Lesson 1
Notes

- Exercise gives you more energy
- Benefits of exercise include:
    - Gives you more energy
    - Helps manage weight
    - Increases strength
    - Increases flexibility
    - Strengthens bones
    - Decreases stress
    - Increases self confidence
- Five elements of physical fitness
    - Muscle endurance
    - Cardiovascular endurance
    - Strength
    - Flexibility
    - Body composition
- Body composition is a result of eating habits, physical activity and genetics
- Cholesterol is a fatty substance in the blood that helps build cells. High cholesterol levels can contribute to heart disease.
- Types of exercise:
    - Aerobic
    - Anaerobic

Lesson 2
Notes

- Your body has 206 bones
- Your body has over 600 muscles
- The muscular system provides the power and flexibility you need to move.
- Three main types of muscles are:
    - Skeletal
    - Smooth
    - Cardiac
- Skeletal muscles are voluntary, this means you can control them
- Smooth muscles are involuntary, this means that they move without you consciously controlling them.
- Cardiac muscle are all associated with the heart and they are also involuntary
- You need to eat healthy, stretch, exercise and have good posture to strengthen muscles and bones

- Foods high in protein help build muscles
- Foods high in Carbohydrates provide energy
- Foods high in vitamin D and Calcium strengthen bones

Lesson 3
Notes
- The circulatory system includes the heart, blood vessels, and blood
- Cardio refers to the heart
- Vascular refers to the blood vessels
- Your body contains 80,000 miles of blood vessels
- Your heart and lungs work together to deliver oxygen throughout your body.
- Blood pressure contains two numbers
    - Systolic- the pressure when the heart contracts and pumps blood into the arteries
    - Diastolic - the pressure read when the heart relaxes and fills with blood
- Blood is made up of plasma, red blood cells and white blood cells
- There are different types of blood: A, B, AB, or O
    - Each type is RH negative or RH positive.
    - Rh-factor is another substance in the blood. If someone is Positive, they can receive blood from both positive and negative donors. If they are negative, they can only receive from other negative donors.
- As you increase aerobic activity, your circulatory system becomes stronger and is able to pump blood more efficiently with more oxygen.
- Vigorous activity helps to decrease fatty substances in blood.

Lesson 4
Notes:
- A workout is an exercise program that focuses on high energy activity
- It's important to warm up before activity so that you do not tear or strain a muscle
- Cooling down allows your heartbeat, breathing and blood pressure to return to a normal level gradually
- You should drink water before, during and after your workout
- As your fitness level increases, you intensity and frequency should increase as well
- You can monitor the intensity of your workout by checking your heart rate before, during and after your workout.

Lesson 5
Notes:

- Weight training is a form of resistance training, which means that muscles must resist a force such as gravity.
- Weight training strengthens muscles, tones muscles, strengthens bones, and helps you manage weight.
- Most people should wait until they are 15 to lift heavy weights.
- Weight training is for males and females.
- Dehydration can cause muscle cramps and heatstroke
- Steroids:
    - Can block teen's normal growth and development
    - Can weaken tendons
    - Can weaken bones
    - Can cause heart rate and blood pressure irregularities
    - Can increase the risk of heart attack and cancer
    - Cause acne
    - Can change sexual characteristics due to changing hormone levels
- Every conditioning program should be personalized for the individual
- Age, weight and physical health should be factors when planning a conditioning program

Lesson 6
Notes:

- To prevent injuries during physical activity, you should wear protective equipment, avoid activities beyond your ability, follow rules, warm up and cool down
- Sore muscles are not injuries. They are common when beginning new fitness activities
- Soreness is the result if tiny tears in your muscles that happen due to resistance
- You can reduce soreness by warming up, stretching and cooling down
- Overworking can result in muscle strains, sprains and tendonitis
- Major injuries include:
    - Dislocation
    - Fracture
    - Stress fracture
    - Concussions
- A concussion is a brain injury that can cause swelling of the brain, dizziness, and confusion.
- When muscles feel sore or injured, remember PRICE
    - P - <u>Protect</u> the injured part of your body
    - R- <u>Rest</u>

- I- Ice the inury
- C- Compress or put pressure using a stretchy bandage
- E - Elevate the injured area