediction Run Improvement Plans.
2. Send 1 student to the starting line, ready to run. The other student should have a pencil and Prediction Run Improvement Plan at the finish.

## Watch These NYRR Videos:

- Time Trials
- Pacing Video Series



## Activity Procedures:

1. Today we'll complete a 1600 Meter Prediction Run. We'll complete this run again in 2 weeks and work toward the goal of improving today's time.
2. The object of the activity is to accurately predict and then record how fast you run 1600M. Setting a challenging but realistic pace to complete the full 1600 M run will be critical to your success.
3. Write your name and prediction on your Prediction Run Improvement Plan. Your partner will listen for and record your time when you cross the finish line. Then you'll switch roles with your partner and record her/his time. When both pairs are finished, the class will take time to discuss and then set goals and create plans for improvement. We will complete this run again in a few weeks to see if you can beat the personal best time that you establish today.

## Grade Level Progression:

L1: Complete the activity as described above.
L2: Allow students to choose their level of challenge: 400M, 1600M, or 3K.

ACADEMIC
LANGUAGE

STANDARDS
\& OUTCOMES ADDRESSED

- Shorten the distance of the run.
- Students run the event as a relay with 2-4 teammates working together.

Challenge, Desire, Fitness Portfolio, 5K Race, Pace, Perceived Exertion

- Standard 1 [10.a] Demonstrate skill attainment in one or more lifetime activities (a).
- Standard 2 [11/12.a,b,c,d,e,f,g,h] Explain and apply biomechanical and physiological principles that aid in the improvement of skills and performance in specialized movement forms, to include laws of motion, leverage, balance, weight transfer, speed, timing, accuracy, force, cardiac output, maximal oxygen consumption (VO2 max), energy systems (aerobic and anaerobic), heart rate (resting, target, and recovery), caloric cost of activity, muscle contraction, static versus dynamic flexibility, and muscular strength versus muscular endurance (a).
- Standard 3 [10.a, c] Create a fitness and activity plan for the present and a potential plan for the future (postsecondary education, college/career) to address the healthrelated components of fitness (a); Identify fitness needs to prevent health concerns in the present and into the future (c).
- Standard 3[11/12.a,b,c] Assess individual level of health-related fitness using a variety of appropriate measures (e.g., criterion-reference wellness tests, BMI, Fitnessgram®) and technology (heart-rate monitors) (a); Evaluate and adjust activity levels to meet personal fitness goals (b); Design and critique a personal fitness program, using available technology (e.g., electronic portfolios, tracking applications) and resources, to improve or maintain personal fitness levels in relation to the five components of fitness (c).
- Standard 5 [11/12.f] Apply rate of perceived exertion and pacing to a conditioning plan that meets the needs of a self-selected physical activity (f).
- DOK 1: What is perceived exertion?
- DOK 2: How did perceived exertion affect your pace?
- DOK 3: How is perceived exertion related to your improvement plan and goal?
- DOK 3: How is perceived exertion related to your improvement plan and goal?

DEBRIEF QUESTIONS

Help students process content. By providing students with the time and guidance needed to complete an improvement plan, you're setting the expectation that students will work with and elaborate on fitness running content that is relevant to their own experiences and applicable to their own health. Be sure you schedule enough time for students to think about their work, ask questions, and revise their thinking.

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## UPHILL CHALLENGE

## STUDENT TARGETS

- Skill: I will demonstrate proper arm movements.
- Cognitive: I will discuss the importance of a proper arm swing as it relates to running form.
- Fitness: I will maintain good posture and balance while running uphill or up the stairs.
- Personal \& Social Responsibility: I will use positive language to actively encourage my peers.


## TEACHING CUES

- Maintain Good Posture
- Drive Arms Powerfully
- Elbows Bent Swing at Shoulder
- Arms Front to Back
- Shoulders and Hands Relaxed


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 2 tennis balls or bean bags per student
- 6 large cones
- Moderate hill (or safe, stable, and wide bleacher steps)
- Uphill Challenge Video
- 1 Fitness Running Portfolio for each student


## Set-Up:

1. Place 2 cones at the bottom of the hill to mark the starting line, 2 cones at the top to mark the finish line, and 2 cones in the middle to mark the halfway point.
2. Arrange students into single-file lines at the bottom of the hill, each student with 2 tennis balls or bean bags.


## Activity Procedures:

1. Today's activity is called Uphill Challenge, and it will help us practice proper running form, especially arm swing and power. The object of the activity is to run to the top of the hill (or stairs) without dropping the tennis balls (or bean bags) balanced on your palms.
2. When you hear the start signal, the first person in each line will run up the hill with the equipment balanced on the palm of each hand. Then they will move to the outside of the running lanes and walk safely back down.
3. When the first group gets halfway to the top of the hill, the next group will begin to run. Continue this pattern until you hear the stop signal.
4. Do not grip the equipment; the object is to balance it on the flat surface of your palm.
5. After a 2 or 3 runs, have students set the equipment to the side. Demonstrate proper running form (both arms and legs), and then have students run up the hill without the equipment.

## Grade Level Progression:

L1: Use a flat surface or moderate hill with a focus on arm movement.
L2: Use a steep hill.

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ACADEMIC LANGUAGE

STANDARDS
\& OUTCOMES ADDRESSED

DEBRIEF QUESTIONS

TEACHING STRATEGY FOCUS

- Use a flat surface or moderate hill before progressing to a steeper hill.
- Do not balance an object; simply hold arms behind the back.
- Run/walk in place while focusing on form.

Agility, Arm Swing, Balance, Posture, Refine

- Standard 1 [9.a,f] Demonstrate proficiency and refinement in locomotor, nonlocomotor, and manipulative skills through appropriate activities (e.g., outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, individual performance activities, games and sports [net/wall, striking/fielding, and goal/target]) (a); Demonstrate competency in one or more specialized skills in health-related fitness activities (f).
- Standard 1 [10.a] Demonstrate skill attainment in one or more lifetime activities (a).
- Standard 4 [10e] Evaluate opportunities for social interaction and social support in a self-selected physical activity or dance (e).
- DOK 1: How would you describe the way you felt while running with the balanced equipment?
- DOK 1: How would you describe proper arm movements for running up a hill?
- DOK 2: How did balancing the equipment affect your posture as you ran? How did it affect your running form?
- DOK 2: What did you notice about your form when you were able to use proper arm swing instead of balancing the equipment?

Help students practice skills, strategies, and processes. One of the main outcomes of this module is helping students refine running-specific skills and practice strategies for refining movement skills for other activity choices. In order to do that effectively, students must practice the skill and then reflect on their practice in a way that focuses on self-improvement. Use the Depth of Knowledge (DOK) question sets to promote student reflection and provide time for Fitness Running Portfolio exercises at the end of each lesson.

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## CHECKPOINT DESTINATION

## STUDENT TARGETS

- Skill: I will demonstrate proper form and steady pacing while running.
- Cognitive: I will discuss the heart's role in aerobic capacity.
- Fitness: I will record pacing and aerobic intensity with my group.
- Personal \& Social Responsibility: I will work cooperatively with group members to maintain a pace we can run at together.


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 5 large cones
- 5 task tents
- 4 Checkpoint Pattern Worksheets
- Track Meter Interval Signs
- 4 stopwatches
- 1 Fitness Running Portfolio for each student Set-Up:

1. Set up cones at a starting point and checkpoints $100 \mathrm{M}, 200 \mathrm{M}, 400 \mathrm{M}$, and 800M away.
2. Give each team a Checkpoint Pattern Worksheet and place pencils in task tents with Interval Signs.
3. Place a stopwatch at each checkpoint.
4. Split students into 4 groups, all groups together at the starting point.

## TEACHING CUES

- Groups Stay Together
- Adjust the Pace
- Focus on Form



## Activity Procedures:

1. Today's activity is called Checkpoint Destination.
2. The object of the activity is to make your way to each checkpoint, record your heart rate, and then work as a group to correctly answer the questions on the worksheets.
3. Each group will be assigned a checkpoint pattern and run to a different check point. Give students a short time to decide as a group on a comfortable pace for each distance and a communication strategy for modifying the pace, if necessary, during the run.
4. When you hear the start signal, jog to the first assigned checkpoint together. On your worksheets, record your heart rates and then answer the question corresponding to that check point. When you're finished, jog back to the start point, discuss your pace for the next checkpoint, and continue.
5. Continue until all groups have visited all checkpoints.

## Grade Level Progression:

L1: Complete the activity as described above.
L2: Calculate target heart rate zones for the activity. Use heart rate monitors to self-monitor intensity and adjust pacing accordingly.

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ACADEMIC LANGUAGE

STANDARDS
\& OUTCOMES ADDRESSED

- Shorten the distance to each checkpoint.
- Place a teammate at each checkpoint. 1-2 students run from checkpoint to checkpoint, while the other teammates complete exercises at each point, waiting for their teammates to arrive and answer questions.

100M, 200M, 400M, 800M, Dehydration, Electrolytes, Hydration, Lactate Threshold, Lactic Acid, Water

- Standard 2 [9.a] Explain and apply selected scientific principles, to include physiological (warm-up, cool down, overload, specificity, and progression) and biomechanical (levers, types of muscle contractions, and force) that aid in the improvement of movement skills (a).
- Standard 2 [11/12.a,b,c,d,e,f,g,h] Explain and apply biomechanical and physiological principles that aid in the improvement of skills and performance in specialized movement forms, to include laws of motion, leverage, balance, weight transfer, speed, timing, accuracy, force, cardiac output, maximal oxygen consumption (VO2 max), energy systems (aerobic and anaerobic), heart rate (resting, target, and recovery), caloric cost of activity, muscle contraction, static versus dynamic flexibility, and muscular strength versus muscular endurance (a).
- DOK 1: What is aerobic capacity?
- DOK 2: What do you know about training to improve aerobic capacity?
- DOK 3: How is pacing related to aerobic capacity?

