Grade Level: High School

Unit: Cardiorespiratory Moderate and Vigorous Physical Activity

Lesson 1: Pre-assessment-baseline-Aerobic workout

Objectives
- Students will be able to complete a pre assessment of their current physical fitness levels.
- Students will be able to remain active for 12 consecutive minutes while in the moderate intensity level or above.
- Students will be able to track their heart rate and target heart rate zones.
- Students will be able to describe benefits to health resulting from participating in appropriate levels of aerobic activity.
- Students will be able to describe the FITT principles for aerobic activity.
- Students will be able to complete written/digital portfolio assessments with personal documentation, goals and reflections.

Standards
- Participates in self-selected physical activity outside of physical education class (S3.M2.6), (S3.M2.7), (S3.M2.8)
- Participates in a variety of self-selected aerobic-fitness activities outside of school such as walking, jogging, biking, skating, dancing and swimming (S3.M3.8)
- Participates in moderate to vigorous aerobic physical activity that includes intermittent or continuous aerobic physical activity of both moderate and vigorous intensity for at least 60 minutes per day (S3.M6.6)
- Calculates target heart rate and applies that information to personal fitness plan. (S3.H10.L1)

Key Vocabulary
- Cardiorespiratory Endurance
- Moderate Physical Activity
- Vigorous Physical Activity
- Aerobic
- Anaerobic
- Pace / pacing
- Heart rate zones
- Dynamic warm-up/ Static warm-up

Equipment Needs
- Pre assessment for physical fitness level
- Track / running area
- Stop watch
- Heart rate monitors (if available)
  - Heart rates on neck or wrist if not
Set-up
- Track or other activity area will be available
- If a different activity space then a track, cones must be placed for students to remain outside designated activity area
- Lap distance must be measured and determined for activity area

Safety
- Check activity area for obstacles or holes
- Address speed / energy output of effort / pacing
  - Keep students from over exhausting themselves on the first few laps
- Be aware of weather concerns (heat, cold, rain, sun, etc.)

Warm Up
- Students will walk slowly for 5 minutes (could be on the way to the activity area / track)
- Students will complete dynamic stretch before pre-assessment

Description
1. Students will take a pre-assessment of their current physical fitness level (see below).
2. Have the students find their heart rate zones using the Karvonen equation.
   a. [https://www.youtube.com/watch?v=_UCwY8Oi95o](https://www.youtube.com/watch?v=_UCwY8Oi95o)
3. Students will appropriately pace themselves for a 12 minute walk / jog / run.
4. Students will go as far as they can in the 12 minute time walk / jog assessment.
5. Students will track the number of laps completed. They will complete calculations to determine total distance.
   a. If the same course for pre and post assessment, total laps can be recorded instead of distance.
   b. If course is not the same between pre and post, total distance is required.

More Challenging
- Have the students work at a higher heart rate
- Have students go for longer (15 minutes instead of 12)

Less Challenging
- Have the students work at a lower heart rate
- Have the students go for a shorter time (8 minutes instead of 12)

Assessment
- Written - Complete the pre assessment on physical fitness levels and document in portfolio assessment.
- Physical - Students will remain in at least a moderate level of MVPA (or vigorous) heart rate levels during the 12 minute walk / jog / run

Cool Down/Review/Closure
- Students will walk slowly for 5 minutes
- Students will complete a static stretch after the slow cool down walk
- Teacher will review heart rate zones
  - What they mean
○ How to calculate them
● Teacher will introduce the requirements for the lesson 5 Teaching instruction. (See lesson 5 or requirements)

Reference: Cooper 12 min walk run test: https://calcuworld.com/health-calculators/cooper-test-calculator/
Sample Pre-Assessment on Physical Fitness Levels

1. How many days per week do you currently work out for at least 30 minutes at a moderate to vigorous levels.
   0  1-2  3-4  5-6  7

2. How many days per week do you currently work out for at least 60 minutes at a moderate to vigorous levels.
   0  1-2  3-4  5-6  7

3. What types of physical activities do you currently take part in
   Weight lifting  Run / Jog / Walk  Swim  Cycling
   Yoga / Pilates  Water aerobics  Golf  Dance
   Team Sports  Skiing / Snowshoe  Tennis

4. True or False
   Working out at a higher intensity level burns more calories (over the same time)

5. True or False
   In order to lose weight, working out (expending more calories) will help to lose more weight

6. True or False
   By increasing my physical fitness level I can reduce my risk of cardiovascular disease

7. True or False
   Strengthening my aerobic fitness levels has additional benefits such as increased strength, stamina and flexibility

8. How important is remaining physically active to you
   (1 being not at all, 10 being extremely important)
   1  2  3  4  5  6  7  8  9  10

______________________   _________________   _______
Name      Date       Grade