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Unit Title: Muscle Fitness Essentials 4-5

Grade Level: Basic/4-5

Section: Five Components of Fitness

Time Frame: 2 Lessons

Fun Games & Activities:
- Muscle Check-Up
- Curl-Up Check
- Muscular Strength and Muscular Endurance Tag

Key Vocabulary Words:
Muscles, Muscular Endurance, Muscular Strength, Repetitions

Essential Questions:
- Why are muscular strength and endurance important to my health?
- How can I get stronger?

Unit Goals:
- Students will gain knowledge and skills necessary to understand and maintain a healthy level of muscular strength and muscular endurance

Student Objectives:
- Students will define muscular strength and muscular endurance.
- Students will develop a healthy level of muscular strength and muscular endurance by practicing resistance activities and measuring and developing muscular strength and muscular endurance
- Students will be able to differentiate between muscular strength and muscular endurance
## Unit Guidelines - Cont’d

### Lessons:
- Explanation of muscular strength and muscular endurance
- Vocabulary words and definitions written on board. (Note: Handout is included with vocabulary words and definitions.)

### Student Assessment:
- Muscular strength and endurance quiz (Included)

### Activity-Based Lessons:
- Muscle Check-Up (Handout is included)
- Curl-Up Check (Handout is included)
- Muscular Endurance and Muscular Strength Tag

### Subject Integration (Math, Reading):
- Curl-Up Check (Graphing Activity)
- Muscle Check-Up (Reading)

### Safety:
Use Five for Life Safety Code to reinforce safe play with students. (Note: See Safety section for directions.)

Each person will review the following safety cues before beginning an activity:
- Check his/her personal space
- Maintain control of his/her body at all times
- Respect equipment, others and self
- Always follow directions

### Equipment Needed:
- Scale
- Step Boxes
- Weight Bar
- Medicine Balls
- Stretch Bands
- Pull-up Bar
- Stop Watch
- 2 Erasers

### NASPE Standards:
- Exhibits a physically active lifestyle
- Achieves and maintains a health-enhancing level of physical fitness
Muscle Fitness Essentials

Every movement requires strength; to repeat a movement numerous times requires endurance. Muscular strength allows a person to lift, push, or pull with all his/her force. Muscular strength is needed for every movement. Many young children cannot shoot a basketball correctly due to a lack of strength; they simply cannot get the ball that high. With practice, their strength increases and soon they can reach the basket. At that point they begin to build muscular endurance. In order to go for a long hike, it is necessary to have muscular endurance. If you wanted to climb a tree while you were out hiking, you would need muscular strength. It is essential to build and maintaining healthy levels of muscular strength and muscular endurance to enjoy a healthy life.

Key vocabulary words:

Muscles – Parts of the body that are responsible for movement
Muscular Endurance – The ability of a muscle to repeat a movement many times or hold a position without stopping to rest
Muscular Strength – The ability of a muscle to push or pull with its total force

Exercise causes muscles to change in two ways. They get stronger, which means they can lift, push, or pull an object with greater force. Muscles also gain endurance, which means they can lift, push, or pull an object with the same force for many repetitions.

If a person is building a brick wall and he/she has a lot of muscular endurance, the job will go faster because he/she will be able to work longer without taking so many breaks. To build muscular endurance, a person should use a resistance that allows them to perform at least 12 repetitions.

Most people do not have or even need the muscular strength to pick up a piano, but if three or four people are trying to move a piano up the stairs, everyone will appreciate the person who has a lot of muscular strength. To build strength a person should use a resistance that restricts the person from doing more than eight repetitions.

Many adults do not realize that as they age, their muscles lose muscular strength and muscular endurance. It is important to work your muscles consistently and persistently to remain strong and healthy. Muscle fitness is essential for a productive healthy life.
Key vocabulary words that will be introduced during this unit are:

- **Muscles** – Parts of the body that are responsible for movement

- **Muscular Endurance** – The ability of a muscle to repeat a movement many times or hold a position without stopping to rest

- **Muscular Strength** – The ability of the muscle to push or pull with its total force
Grade: Basic/4-5

Objective:
To teach the difference between muscular strength and muscular endurance. Students will be able to identify which component of fitness – muscular strength or muscular endurance – is used during self-testing.