Help students process content. This activity is rich with opportunities to teach students about the importance of aerobic fitness and strategies for training to improve their aerobic capacity. Use the debrief questions above to help students process the terminology and concepts behind what they're feeling physiologically during their running practice.

Online Physical Education Network

## CASINO ROYALE

## STUDENT TARGETS

- Skill: I will adjust my pacing to maintain a target heart rate.
- Cognitive: I will calculate, track, and adjust my heart rate using a heart rate monitor.
- Fitness: I will improve my aerobic capacity by maintaining my target heart rate.
- Personal \& Social Responsibility: I will discuss the health benefits of fitness running.


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 1 die per team
- 7 cones with task tents
- Track Meter Interval Signs
- 1 Casino Royale Scorecard per team
- 1 Fitness Running Portfolio for each student


## Set-Up:

1. Place cones/task tents and meter-marker signs at each 100 M interval.
2. Create teams of $3-6$ students.
3. Give each team a die and a scorecard.


## Activity Procedures:

1. Today's activity is called Casino Royal.
2. The object of the activity is to collect the greatest number of points as a group. Every 100M interval your group runs is worth 100 points.
3. When you hear the start signal, 1 person from your group will roll the die and then run that number multiplied by 100M. For example, if you roll a 4 , run 400 M . This will earn your group 400 points.
4. As soon as that group member begins running, the next person in your group will roll the die and take a turn. Continue rotating group members, 1 after the other, until you hear the stop signal. When you've finished your running interval, jog at a slow pace back to the starting line, record your score, and then roll again.
5. Continue rolling the die quickly so that all group members are running at the same time.

## Grade Level Progression:

L1: Each teammate will earn 1,000 heart rate points for working in their target zones for more than $50 \%$ of the activity time (Heart Health Zone 120-180 BPM).
L2: Adjust pace to work at the low end of the target zone for 300M-600M intervals, and at the high end of the zone for $100 \mathrm{M}-200 \mathrm{M}$ intervals.

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CASINO ROY ALE

## UNIVERSAL <br> DESIGN ADAPTATIONS

ACADEMIC
LANGUAGE

STANDARDS
\& OUTCOMES
ADDRESSED

DEBRIEF QUESTIONS

- Roll odds/evens, with odd numbers representing a 100 M run and the even numbers representing a 200M run. As students progress, make these distances longer.

Fitness Plan, Heart Rate, Heart Rate Monitor, Intensity, Pace, Target Heart Rate Zone

- Standard 2 [11/12.a,b,c,d,e,f,g,h] Explain and apply biomechanical and physiological principles that aid in the improvement of skills and performance in specialized movement forms, to include laws of motion, leverage, balance, weight transfer, speed, timing, accuracy, force, cardiac output, maximal oxygen consumption (VO2 max), energy systems (aerobic and anaerobic), heart rate (resting, target, and recovery), caloric cost of activity, muscle contraction, static versus dynamic flexibility, and muscular strength versus muscular endurance (a).
- Standard 4 [10e] Evaluate opportunities for social interaction and social support in a self-selected physical activity or dance (e).
- Standard 4 [11/12.f] Demonstrate the ability to work cooperatively to accomplish a group goal (f).
- Standard 5 [10.b] Evaluate current activity and intensity levels (b).
- DOK 1: What would you include on a list about pace?
- DOK 2: How does pace affect heart rate?
- DOK 3: What facts would you select to support the importance of pacing when participating in a 5 K fitness running event?
- DOK 1: Can you remember the cues for running?
- DOK 2: How does running form affect exercise intensity?
- DOK 3: How is form related to maintaining running pace?

Help students elaborate on content. Simply defining pace, form, and intensity should be easy for students. Guide them through the process of elaborating on how these concepts are related and how they impact their running performance. This knowledge can help students understand and work toward improving their form and using a more mindful approach to pacing.

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## STUDENT TARGETS

- Skill: I will demonstrate proper running technique.
- Cognitive: I will use breathing strategies for mindfully decreasing my heart rate during rest intervals.
- Fitness: I will discuss heart rate recovery as it relates to my personal fitness.
- Personal \& Social Responsibility: I will use positive language and communication to encourage my teammates.


## TEACHING CUES

- Form
- Pace
- Teamwork


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 2-4 decks of playing cards
- 1 Fitness Running Portfolio for each student


## Set-Up:

1. Split the class into teams of 3 . Give each teammate a number from 1 to 3 .
2. Send teammates 1 and 3 to the starting line. Send teammate 2 to the 200M mark.
3. Place 1 stack of cards at the 200 M mark and 1 at the starting line.


## Activity Procedures:

1. Today's activity is called Renegade Outlaws. The object of the activity is to score points by collecting as many playing cards as possible from each interval mark. Your team receives points based on the card you draw (3s are worth 3 pts, 10 s worth 10 pts, Queens worth 12 pts, etc.).
2. When you hear the start signal, runner 1 will take off from the starting line and run to the 200 M mark. S/he will stop there to collect a card and rest.
3. As soon as runner 1 reaches the 200 M mark, runner 2 will run from the 200 M mark to the starting line, collect a card, and rest. At this point, runner 3 will run to the 200 M mark where runner 1 is waiting.
4. Continue running and collecting cards in this pattern until you hear the stop signal. At that time your team will add up the points from all of your cards.

## Grade Level Progression:

L1: Run at a moderate pace, focusing on form rather than speed.
L2: Run at a more vigorous pace and add an additional member per team. During each round, designate 1 teammate as the form coach, analyzing form and providing feedback to teammates.

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- Split students into groups of 5.2 students will start at the starting line, 1 at the 100 M mark, 1 at the 200M mark, and 1 at the 300M mark. Students will run shorter distances with similar amounts of rest.

Encourage, Heart Rate Recovery, Mindfulness, Personal Fitness, Positive Language, Technique

- Standard 1 [10.a] Demonstrate skill attainment in one or more lifetime activities (a).
- Standard 1 [11/12.a,c] Demonstrate mastery in all basic skills and movement patterns required for the selected activity and the ability to use the skills with consistency in the appropriate setting (a); Demonstrate advanced movement patterns in self-selected movement or activity (c).
- Standard 3 [10.a,c] Create a fitness and activity plan for the present and a potential plan for the future (postsecondary education, college/career) to address the healthrelated components of fitness (a); Identify fitness needs to prevent health concerns in the present and into the future (c).
- Standard 4 [10e] Evaluate opportunities for social interaction and social support in a self-selected physical activity or dance (e).
- Standard 4 [11/12.f] Demonstrate the ability to work cooperatively to accomplish a group goal (f).

Help students record and represent knowledge. Take one lesson to allow students to complete DOK 4 above. Begin the process with only a blank sheet of paper, pencil, and ideas. Push students to design the entire experiment, including data collection and reporting design. This process will give students an opportunity to focus on their own personal physiological response to exercise while analyzing the feedback that their body is providing.

## TOOLS FOR LEARNING FITNESS RUNNING

## STUDENT TARGETS

- Skill: I will demonstrate proper running technique.
- Cognitive: I will identify and utilize the academic language of running.
- Fitness: I will calculate target HR and adjust my pacing to work within a target zone.
- Personal \& Social Responsibility: I will support my teammates with positive language.


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 8 buckets
- 1 low-profile cone per team
- Scavenger Hunt Academic Language Sheets
- Academic Language Sheet Definition Key
- Scavenger Hunt Score Card
- 1 Fitness Running Portfolio for each student


## Set-Up:

1. Place buckets upside-down at various locations around the infield of the track. The greater the distance between buckets, the more vigorous the workout.
2. Place 1 Scavenger Hunt Academic Language Sheet under each bucket.
3. Place cones around the perimeter of the track.
4. Create teams of 2-4 students, each at a cone.

## Activity Procedures:

1. Today we will be doing a scavenger hunt.
2. The object of the activity is to earn the most points as a team by quickly finding the academic language word that matches the definition that I read.
3. I will read a definition and then say, "GO!" Then 1 of your teammates will run out and flip over buckets to search for the academic language word that matches the definition that I read. Be sure to replace the bucket after you see what's under it.
4. As soon as you've found the word, remember the card number you found it on, run back to your team, and record the card number on your team's score card.
5. We'll check answers when all teams are back. The $1^{\text {st }}$ team to return with a correct answer receives 5 points; the $2^{\text {nd }}$ receives 4 points; the $3^{\text {rd }}$ will receive 3 points. We'll continue for 6 rounds before totaling our team's final score.

## Grade Level Progression:

L1: Play the activity as described above.
L2: Give bonus heart rate points to teams who are able to adjust their pacing and maintain their HRs within the target zone.

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## UNIVERSAL <br> DESIGN ADAPTATIONS <br> ACADEMIC LANGUAGE

STANDARDS \& OUTCOMES ADDRESSED

- Decrease the distance between cones and buckets.
- Allow 2 teammates to go out and look at the same time.

Encourage, Personal Fitness, Positive Language, Social Interaction, Social Support, Target Heart Rate, Technique

- Standard 1 [9.a,f] Demonstrate proficiency and refinement in locomotor, nonlocomotor, and manipulative skills through appropriate activities (e.g., outdoor pursuits, fitness activities, dance and rhythmic activities, aquatics, individual performance activities, games and sports [net/wall, striking/fielding, and goal/target]) (a); Demonstrate competency in one or more specialized skills in health-related fitness activities (f).
- Standard 1 [10.a] Demonstrate skill attainment in one or more lifetime activities (a).
- Standard 1 [11/12.a,c] Demonstrate mastery in all basic skills and movement patterns required for the selected activity and the ability to use the skills with consistency in the appropriate setting (a); Demonstrate advanced movement patterns in self-selected movement or activity (c).
- Standard 2 [11/12.a,b,c,d,e,f,g,h] Explain and apply biomechanical and physiological principles that aid in the improvement of skills and performance in specialized movement forms, to include laws of motion, leverage, balance, weight transfer, speed, timing, accuracy, force, cardiac output, maximal oxygen consumption (VO2 max), energy systems (aerobic and anaerobic), heart rate (resting, target, and recovery), caloric cost of activity, muscle contraction, static versus dynamic flexibility, and muscular strength versus muscular endurance (a).

DEBRIEF QUESTIONS

- DOK 1: What is target heart rate?
- DOK 2: What do you know about target heart rate zones?
- DOK 3: How is target heart rate related to personal fitness and personal fitness planning?
- DOK 1: What would you include on a list about social support?
- DOK 2: How would you summarize your role in providing social support to others?
- DOK 3: How is social support related to physical activity and personal fitness?

Organize students to interact with content. The Vocab Scavenger Hunt provides students with rich opportunities to engage with the content of fitness running while interacting with their peers in a team environment. When implemented in its full form, this activity gives students a vigorous dose of exercise, provides an opportunity for them to analyze and use their bodies' feedback to adjust intensity, and reinforces the use of academic language.

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## 3K: THE ONE WITH THE MOST

## STUDENT TARGETS

- Skill: I will demonstrate proper running form while maintaining a steady and challenging pace.
- Cognitive: I will use correct fitness running terminology when completing fitness portfolio pages.
- Fitness: I will use a fitness portfolio to record performance times and set future goals.
- Personal \& Social Responsibility: I will discuss the health benefits of fitness running as a lifetime physical activity.


## TEACHING CUES

- Set a Steady Pace
- Focus on Form and Breathing
- Give Your Best Effort


## ACTIVITY SET-UP \& PROCEDURE

## Equipment:

- 3-5 decks of cards (enough for each student to receive 7 cards)
- Stopwatch
- 3K Time Record Sheets (in portfolio)


## Set-Up:

1. Students begin at the starting line.
2. Lap monitors (teachers and/or students) are positioned with playing cards.


## Activity Procedures:

1. Today's 3 K activity is called The One with the Most. In this activity, you will run a 3 K (3000M, or 7.5 laps on a 400 M track). As you run, you will collect playing cards from the lap monitors for each lap. The cards will determine your points, and they'll also help you count your laps.
2. The object of the activity is to receive cards that beat the teacher's hand (face cards $=10$, aces $=1,2 s=2$, and so on). I will draw my 7 cards when everyone has finished the run, and we'll add up our points.
3. When finished, everyone will walk 1 cool-down lap. Next, everyone will record their run time on the 3K Time Record Sheet. The first time on the sheet will set a baseline for your personal best. I will announce future run opportunities throughout the school year (mornings, lunches, afterschool) to give you the opportunity to improve your personal best.
4. Running this 3 K time trial will give you distance experience and give you the confidence for a real 5 K running event.

## Grade Level Progression:

L1: Complete the activity as described above.
L2: Select advanced running students to be peer coaches. They act as lap monitors but also take notes on feedback that can be provided to their classmates to help improve and refine form and performance.

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ACADEMIC LANGUAGE

STANDARDS \& OUTCOMES ADDRESSED

- Allow students to run this race as a relay, with teammates splitting the distance.
- Allow students to choose the distance of the run with a focus on setting a personal best for that distance and then creating goals for improvement.

3K, 5K, Competency, Cool-Down, Fitness Portfolio, Health Benefits, Performance, Refine

- Standard 3 [9.a,d,f] Demonstrate program-planning skills by assessing and analyzing personal fitness levels, setting goals, devising strategies, making timelines for a personal physical fitness plan, and evaluating the components and progress of the personal fitness plan (a); Explain the relationship between heart rate, training zones, and exercise intensity, to include measures (e.g., heart rate monitors, pedometers, accelerometers) and appropriate training zones to meet exercise and personal fitness goals (d); Calculate resting heart rate, target heart rate, and blood pressure (f).
- Standard 3 [10.a,c] Create a fitness and activity plan for the present and a potential plan for the future (postsecondary education, college/career) to address the healthrelated components of fitness (a); Identify fitness needs to prevent health concerns in the present and into the future (c).
- Standard 3[11/12.a,b,c] Assess individual level of health-related fitness using a variety of appropriate measures (e.g., criterion-reference wellness tests, BMI, Fitnessgram ${ }^{(8)}$ ) and technology (heart-rate monitors) (a); Evaluate and adjust activity levels to meet personal fitness goals (b); Design and critique a personal fitness program, using available technology (e.g., electronic portfolios, tracking applications) and resources, to improve or maintain personal fitness levels in relation to the five components of fitness (c).
- DOK 1: What would you include on a list about the health benefits of fitness running?
- DOK 2: How would you apply what you know about the health benefits of fitness running when creating a personal fitness plan in your portfolio?
- DOK 3: What facts would you use to persuade someone to try fitness running as a routine personal fitness activity?
- DOK 4: Use the Fitness Running Portfolio pages to create a personal fitness running plan that you can follow outside of class.

Help students practice skills, strategies, and processes. Creating and then executing a personal fitness plan is a process in which students will use the skills and knowledge they've developed to build a strategy for personal well-being. Use the Fitness Running Portfolio and worksheets to guide students through this process. Take the time to read and provide feedback on the reasoning and logic for their work.

## TOOLS FOR LEARNING FITNESS RUNNING



HIGH SCHOOL

## SAMPLE LESSON PLAN

FOCUSOUTCOMES

- Standard 1 [9.a,f] Demonstrate proficiency and refinement in locomotor, nonlocomotor, and manipulative skills through appropriate activities (e.g., outdoor pursuits, fitness activities) (a); Demonstrate competency in one or more specialized skills in health-related fitness activities (f).
- Standard 1 [10.a] Demonstrate skill attainment in one or more lifetime activities (a).
- Standard 1 [11/12.a,c] Demonstrate mastery in all basic skills and movement patterns required for the selected activity and the ability to use the skills with consistency in the appropriate setting (a); Demonstrate advanced movement patterns in self-selected movement or activity (c).
- Standard 5 [11/12.f] Apply rate of perceived exertion and pacing to a conditioning plan that meets the needs of a self-selected physical activity (f).
- Skill: I will demonstrate proper running form, focusing on pace and stride.
- Cognitive: I will discuss the importance of pacing.
- Fitness: I will find a comfortable pace that allows me to remain actively engaged during this activity.
- Personal \& Social Responsibility: I will communicate with my team to determine and hold a pace that everyone can maintain.
- Aerobic
- Cardiorespiratory Endurance
- Comfortable
- Pace
- Stamina
- Stride

Fitness Running Portfolio

- DOK Questions


## UPEN TOOLS FOR LEARNING FITNESS RUNNING

 SAMPLE LESSON PLANTRANSITION NOTES
ACTIVITY
DEBRIEF


Fitness Running Portfolio (Day 1)

## 100M <br> (noun)

100 meters in distance, often measured as a quarter of the way around a standard outdoor track. May also refer to the 100-meter dash, a track and field race of the same length.

Dorie sprinted down the long side of the track to run 100 M as quickly as she could.

## 1600M

(noun)
1600 meters in distance, often measured as 4 times around a standard outdoor track and equal to approximately 1 mile. May also refer to the 1600meter race, a track and field race of the same length.

Simone runs 1600M every Saturday, tracking her time each week to see if she is improving.

## 200M <br> (noun)

200 meters in distance, often measured as halfway around a standard outdoor track. May also refer to the 200-meter dash, a track and field race of the same length.

Hasan ran 200M by coming around the curved part of the track and then down the straight side to the finish line.

## 3K RACE <br> (noun)

A community or competitive race of 3000 meters, which is approximately 1.86 miles and 7.5 times around a standard outdoor track.

## Emma paced herself so that she could make it through the entire 3 K race without stopping.

## 400M <br> (noun)

400 meters in distance, often measured as once around a standard outdoor track and equal to approximately a quarter mile. May also refer to the 400-meter dash, a track and field race of the same length.

Nate ran once around the track and achieved his personal best 400M time.

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## 5K RACE <br> (noun)

## A community or competitive race of 5000 meters, which is approximately 3.1 miles and 12.5 times around a standard outdoor track.

Jordan loves to participate in 5K races because they are a way to get involved in the community and stay healthy at the same time.

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## 800M

(noun)
800 meters in distance, often measured as twice around a standard outdoor track and equal to approximately half a mile. May also refer to the 800meter race, a track and field race of the same length.

The class ran 800M by completing two complete laps around the track.

## ACTION PLAN <br> (noun)

A proposed strategy or course of action to achieve a specific goal.

Rachel's goal was to improve her average mile time by 30 seconds, so she made an action plan that would help her build strength and increase her endurance over the next four weeks.

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## ACTIVITY LOG <br> (noun)

A journal-like record that contains a list of activities completed and their dates so that the owner can remember and learn from prior experiences.

As Deedi followed her 5K training program, she kept an activity log so she could remember which workouts were most difficult and how much she had improved.