Muscle Check-Up

Explanation:
Muscular strength is built by doing near maximum resistance exercises. Therefore, an individual should not be able to complete more than eight repetitions of the exercise. As a person is able to go beyond the eight repetitions, he/she is beginning to develop muscular endurance.

Directions:
1. Provide a short explanation of the difference between muscular strength and muscular endurance.
2. Teach proper technique and safety for each station.
3. Divide class into groups of two and assign them to a station to begin.
4. Pass out recording sheets to each student in the class.
5. Students will perform the activity and record their results before moving to the next station.
6. After all stations are finished and students have completed the muscle check-up card, talk about the stations. Discuss whether they were muscular strength or muscular endurance.

Stations:
1. Bicep Curl 1 Stretch Band – Stand with both feet in ready position with stretch band under the middle of each foot. With elbows touching sides of waist, palms facing forward, curl arms until hands are shoulder height. Repeat the movement.
2. Push-ups – Lie face down with hands under shoulders, legs straight and the toes supporting the feet. Push with the arms until fully extended, keeping the back and legs straight. Then lower the body until there is a 90-degree angle at the elbows, with the upper arms parallel to the floor. Repeat the exercise.
3. Superman – Lie face down with arms and legs extended. Lift arms and legs as high as possible. Repeat the movement.
4. Bicep Curl 2 Stretch Bands – Stand with both feet in ready position with stretch bands under the middle of each foot. With elbows touching sides of waist, palms facing forward, curl arms until hands are shoulder height. Repeat the movement.

(continued)
Muscle Check-Up - cont’d

Stations (cont’d):

5. **Crunches** – Lie on back with knees bent and feet flat on the floor, about 12 inches from the hips. Arms are crossed with hands placed on opposite shoulders and elbows held close to chest. Keeping this position, lift the shoulders 2-3 inches and then return to starting position. Repeat the movement.

6. **Pull-ups** – Hang from a horizontal bar with arms fully extended, palms facing forward and feet free from floor. Raise body until chin clears the bar and then lower body to starting position. Perform as many as possible.

7. **Flexed-arm Hang** – Hang from the pull-up bar in a flexed-arm position, with chest close to the bar and legs hanging straight. Test is complete when chin touches or falls below the bar. Partner times the length of the flexed arm hang.

8. **Grip Strength Test with Weight Scale** – Grasp weight scale with thumbs in front and fingers behind scale, arms extended parallel to the floor. Squeeze the scale, using as much force as possible, and check number of pounds that appear on the scale.

9. **Medicine Ball Chest Pass** – Sit with back against the wall, legs straight, ball at chest. Push the ball forward, using as much force as possible. Partner measures the distance with a tape measure.

10. **Bicep Curl with Weight Bar** – Stand with feet in a staggered stance position, shoulder width apart, toes pointed forward. Hold weight bar at waist level with palms facing forward. Keep elbows pressed at sides of body. Curl arms and move weight bar to shoulder level and then return to starting position. Repeat as many times as possible.

11. **Curl-ups** – Lie on mat with knees flexed and feet about 12 inches from the hips. Partner holds feet. With back flat on the floor, cross arms with hands placed on opposite shoulders. Raise the trunk, curling up to touch the elbows to the thighs, and then return to starting position. Repeat as many as possible in 30 seconds.

12. **Standing Long Jump** – Stand at marked line, feet shoulder width apart. Jump forward as far as possible. Partner measures distance with tape measure.

13. **Skier with a Step Box** – Stand parallel to the step box. Jump once to the top of the box and jump down on the other side. Repeat movement as many times as possible in 30 seconds.
Muscle Check-Up Card

Name ___________________________ Teacher ___________________________

Directions: Perform the activity and record your results.

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<thead>
<tr>
<th>Station</th>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
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<td>Push-ups</td>
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<td>Superman</td>
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<td>Bicep Curl w/2 Stretch Bands</td>
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<td>Flexed Arm Hang</td>
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<td>Medicine Pass</td>
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