## AEROBIC

(adjective)

Relating to, involving, or requiring oxygen.

Aerobic exercise is usually performed for an extended duration at a low to moderate intensity, like going for a two-mile jog.

## AEROBIC CAPACITY (noun)

The body's ability to take in, transport, and use oxygen during vigorous physical activity.

## Giselle knew that if she exercised regularly, she could increase her aerobic capacity.

## AGILITY <br> (noun)

## The ability to change body position and direction quickly and efficiently.

Improved agility can help an individual run more safely and responsively to her or his environment.

## ANAEROBIC <br> (adjective)

## Relating to, involving, or requiring an absence of oxygen.

Anaerobic exercise is usually performed for a short duration at a high intensity, like weight lifting or sprinting.

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## ARM SWING

(noun)
The way a runner moves their arms while running. A proper arm swing increases running efficiency and consists of elbows bent at a 90 -degree angle, relaxed shoulders and hands, and a smooth front-to-back (not side-to-side) motion.

David paid special attention to his arm swing because he wanted to conserve energy that would help him complete the 5K race with a new personal best time.

## ASSESSMENT <br> (noun)

An evaluation of the state, quality, or ability of a person or thing.

According to his coach's assessment, Charlie's running stride was a little too long. He would perform better if he took more steps while running.


## BALANCE <br> (noun)

The ability to maintain the body in proper equilibrium.

Agility and balance are critical if a runner is to improve her or his running efficiency.

## CARDIORESPIRATORY ENDURANCE

(noun)

The ability of the heart, lungs, and blood vessels to supply oxygen and nutrients to the muscles during long periods of exercise.

Sallie jogged a little farther each time she went for a run in order to improve her cardiorespiratory endurance.

## CHALLENGE <br> (noun)

Something that presents difficulty and requires effort to master or achieve.

Jules was proud of his 3 K race time, so his next challenge would be to improve his 5 K race time.

# COMFORTABLE <br> (adjective) 

## Providing physical ease or relaxation.

If you improve your cardiorespiratory endurance, then you will gradually begin to feel more comfortable at faster and faster running speeds.

## COMPETENCY <br> (noun)

## The ability to successfully and consistently complete a task or perform a skill.

A runner's performance in a race depends on their competency in executing proper running form.


## COOL-DOWN <br> (noun)

A series of moderate exercises, done after more intense activity, which allows the body to gradually return to a resting or near-resting state.

Gabriela ran hard for 30 minutes, and then she performed a cool-down by jogging lightly for five more minutes. UGCames

## DEHYDRATION <br> (noun)

The loss of water from the body, or the state of having lost too much water from the body for it to continue functioning optimally.

Dehydration before or during a race can cause suboptimal performance and, potentially, injury.

## DESIRE

(noun)

A strong feeling of want, either for a thing or for an event to come to pass.

Angelique had a strong desire to run her 5 K race in less than 30 minutes, so she trained hard and fueled her body well before the race.

UGGames

## DYNAMIC WARM-UP <br> (noun)

Activity done at the beginning of a bout of exercise in which movement, momentum, and active muscular effort are used to stretch and prepare muscles for exercise.

Kiese noticed that he always felt more comfortable and confident during a run if he performed a dynamic warm-up first.

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## EFFICACY (noun)

The ability to produce an intended result; effectiveness. Self-efficacy is a person's belief in her/his effectiveness or ability to succeed.

The body's efficacy during a run is dependent on how well you fuel it and train it.

## ELECTROLYTES <br> (noun)

The ionized or ionizable constituents of a living cell, blood, or other organic matter.

Common electrolytes include sodium, potassium, calcium and bicarbonate, and eating fruits and vegetables is a good way to get more of them into your diet.

# ENCOURAGE <br> (verb) 

## To offer support, confidence, or hope to someone else.

The relay team encouraged one another throughout the activity, which helped everyone stay motivated to cross the finish line.

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## FITNESS PLAN <br> (noun)

A proposed course of action to reach a desired level of fitness, typically including an exercise schedule and approach to nutrition.

Ainsley's fitness plan included cardio five times per week and strength training three times per week.

## GOAL

(noun)

## An aim or desired result.

## Kachi's goal was to run 200M in less than 30 seconds.

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## GROWTH MINDSET (noun)

Defined by psychologist Carol Dweck as a belief that abilities can be developed through dedication and hard work; raw talent and common knowledge are just starting points.

Having a growth mindset allowed Jing to realize that a well-executed fitness plan could help him achieve his ideal average mile time.

## HEALTH BENEFIT <br> (noun)

An improvement to a person's overall well-being resulting from a physical activity or food choice.

The health benefits of fitness running include improved cardiorespiratory endurance, increased aerobic capacity, and greater muscular strength.

## HEALTH-RELATED FITNESS

 (noun)A group of 5 physical characteristics that contribute to a person's overall well-being. The 5 components of Health-Related Fitness include Cardiovascular Endurance, Muscular Strength, Muscular Endurance, Flexibility, and Body Composition.

Fitness running is an effective method of improving health-related fitness.

## HEART RATE <br> (noun)

The speed at which the heart is beating, measured in beats per minute.

Jaime monitored their heart rate to ensure they were in their target heart rate zone.

## HEART RATE MONITOR (noun)

Wearable technology that measures real-time heart beats per minute.

Wearing a heart rate monitor is one way to track your performance during a long run.

## HEART RATE RECOVERY

 (noun)The heart's ability to recover to a normal rate immediately after a bout of exercise, and then again after a specified time period-commonly 1 and 3 minutes after completion. A person's recovery time is shorter if their cardiorespiratory fitness is better.

Roxie recorded her heart rate recovery after every run in order to track her level of cardiorespiratory fitness.

# HEART RATE ZONE <br> (noun) 

A range of heart beats per minute, measured as a percentage of one's maximum heart rate, identified because specific health benefits are associated with sustained exercise intensity within that range.

The three heart rate zones are general body health, heart health, and max performance.

## HYDRATION <br> (noun)

The process of drinking the correct amount water needed to keep your body working right.

Hydration is just one component of a well-rounded fitness plan; exercise and nutrition must also be included.

## INTENSITY <br> (noun)

The amount of exertion used when performing an exercise or activity.

Moderate- to high-intensity exercise is important to improving athletic performance.

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## LACTATE THRESHOLD <br> (noun)

A level of running intensity at which one's blood lactate levels increase exponentially (faster than it can be removed).

Jun's lactate threshold got higher and higher the further he got into his 5 K training program.


## LACTIC ACID <br> (noun)

A chemical produced during exercise that arises when the body's demand for oxygen exceeds its capacity to take in oxygen. Lactic acid buildup during exercise causes a burning feeling in the muscles that is associated with fatigue.

Jamila began to feel the lactic acid build up in her legs during the 200M dash.

## LEADERSHIP <br> (noun)

The effective use of people skills to organize and motivate others to work cooperatively toward a common goal.

Brandon noticed that his relay team seemed fatigued, so he took a position of leadership and began encouraging them to persevere.

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## MENTAL WELLNESS

(noun)
A state of well-being in which a person realizes her/his own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.

Mental wellness is just as important as physical wellness to building a balanced, healthy life.

## MINDFUL BREATHING <br> (noun)

## Breathing attentively and intentionally, especially as a tenet of mental wellness.

Kyle used mindful breathing to help him catch his breath in between 100M sprints.

## MINDFULNESS

(noun)
A mental state achieved by focusing one's awareness on the present moment while calmly acknowledging and accepting one's feelings, thoughts, and bodily sensations.

Incorporate mindfulness into your workouts, and you will become even better at noticing and understanding the signals your body is providing to you.

UECames

## NUTRITIONAL BALANCE (noun)

A way of preparing meals and snacks in which different nutrients are in proportions that optimize health.

Nutritional balance is just as important as exercise when it comes to creating a well-balanced fitness plan. UGEames

# OVERCOME (verb) 

## To succeed in dealing with a problem or challenge.

Hana dug deep into her own mental strength in order to overcome her fatigue and end the race with a sprint to the finish.

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## PACE

(noun)

A steady and consistent speed at which a person moves or works, often in order to avoid becoming overly tired.

Jogging at a moderate, steady pace is a form of aerobic exercise.

UGGames

## PERCEIVED EXERTION (noun)

How hard an individual feels her/his body is working during a bout of physical activity or exercise.

The four rates of perceived exertion are light activity, moderate, vigorous, and max.

# PERFORMANCE (noun) 

The process of carrying out an action, task, or function.

Your performance in a 5 K race will be best if you execute a thoughtful fitness plan, including challenging training sessions and healthful nutrition.

# PERSEVERANCE <br> (noun) 

Continued effort to do or achieve something despite difficulties, failure, or opposition.

Perseverance is important in fitness running because it can be challenging to push through fatigue and exert mental toughness.

## PERSONAL BEST <br> (noun)

The best performance of a specified activity that a person has ever achieved.

Jerry worked hard to achieve his personal best in the 3 K race.

UGEames

## PERSONAL FITNESS

(noun)
A continuum that moves from worse to better in terms of physical, mental, and emotional health. This continuum represents an individual journey and is unique for every person based on past, current, and future expectations and goals.

Anne plans to incorporate fitness running into her daily life in order to improve and maintain her level of personal fitness.

## PHYSIOLOGICAL RESPONSE (noun)

An automatic reaction of the body / body systems in response to an event or stimulus.

An increased heart rate is a physiological response to running.

## POSITIVE LANGUAGE

 (noun)A method of verbal communication that uses an optimistic tone and focuses on what is good or can be improved in a given situation, task, or environment.

Using positive language to motivate yourself when running can help you continue when you begin to feel fatigued.

## POSTURE <br> (noun)

The position in which the body is held.

Proper running posture will improve the way your body uses its energy and help you run more effectively.

USGames

## POWER

(noun)

The ability to produce maximum force in the shortest time.

Anthony watched the marathon runner push more power into her legs in order to give herself a boost of speed as she approached the race's finish line.

## PREDICTION <br> (noun)

## An estimate or forecast of a future result.

Amal was delighted that her performance during the 3 K race was even better than her prediction because her health-related fitness had improved more than she'd guessed.
0.5 cames

## RECOVERY HEART RATE (noun)

A measure of the heart's ability to return to a normal ambient heart rate after you stop exercising, usually expressed as an interval of time.

Aubrey measured her recovery heart rate after each workout and found that it was improving steadily. Uscames

## REFINE <br> (verb)

To improve something by making small, incremental changes.

Bobbie refined her fitness plan as she went, adjusting her nutrition and exercise plans to better suit the progress she'd made so far.

Wegame

## RISK FACTOR <br> (noun)

Something that increases a person's risk or susceptibility to a certain future state, especially in regard to health considerations.

Lack of physical activity is a risk factor for heart disease, which is why fitness running makes for a great lifelong fitness activity.


## SMART GOAL

(noun)
A target outcome that is Specific, Measurable, Attainable, Relevant, and Timely.

Caleb's SMART Goal was to improve his 1-mile personal best time before the school's 3K race event. He has an action plan that includes purposeful training and a dedicated routine.

USG:MES

# SOCIAL INTERACTION (noun) 

An exchange of communication between two or more individuals.

Community 5 K running events are a great forum for social interaction with like-minded people.


# SOCIAL SUPPORT <br> (noun) 

Help, encouragement, and/or comfort given by a network of friends, family, and community members.

Joey decided to start a fitness running club after school so that he and his friends could offer each other social support in executing their fitness plans.

Uscames

## STAMINA

(noun)

## A person's ability to sustain a certain level of effort.

The more often Chris performed fitness running workouts, the better his stamina became.

UGGames

## STRIDE <br> (noun)

The manner and technique with which a runner takes steps while running.

Practice executing an efficient running stride, and your overall running performance will improve.

## TARGET HEART RATE (noun)

A range in the number of heart beats per minute chosen in order to reach a level of exercise intensity required to gain specific fitness benefits.

Miguel sped up in order to increase his pulse and hit his target heart rate for the workout.

## TARGET HEART RATE ZONE (noun)

A range of heart beats per minute, measured as a percentage of one's maximum heart rate, chosen in order to reach a level of exercise intensity required to gain specific fitness benefits.

Rochelle started the race too fast and found herself above her target heart rate zone, so she slowed down a bit.

## TECHNIQUE <br> (noun)

## A skillful or efficient way of performing an activity.

Technique is just as important in fitness running as strength and endurance.

## TIMELINE

(noun)

The length of time available to complete a goal or until a specific event.

Zchantel's training program had a timeline of 12 weeks, so she decided to increase the intensity of her exercises a bit each week.

USGames

## WATER <br> (noun)

A colorless, transparent, odorless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms.

Drink water when you engage in fitness running so that you won't become dehydrated. USGames


Walk to the next cone marker by taking side squat steps. Stay balanced, push your glutes back, keep your knees over your toes.

## FRONT LUNGE STEPS

Walk to the next cone marker by taking front lunge steps. Long stride in balanced alignment, back knee down, front knee directly above your foot.

## HIGH sKIP STEPS

Skip to the next cone marker by using giant skips, pushing as high as you can go. Step-hop, swing arms, and drive up as high as you can.

## Zombie Kick Walks

Zombie walk to the next cone. Swing step, bringing leg and foot up to touch toe with same side hand. Alternate swing steps.

List the names of all group members:

| Check Point \# | Distance | Record HR Data for All Group Members |
| :---: | :---: | :--- |
| Check <br> Point 1 | 100 M |  |
| Check <br> Point 2 | 200 M |  |
| Check <br> Point 3 | 400 M |  |
| Check <br> Point 4 | 800 M |  |

## Check Point (CP) Questions

(Allow each group member to provide an answer to the questions below.)
CP 1: Give an example of a person who has demonstrated perseverance. Briefly discuss why you choose that person?

CP 2: What is 1 benefit to exercising in the Heart Health target heart rate zone?

CP 3: Name a sport or activity in which physical activity in the Max Performance heart rate zone would be important?

CP 4: What is 1 thing you can do to ensure that you're getting enough daily physical activity.

## List the names of all group members:

| Check Point \# | Distance | Record HR Data for All Group Members |
| :---: | :---: | :--- |
| Check <br> Point 1 | 200 M |  |
| Check <br> Point 2 | 400 M |  |
| Check <br> Point 3 | 800 M |  |
| Check <br> Point 4 | 100 M |  |

## Check Point (CP) Questions

(Allow each group member to provide an answer to the questions below.)
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List the names of all group members:

| Check Point \# | Distance | Record HR Data for All Group Members |
| :---: | :---: | :--- |
| Check <br> Point 1 | 400 M |  |
| Check <br> Point 2 | 800 M |  |
| Check <br> Point 3 | 200 M |  |
| Check <br> Point 4 | 100 M |  |

## Check Point (CP) Questions

(Allow each group member to provide an answer to the questions below.)
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CP 3: Name a sport or activity in which physical activity in the Max Performance heart rate zone would be important?

CP 4: What is 1 thing you can do to ensure that you're getting enough daily physical activity.

## List the names of all group members:

| Check Point \# | Distance | Record HR Data for All Group Members |
| :---: | :---: | :--- |
| Check <br> Point 1 | 800 M |  |
| Check <br> Point 2 | 200 M |  |
| Check <br> Point 3 | 100 M |  |
| Check <br> Point 4 | 400 M |  |

## Check Point (CP) Questions

(Allow each group member to provide an answer to the questions below.)
CP 1: Give an example of a person who has demonstrated perseverance. Briefly discuss why you choose that person?

CP 2: What is 1 benefit to exercising in the Heart Health target heart rate zone?

CP 3: Name a sport or activity in which physical activity in the Max Performance heart rate zone would be important?

CP 4: What is 1 thing you can do to ensure that you're getting enough daily physical activity.



## 300M



## 600M

## 800M




## UPENTOOLS FOR LEARNING FITNESS RUNNING

## CASINO ROYALE SCORE CARD

Roll the dice. Run the correct distance. Enter your initials, number of points scored, and then add those point to the running total from the line above. Roll, run, record, repeat.

Name of Team Members:

| Roll \# | Initials of Point Scorer | Number of Point Scored | Running Total |
| :---: | :---: | :---: | :---: |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 |  |  |  |
| 10 |  |  |  |
| 11 |  |  |  |
| 12 |  |  |  |
| 13 |  |  |  |
| 14 |  |  |  |
| 15 |  |  |  |
| 16 |  |  |  |
| 17 |  |  |  |
| 18 |  |  |  |
| 19 |  |  |  |
| 20 |  |  |  |

Final Total Score: $\qquad$

# 5K RACE 

## (Noun)

A community or competitive race of 5000 meters, which is approximately 3.1 miles and 12.5 times around a standard outdoor track.

1

## 800M <br> (Noun)

800 meters in distance, often measured as twice around a standard outdoor track and equal to approximately half a mile. May also refer to the 800-meter race, a track and field race of the same length.

# ACTION PLAN <br> (Noun) 

A proposed strategy or course of action to achieve a specific goal.

3

# AEROBIC CAPACITY 

(Noun)
The body's ability to take in, transport, and use oxygen during vigorous physical activity.

4

## ARM SWING

## (Noun)

The way a runner moves their arms while running. A proper arm swing increases running efficiency and consists of elbows bent at a 90degree angle, relaxed shoulders and hands, and a smooth front-to-back (not side-to-side) motion.

# BALANCE 

## (Noun)

The ability to maintain the body in proper equilibrium.

## 6

# CHALLENGE 

## (Noun)

## Something that presents difficulty and requires effort to master or achieve.

## COOL-DOWN

## (Noun)

A series of moderate exercises, done after more intense activity, which allows the body to gradually return to a resting or near-resting state.

8

ROAD RUNNERS

# DEHYDRATION 

## (Noun)

The loss of water from the body, or the state of having lost too much water from the body for it to continue functioning optimally.

## DYNAMIC WARM-UP

## (Noun)

Activity done at the beginning of a bout of exercise in which movement, momentum, and active muscular effort are used to stretch and prepare muscles for exercise.

# ENCOURAGE 

(Verb)

## To offer support, confidence, or hope to someone else.

11

# GROWTH MINDSET <br> (Noun) 

Defined by psychologist Carol Dweck as a belief that abilities can be developed through dedication and hard work; raw talent and common knowledge are just starting points.

12


An improvement to a person's overall well-being resulting from a physical activity or food choice.

13

## HEALTH-RELATED FITNESS

## (Noun)

A group of 5 physical characteristics that contribute to a person's overall well-being. The 5 components of Health-Related Fitness include Cardiovascular Endurance, Muscular Strength, Muscular Endurance, Flexibility, and Body Composition.

14

# HEART RATE ZONE 

## (Noun)

A range of heart beats per minute, measured as a percentage of one's maximum heart rate, identified because specific health benefits are associated with sustained exercise intensity within that range.

15

# HYDRATION 

## (Noun)

The process of drinking the correct amount water needed to keep your body working right.

16

# INTENSITY <br> (Noun) 

The amount of exertion used when performing an exercise or activity.

17

# LACTIC ACID 

(Noun)
A chemical produced during exercise that arises when the body's demand for oxygen exceeds its capacity to take in oxygen. Lactic acid buildup during exercise causes a burning feeling in the muscles that is associated with fatigue.

18

# MENTAL WELLNESS 

## (Noun)

A state of well-being in which a person realizes her/his own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.

19

# MINDFUL BREATHING <br> (Noun) 

Breathing attentively and intentionally, especially as a tenet of mental wellness.

## 20

# NUTRITIONAL BALANCE 

## (Noun)

A way of preparing meals and snacks in which different nutrients are in proportions that optimize health.

21

# PACE <br> (Noun) 

A steady and consistent speed at which a person moves or works, often in order to avoid becoming overly tired.

22

# PERCEIVED EXERTION 

## (Noun)

How hard an individual feels her/his body is working during a bout of physical activity or exercise.

23

# PERSONAL BEST 

## (Noun)

The best performance of a specified activity that a person has ever achieved.

24

# POSITIVE LANGUAGE 

## (Noun)

A method of verbal communication that uses an optimistic tone and focuses on what is good or can be improved in a given situation, task, or environment.

## 25

# POSTURE 

(Noun)
The position in which the body is held.

## 26

# SMART GOAL 

(Noun)
A target outcome that is Specific, Measurable, Attainable, Relevant, and Timely.

27

# STRIDE <br> (Noun) 

The manner and technique with which a runner takes steps while running.

## 28

# TARGET HEART RATE ZONE (Noun) 

A range of heart beats per minute, measured as a percentage of one's maximum heart rate, chosen in order to reach a level of exercise intensity required to gain specific fitness benefits.

## 29

## WATER

## (Noun)

A colorless, transparent, odorless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms.

## 30

## SCAVENGER HUNT ACADEMIC LANGUAGE KEY

CARD \#. WORD (Part of Speech) Definition.

1. 5K RACE (Noun) A community or competitive race of 5000 meters, which is approximately 3.1 miles and 12.5 times around a standard outdoor track.
2. 800M (Noun) 800 meters in distance, often measured as twice around a standard outdoor track and equal to approximately half a mile. May also refer to the 800-meter race, a track and field race of the same length.
3. ACTION PLAN (Noun) A proposed strategy or course of action to achieve a specific goal.
4. AEROBIC CAPACITY (Noun) The body's ability to take in, transport, and use oxygen during vigorous physical activity.
5. ARM SWING (Noun) The way a runner moves their arms while running. A proper arm swing increases running efficiency and consists of elbows bent at a 90 -degree angle, relaxed shoulders and hands, and a smooth front-to-back (not side-to-side) motion.
6. BALANCE (Noun) The ability to maintain the body in proper equilibrium.
7. CHALLENGE (Noun) Something that presents difficulty and requires effort to master or achieve.
8. COOL-DOWN (Noun) A series of moderate exercises, done after more intense activity, which allows the body to gradually return to a resting or near-resting state.
9. DEHYDRATION (Noun) The loss of water from the body, or the state of having lost too much water from the body for it to continue functioning optimally.
10. DYNAMIC WARM-UP (Noun) Activity done at the beginning of a bout of exercise in which movement, momentum, and active muscular effort are used to stretch and prepare muscles for exercise.
11. ENCOURAGE (Verb) To offer support, confidence, or hope to someone else.
12. GROWTH MINDSET (Noun) Defined by psychologist Carol Dweck as a belief that abilities can be developed through dedication and hard work; raw talent and common knowledge are just starting points.
13. HEALTH BENEFIT (Noun) An improvement to a person's overall well-being resulting from a physical activity or food choice.
14. HEALTH-RELATED FITNESS (Noun) A group of 5 physical characteristics that contribute to a person's overall well-being. The 5 components of Health-Related Fitness include Cardiovascular Endurance, Muscular Strength, Muscular Endurance, Flexibility, and Body Composition.
15. HEART RATE ZONE (Noun) A range of heart beats per minute, measured as a percentage of one's maximum heart rate, identified because specific health benefits are associated with sustained exercise intensity within that range.

## SCAVENGER HUNT ACADEMIC LANGUAGE KEY

CARD \#. WORD (Part of Speech) Definition.
16. HYDRATION (Noun) The process of drinking the correct amount water needed to keep your body working right.
17. INTENSITY (Noun) The amount of exertion used when performing an exercise or activity.
18. LACTIC ACID (Noun) A chemical produced during exercise that arises when the body's demand for oxygen exceeds its capacity to take in oxygen. Lactic acid buildup during exercise causes a burning feeling in the muscles that is associated with fatigue.
19. MENTAL WELLNESS (Noun) A state of well-being in which a person realizes her/his own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.
20. MINDFUL BREATHING (Noun) Breathing attentively and intentionally, especially as a tenet of mental wellness.
21. NUTRITIONAL BALANCE (Noun) A way of preparing meals and snacks in which different nutrients are in proportions that optimize health.
22. PACE (Noun) A steady and consistent speed at which a person moves or works, often in order to avoid becoming overly tired.
23. PERCEIVED EXERTION (Noun) How hard an individual feels her/his body is working during a bout of physical activity or exercise.
24. PERSONAL BEST (Noun) The best performance of a specified activity that a person has ever achieved.
25. POSITIVE LANGUAGE (Noun) A method of verbal communication that uses an optimistic tone and focuses on what is good or can be improved in a given situation, task, or environment.
26. POSTURE (Noun) The position in which the body is held.
27.SMART GOAL (Noun) A target outcome that is Specific, Measurable, Attainable, Relevant, and Timely.
28. STRIDE (Noun) The manner and technique with which a runner takes steps while running.
29. TARGET HEART RATE ZONE (Noun) A range of heart beats per minute, measured as a percentage of one's maximum heart rate, chosen in order to reach a level of exercise intensity required to gain specific fitness benefits.
30. WATER (Noun) A colorless, transparent, odorless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms.


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## UNIVERSAL DESIGN ADAPTATIONS

Universal Design for Learning (UDL) is a strategy for eliminating instructional and environmental barriers for every member of a learning community in order to meet the needs of all students across the continuum of physical, intellectual, and emotional abilities. Although we acknowledge that it would be impossible to build one curriculum to meet the needs of every single child, we strongly believe that striving to maximize the active and meaningful participation for all students is a core responsibility of every educator.

OPEN has embraced this responsibility by working to create suggested Universal Design Adaptations intended to serve as baseline recommendations for modifying learning activities. The text Strategies for Inclusion: A Handbook for Physical Educators by Lauren J. Lieberman and Cathy Houston-Wilson provides the foundation for our work in this area.
The table below offers additional adaptations in an effort to move closer to the ideal of Universal Design.

Potential Universal Design Adaptations for Fitness Running

| Equipment | Rules | Environment | Instruction |
| :---: | :---: | :---: | :---: |
| - Provide auditory signals to help students move along a safe pathway <br> - Increase or decrease the size of the running area/lanes <br> - Provide racing chairs for wheelchair users | - Run relay-style courses, with students working together to run short individual distances that add up to longer distance runs <br> - Allow students an opportunity to modify rules to match their skills and interests | - Provide visual cues and reminders throughout the running areas <br> - Use large, bright directional signs and signals <br> - Ensure surfaces are safe and appropriate for all to participate | - Prompt students to walk. Focus on arm and leg movements. <br> - Provide running guides <br> - Provide visual cues and/or videos demonstrating upper- and lower-body running form |

Lieberman, L.J., \& Houston-Wilson, C. (2009). Strategies for Inclusion: A Handbook for Physical Educators (2nd ed.). Champaign, IL: Human Kinetics.

## UPENTOOLS FOR LEARNING FITNESS RUNNING

HEART RATE ZONE CHART

|  | HR Zone BPM | Benefits | Perceived Exertion | Recommended For: |
| :---: | :---: | :---: | :---: | :---: |
| PERFORMANCE | $\begin{aligned} & 90 \text { to } 100 \% \\ & \mathbf{1 8 0 - 2 0 0} \end{aligned}$ | Max performance \& speed | Exhausting for breathing and muscles | Those training for specific vigorous performances |
| HEART <br> HEALTH | $\begin{gathered} 70 \text { to } 90 \% \\ \mathbf{1 4 0 - 1 8 0} \end{gathered}$ | Aerobic fitness \& performance capacity | Some muscle fatigue, heavy breathing, sweating | Everyone: Moderately long activity |
|  | $\begin{gathered} 60 \text { to } 70 \% \\ \mathbf{1 2 0 - 1 4 0} \end{gathered}$ | Basic endurance and fat burning | Light muscle exertion, easy breathing, light sweating | Everyone: Longer, more frequent activity |
| ACTIVE | $\begin{gathered} 50 \text { to } 60 \% \\ \mathbf{1 0 0 - 1 2 0} \end{gathered}$ | Overall health, warm-up, and cooldown | Easy for breathing and muscles | Everyone: <br> Active warm-up \& recovery |

## PERCEIVED EXERTION CARD

| RPE Scale | Rate of Perceived Exertion |
| :---: | :---: |
| $10$ | Max Effort Activity <br> It feels almost impossible to keep going. I'm completely out of breath and can't talk. I can't keep this up for long. |
| 9 | Very Vigorous Activity It's really hard to maintain this intensity. I can barely breathe and can only speak a few words at one time. |
| 7-8 | Vigorous Activity This is almost uncomfortable. My breathing is very heavy, but can speak a full sentence. |
| 4-6 | Moderate Activity <br> My breathing is heavy, but can hold a short conversation. I'm not uncomfortable, but I can feel the challenge in the activity. |
| 2-3 | Light Activity <br> I can maintain this activity for hours. It's easy to breathe and carry on a conversation. |
| 1 | Very Light Activity <br> I don't have to try hard at all, but I'm not watching TV or taking a nap. |

$\qquad$

## UPEN <br> Online Physical Education Network



## TOOLS FOR LEARNING FITNESS RUNNING

## - STUDENT PORTFOLIO



RISING
NEW YORK
ROAD RUNNERS

Name: $\qquad$

## OPEN TOOLS FOR LEARNING FITNESS RUNNING <br>  <br> NOTES

$\qquad$

Fitness Running Personal Portfolio Day 1

Physiologica Response

Throughout your fitness journey, it will be important to consider your perceived exertion and compare it with heart-rate data that gives real-time information about exercise intensity. As you improve your levels of fitness, your perceived exertion during exercise will become more in line with your real-time heart rate. We will use this journal to begin tracking this alignment.

At the end of today's activity, use the Perceived Exertion Chart to select your RPE score. Then circle your score below.

| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Activity | Moderate |  | Vigorous |  |  | Max |  |  |  |

Movement
Skill
Refinement

Perceived Exertion (noun) How hard an individual feels her/his body is working during a bout of physical activity or exercise.

Pace (noun) A steady and consistent speed at which a person moves or works, often in order to avoid becoming overly tired.

Running at an appropriate pace is a skill that is learned and refined through purposeful practice. In the activity Double Line Pursuit, we began to work with pacing as a skill. Answer the questions below, considering your experience in today's activity.

How would you describe a comfortable running pace?

What did you notice about your perceived exertion when you increased your running pace in order to catch the line ahead of you?

How is aerobic capacity related to running pace?

Social and
Emotional
Learning

Dynamic Warm-Up (noun) Activity done at the beginning of a bout of exercise in which movement, momentum, and active muscular effort are used to stretch and prepare muscles for exercise.

Before we begin each day of Fitness Running, we will participate in a dynamic warm-up activity.

How would you describe a safe and appropriate dynamic warm-up?
$\qquad$

Fitness Running Personal Portfolio Day 2

Physiological
Response

Movement
Skill
Refinement

At the end of today's activity, use the Perceived Exertion Chart at the end of the portfolio to select your RPE score. Then circle your score below.


1600 meters is approximately 1 mile. Before running today's 1600-meter activity, make a time prediction. We'll compare that to your actual time and then think about how to improve your performance at the end of the Fitness Running module.

For your reference, the current 1-mile world record time is 3 minutes, 43 seconds (3:43.13). A person walking at a fast pace can complete a mile in 15 minutes. Your prediction should be somewhere in between these times.

Prediction: $\qquad$ Date: $\qquad$
Actual Personal Best (PB) Time: $\qquad$
SMART Goal for Personal Best: $\qquad$

Over the next 5 lessons, we will be working in physical education class to improve your personal best. List 2 purposeful action items that you will commit to doing outside of class. You'll then track your commitment to these action items on the following pages.

1. $\qquad$
2. $\qquad$
Did you consider your health-related fitness when selecting each item? Why did you choose these 2 action items?

Social and Emotional
Learning

Social Support (noun) Help, encouragement, and/or comfort given by a network of friends, family, and community members.

What would you include on a list about your social-support network?

How can you apply what you've learned about fitness running and healthrelated fitness to act as a social support resource to friends and family?
$\qquad$

Fitness Running Personal Portfolio Day 3

## Physiological Response

Movement
Skill
Refinement

Social and
Emotional
Learning

Aerobic Capacity (noun) The body's ability to take in, transport, and use oxygen during vigorous physical activity. List 3 facts that you know about aerobic capacity.

How does fitness running affect aerobic capacity?

How is fitness running related to muscular endurance?

Running balance and form is a result of the relationship between your arms, legs, shoulders and core as they work in coordination. List words that help you describe each of the following parts of your running form. Posture:

Arms:

Shoulders:

Hands:
What did you notice about your running form that is really good?

What did you notice that you will work to improve?

Positive Language (noun) Verbal communication choices that use an optimistic tone and focus on what is good or can be improved. List 5 words that provide examples of positive language.

How can you apply positive language to your personal self-talk related to your fitness running performance?

Using positive language, describe your progress toward your SMART goal for a 1-mile personal best.
$\qquad$

Fitness Running Personal Portfolio Day 4

Physiological Response

Movement
Skill
Refinement

Social and
Emotional
Learning

Target Heart Rate (noun) A number of heart beats per minute that's chosen in order to reach a level of exercise intensity required to gain specific fitness benefits.

There are 3 main physiological benefits to consider when choosing a target heart rate zone during a workout: general body health, heart health, and max power performance. All people require general body health and heart health to maintain healthy levels of fitness. Those interested in maximizing athletic performance will benefit from bouts of exercise working at max power performance levels.

As a fitness runner, what benefits are you most interested in? (circle one)

## General Body Health Heart Health Max Power Performance

Heart Rate Zone (noun) A range of heart beats per minute, measured as a percentage of one's maximum heart rate, identified because specific health benefits are associated with sustained exercise intensity within that range.

Most high school students have an approximate max heart rate of 200 beats per minute ( 200 BPM Max HR). Based on that number, the following heart rate zones have been identified.

| Max Performance | $180-200$ BPM $(90-100 \%$ Max $)$ |
| :--- | :--- |
| Heart Health | $120-180$ BPM $(60-90 \%$ Max $)$ |
| General Body Health | $100-120$ BBM $(50-60 \%$ Max $)$ |

Based on the zone chart above, list the target zone for each type of activity.

Warm-Up / Cool-Down: $\qquad$
Endurance Training: $\qquad$

Speed / Power Training: $\qquad$
Perseverance (noun) Continued effort to do or achieve something despite difficulties, failure, or opposition.

Based on your past experiences, what does the word perseverance mean to you? Elaborate on why this is the meaning you selected.
$\qquad$

Fitness Running Personal Portfolio Day 5

## Physiological

Target Heart Rate Zones
Response

| Max Performance | $180-200$ BPM (90-100\% Max) |
| :--- | :--- |
| Heart Health | $120-180$ BPM (60-90\% Max) |
| General Body Health | $100-120$ BBM (50-60\% Max) |

In today's lesson, one of our goals was to adjust pacing to maintain a heart rate within the heart health zone. In the space below, list as many health-related fitness benefits of training in the heart health zone as you can.

## Movement <br> Skill

Look back at day 2 of this portfolio and fill in the information below as a reminder of your goal.

## Refinement

Social and Emotional Learning

Actual Personal Best (PB) Time: $\qquad$
Goal for Personal Best: $\qquad$
Purposeful action items: List 2 actions that you will commit to doing outside of class. You'll then track your commitment to these action items on the following pages.

1. $\qquad$
2. $\qquad$
Did you consider your health-related fitness when selecting each item? Why did you choose these 2 action items?

There are many health benefits to regular activity in the heart health zone. One of those benefits is stress reduction. Physical activity boosts hormones that promote mental health and helps to flush out chemicals that stimulate anxiety.

How does fitness running affect your overall mood?

What do you notice about the way you communicate with others after you participate in fitness running activities?
$\qquad$

Fitness Running Personal Portfolio Day 6

Physiological
Response

Movement
Skill
Refinement

A main source of energy for fitness runners is carbohydrates. Your body works to supply carbohydrates (glycogen) to fuel aerobic activity using aerobic glycolysis. One question that many runners have is, "Where can I get carbs before a run?" Many nutrition questions are not always cut and dry. However, here are 2 tips to help you make healthful choices.

1) Choose natural sources of carbohydrates, like fruits and vegetables. You get the sugar/carbs along with beneficial vitamins, minerals, and fiber. Sport drinks full of carbs don't give you the same benefit — even if they're "fortified" with nutrients.
2) Fruit that's nice and juicy is a great pre-exercise snack. The juice from the fruit will help you hydrate before a run (although it's also very important to drink plenty of water). Plus, fruit is easy for your body to digest for quick and comfortable pre-workout fuel.

List 2 types of fruit that you would eat to help you fuel up before a run.

Recovery Heart Rate (noun) A measure of the heart's ability to return to a normal ambient heart rate after you stop exercising, usually expressed as an interval of time.

Because high school students are still experiencing growth and development, their recovery heart rate is affected my many factors. As a person gets older, recovery heart rate can be a good indicator of her/his fitness level. Shorter recovery rates indicate better fitness.

There are 2 important ways you can help your heart safely recovery after exercise:

1) Mindful breathing. Take $4-8$ seconds to take a slow, controlled breath in. When your lungs are full, hold the air for $2-3$ seconds and then slowly exhale. Repeat this pattern for 1-2 minutes.
2) Don't stop moving. It's important to walk or continue with moderate physical activity directly following activity that is vigorous and pushes your heart rate into the upper range of the heart health zone. Your heart gets help from your contracting muscles in pushing blood throughout your body. That's one reason why a cool-down walk or activity is an important part of your fitness running routine.

How can you apply what you know about recovery heart rate to your physical activity routine outside of physical education class?

Social and
Emotional
Learning

Leadership (noun) The effective use of people skills to organize and motivate others to work cooperatively toward a common goal. How is leadership applied in relation to health-related fitness?
$\qquad$

## Fitness Running Personal Portfolio Day 7

## Physiological Response

## Movement

Skill
Refinement

Social and Emotional
Learning

What does physiological response mean?

How would you summarize your body's physiological response to fitness running?

How is fitness running related to long-term physiological responses?

Have you moved to improve?
Check the appropriate response based on your personal running form.

| Form Skill Component | Stayed the Same <br> $\boldsymbol{\nu}$ | IMPROVED |
| :---: | :---: | :---: |
| Posture |  |  |
| Arms |  |  |
| Shoulders |  |  |
| Hands |  |  |

What about your running form has improved the most?

What do you want to continue to improve?

Have you taken the time to introduce a friend or family member to the things that you've learned in our fitness running lessons?

Do you believe that your introduction was beneficial to your friend or family member? Why or why not?

Create a short list of ways you can encourage your friends and family members to be more physically active.
$\qquad$

Fitness Running Personal Portfolio Day 8
Physiological Perceived Exertion (noun) How hard an individual feels her/his body

Social and Emotional Learning is working during a bout of physical activity or exercise.

Look on day 2 of this portfolio. What was your perceived exertion after your 1600M run?
$\qquad$ Baseline Perceived Exertion

For today's 1600M run, circle your score below.

| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Activity | Moderate |  |  |  |  | Vigorous |  |  |  | Max |

Important note: Today's 1600M run shouldn't necessary feel any different with respect to your exertion if you worked hard to improve your time and set a new personal best.

List the information from day 2 of this portfolio.
1600M Personal Best (PB) Time: $\qquad$ (Day 2)

SMART Goal for Personal Best: $\qquad$ (Set Day 2)

Today's Prediction: $\qquad$ Date: $\qquad$
Today's 1600M Time: $\qquad$
Did you set a new PB time? (circle one) YES NO
Did you meet or beat your SMART goal PB time? YES NO
It's time for reflection. If you set a new personal best time and/or hit your SMART goal PB time, it's time to celebrate! Your success is due to your hard work and commitment to personal health and fitness. Regular physical activity and healthy nutrition choices helped you be your best.

If you didn't reach your goals, it's important to remember that personal fitness is a journey that will last your entire life. You gained knowledge and experience throughout this fitness running module that will help you build a lifetime of healthy living.

How would you describe your fitness running experience?

How will you apply what you learned outside of physical education class?
$\qquad$

Fitness Running Personal Portfolio Day 9

Physiological Response

During today's run, pace yourself to maintain the heart health target heart rate zone. Your average beats per minute (BPM) should be somewhere between 120 and 180 .

| Max Performance | $180-200$ BPM (90-100\% Max) |
| :--- | :--- |
| Heart Health | $120-180$ BPM (60-90\% Max) |
| General Body Health | $100-120$ BBM (50-60\% Max) |

Record your average heart rate: $\qquad$
For today's 3 K run, circle your RPE score below.

| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Activity | Moderate |  |  |  | Vigorous |  |  | Max |  |

## Movement

Skill
Refinement

Social and
Emotional
Learning

Based on your 1600M PB time, make a 3K prediction. Be sure to ask yourself, "Can I maintain that 1600M pace for the entire 3 K event?"

Prediction: $\qquad$ Date: $\qquad$
Actual Personal Best (PB) Time: $\qquad$
SMART Goal for Personal Best: $\qquad$
Have you moved to improve? Check the appropriate responses.

| Form Skill Component | Stayed the Same <br> $\boldsymbol{\nu}$ | IMPROVED <br> $\boldsymbol{\nu}$ |
| :---: | :---: | :---: |
| Posture |  |  |
| Arms |  |  |
| Shoulders |  |  |
| Hands |  |  |

This module was designed to introduce you to fitness running. How fast you run is not the main purpose of fitness running; what's important is that you can design a safe activity program that you enjoy and that helps you reach your long-term fitness and activity goals.

Here are questions to help you plan future fitness running experiences. (Write your full answers on the next page.)

- Who can I ask to help me find opportunities to participate in fitness running events (e.g., 1-mile, 3K, or 5K runs)?
- Where can I continue to learn about fitness running outside of physical education class?
- Which friends or family members might participate in fitness running experiences with me?
$\qquad$

Write your complete answers to the final reflection questions below. TOOLS FOR LEARNING
FITNESS RUNNING ${ }^{7}$ (DR
HOLISTIC DUAL PERFORMANCE RUBRIC


## UPEN TOOLS FOR LEARNING FITNESS RUNNING

## ACADEMIC LANGUAGE QUIZ

A proposed strategy or course of action to achieve a specific goal.

a. Action Plan
b. SMART Goal
c. Journal Page
d. Race Course

Something that presents difficulty and requires effort to master or achieve.
a. Fixed Mindset
b. Challenge
c. Obstacle
d. Trap

Wearable technology that measures real-time heart beats per minute.
a. Smart Watch
b. Activity Tracker
c. Heart Rate Monitor
d. Heart Rate Zone

An evaluation of the state, quality, or ability of a person or
 thing.
a. Class Target
b. Journal Page
c. Pop Quiz
d. Assessment

Often measured as 4 times around a standard outdoor track and equal to approximately 1 mile.
a. 400 M
b. 800 M
c. 1200 M
d. 1600 M

The effective use of people skills to organize and motivate others to work cooperatively toward a common goal.

An automatic reaction of the body I body systems in response to an event or stimulus.
a. Social Responsibility
b. Leadership
c. Etiquette
b. Heart Rate
d. Encouragement
c. Stress Response
d. Respiration Rate

Move to improve: Think and work toward skill refinement. Move to Improve Self-Analysis

Student Name: $\qquad$
Name of Activity/Learning Task:
List two ways you can focus on your body's movement in space to improve performance. Provide specific examples.

1. $\qquad$
$\qquad$
$\qquad$
2. $\qquad$
$\qquad$
$\qquad$
List two ways you can focus on form to improve performance. Provide specific examples.
3. $\qquad$
$\qquad$
$\qquad$
4. $\qquad$
$\qquad$
$\qquad$
List two ways you can focus on effort (time, force, flow) to improve performance. Provide specific examples. Note: Effort from a personal responsibility perspective is important for improvement, but it is a different concept.
5. $\qquad$
$\qquad$
$\qquad$
6. $\qquad$
$\qquad$
$\qquad$

## SELF-EFFICACY AND SOCIAL SUPPORT INVENTORY

Name: $\qquad$ Date: $\qquad$

Directions: Select Yes or No for the first 8 items, then write a short response for the final 2 items.

|  | YES | NO |
| :--- | :--- | :--- |
| I think I can ask an adult (teacher or family member) to help me <br> find opportunities to continue fitness running. |  |  |
| I think I can ask a friend or family member to go for a run with <br> me. |  |  |
| I think I have the skills I need to continue fitness running outside <br> of physical education class. |  |  |
| I think I have the knowledge I need to improve my fitness running <br> performance outside of physical education class. |  |  |
| I think I know where to find resources to learn more about fitness <br> running. |  |  |
| I think I will participate in a fitness running event in the future if <br> the opportunity is available. |  |  |
| I think I will feel comfortable participating in a fitness running <br> event with my peers outside of physical education class. |  |  |
| I think activities like fitness running can help me stay active and <br> healthy in the future. |  |  |

If you could choose between fitness running and other physical activity options, would you choose running? Why or why not?

Did you enjoy the challenges that you faced while learning fitness running skills and concepts? Why or why not?

TEACHER SELF-EVALUATION \& REFLECTION GUIDE

| Teaching Dates of Module: | School Year: |
| :---: | :---: |
| General Comments / Notes for Planning Next Year's Module |  |
| $\begin{array}{ll}\checkmark & \text { Comment } 1 \\ \checkmark & \text { Comment } 2 \\ \checkmark & \text { Comment } 3 . .\end{array}$ |  |
| Self-Reflection Across Danielson's Four Domains of Teaching |  |
| Domain 1: Planning \& Preparation |  |
| 1a: Demonstrating Knowledge of Content/ Pedagogy | 1d: Demonstrating Knowledge of Resources |
| 1b: Demonstrating Knowledge of Students | 1e: Designing Coherent Instruction |
| 1c: Selecting Instructional Outcomes | 1f: Designing Student Assessments |
| $\checkmark$ Reflection 1 <br> $\checkmark$ Reflection 2 <br> $\checkmark$ Reflection 3... |  |
| Domain 2: Classroom Environment |  |
| 2a: Evidence of Respect and Rapport | 2d: Managing Student Behavior |
| 2b: Establishing a Culture for Learning | 2e: Organizing Physical Space |
| 2c: Managing Classroom Procedures |  |
| $\checkmark$ Reflection 1 <br> $\checkmark$ Reflection 2 <br> $\checkmark$ Reflection 3... |  |
| Domain 3: Instruction |  |
| 3a: Communicating with Students | 3d: Using Assessment in Instruction |
| 3b: Using Questioning and Discussion Techniques | 3e: Demonstrating Flexibility and Responsiveness |
| 3c: Engaging Students in Learning |  |
| $\checkmark$ Reflection 1 <br> $\checkmark$ Reflection 2 <br> $\checkmark$ Reflection 3... |  |
| Domain 4: Professional Responsibilities |  |
| 4a: Reflecting on Teaching | 4d: Participating in a Professional Community |
| 4b: Maintaining Accurate Records | 4e: Growing and Developing Professionally |
| 4c: Communicating with Families | 4f: Showing Professionalism |
| $\checkmark$ Reflection 1 <br> $\checkmark$ Reflection 2 <br> $\checkmark$ Reflection 3... |  |
| Self-Rating with Rationale |  |
| Choose One: <br> Innovative (4); Proficient (3); Basic (2); Unsatisfactory (1) |  |

