BIG IDEAS

Our personal fitness can be maintained or enhanced through participation in a **variety of activities at different intensity levels**.	Knowing how our bodies move and function helps us **stay safe** during exercise.	Following proper **training guidelines** and techniques can help us reach our health and fitness goals.	Making **healthy choices** can help us reach our health and fitness goals.

Learning Standards

Curricular Competencies	Content
Students are expected to be able to do the following:	*Students are expected to know the following:*
Healthy and active living • Participate daily in **physical activities** designed to enhance and maintain health components of fitness • Identify, apply, and reflect on **strategies** used to pursue personal fitness goals • Identify and describe the relationships between **healthy eating, overall health, and performance** in fitness activities • Analyze health messages from a variety of **sources** and describe their potential influences on health and well-being • Analyze a variety of **fitness myths and fads** • Plan ways to overcome potential **barriers** to participation in fitness and conditioning activities • Explain how developing competencies in fitness and conditioning activities can **increase confidence and encourage lifelong participation** in physical activities **Human anatomy and physiology** • Identify and describe how muscles produce movement in different parts of the body and how to train those muscles • Identify and describe the influences of different training styles on fitness results	• **anatomical terminology** • skeletal system, including **bones and joints** • ways to train the **muscular and cardiovascular systems** • different types of muscle, including **cardiac and skeletal muscle** • relationships between energy systems and **muscle fibre types** • different types and functions of **connective tissue** • components of an **exercise session** • exercise **safety and etiquette** • ways to monitor and adjust physical exertion levels, including heart-rate monitoring and **repetition ranges** • principles of program design, including training principles to enhance personal fitness levels, such as the **FITT principle**, **SAID principle**, and **specificity** • **effects of different types of fitness activities** on the body • sources of health information • influences of **food choices and eating patterns** on physical performance • **performance-enhancing supplements and drugs**

Learning Standards (continued)

Curricular Competencies	Content
Principles of training • Develop and demonstrate appropriate exercise techniques for a variety of fitness activities • Create and implement a **personalized fitness program** • Identify and describe how different types of **fitness activities influence the muscular and cardiovascular systems** **Social responsibility** • Demonstrate a variety of leadership skills in different types of fitness activities • Demonstrate appropriate behaviours in different types of fitness activities and environments • Apply safety practices in different types of fitness activities, for themselves and others	

Big Ideas – Elaborations

- **variety of activities at different intensity levels:**
  Key questions:
  - How do intensity levels affect my fitness?
  - Which activities will support my personal fitness goals?
  - How do I choose the appropriate intensity level for the activity?
- **stay safe:**
  Key questions:
  - What are some safety features to be aware of when exercising?
  - How do proper movement patterns ensure safety when exercising?
- **training guidelines:**
  Key questions:
  - How will following a fitness plan help me reach my fitness goals?
  - How do exercise guidelines influence my fitness goals?
- **healthy choices:**
  Key questions:
  - How do my health choices affect my fitness goals?
  - Why is recovery an important part of my fitness plan?

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Curricular Competencies – Elaborations

- **physical activities:**
  Key question:
  - Which activities target the health components of fitness?
- **strategies:**
  Key questions:
  - What strategies can I use in order to participate daily in physical activities?
  - How did my chosen strategies affect my fitness goals?

- **healthy eating, overall health, and performance:**

  Key questions:

  – How does my eating affect my energy levels?
  – What eating choices can I make to support my overall health and performance?
- **sources:** could include:
  – medical professionals
  – websites
  – magazine and TV advertisements
  – retail stores (e.g., vitamin/supplement stores)
- **fitness myths and fads:**

  Key questions:

  – How realistic are fitness claims made in magazines and online articles?
  – What strategies can I use to determine the validity of a fitness myth or fad?
- **barriers:**

  Key question:

  – What are some possible barriers to my participation in fitness and conditioning activities throughout the year?
- **increase confidence and encourage lifelong participation:**

  Key questions:

  – Which physical activities give me a sense of accomplishment and confidence?
  – How might my self-esteem be influenced by my fitness levels?
- **Human anatomy and physiology:**

  Key questions:

  – How do I train the different muscle groups in my body?
  – Which fitness and conditioning activities train which different muscles in my body?
- **personalized fitness program:** incorporating a variety of activities to achieve fitness goals

  Key question:

  – What features are needed to create an effective fitness program?
- **fitness activities influence the muscular and cardiovascular systems:** for example, using interval training to train the anaerobic energy system

  Key question:

  – How might circuit training affect both the muscular and cardiovascular systems?

- **anatomical terminology:** for example, joint movements (e.g., "flexion" and "extension" at the elbow in a biceps curl)
- **bones and joints:** could include bones such as femur, humerus, tibia, and ulna, and joints such as shoulder, hip, elbow, knee, and ankle
- **muscular and cardiovascular systems:** could include:
  - muscular system: resistance training
  - cardiovascular system: jogging, running, circuit training, interval training
- **cardiac and skeletal muscle:**
  - Cardiac muscle is the heart muscle.
  - Skeletal muscles move the bones in the body and are part of the muscular system, which helps control body movement.
- **muscle fibre types:**
  - Fast-twitch muscle fibres have a high anaerobic capacity as well as a fast speed and high force of muscle contraction. These are exercised in, for example, sprint and power activities.
  - Slow-twitch muscle fibres have a high aerobic capacity as well as a slow speed and low force of muscle contraction. These are exercised in, for example, endurance activities.
- **connective tissue:**
  - Tendons connect bones to muscle.
  - Ligaments connect bone to bone.
- **exercise session:**
  - warm-up
  - exercise
  - cool-down
- **safety and etiquette:**
  - training practices (e.g., avoiding overtraining and dangerous practices)
  - breathing techniques (e.g., breathing out during exertion and breathing in during the "easy phase")
  - spotting (e.g., helping others complete their repetitions in weight-training activities)
- **repetition ranges:** for example:
  - 13-15 for muscular endurance
  - 8-12 for muscular hypertrophy
  - 3-5 for muscular strength
- **FITT principle:** a guideline to help develop and organize personal fitness goals based on:
  - Frequency – how many days per week
  - Intensity – how hard one exercises in the activity (e.g., percentage of maximum heart rate)
  - Type – the type of activity or exercise, focusing on the fitness goal (e.g., jogging for cardio endurance)
  - Time – how long the exercise session lasts

Content – Elaborations

- **SAID principle:** Specific Adaptation to Imposed Demand: the body will react and respond to the type of demand placed on it (e.g., a student's flexibility will eventually improve if he or she participates in regular stretching activities).
- **specificity:** The types of exercises chosen will determine the kinds of fitness improvements (e.g., a student who wants to improve his or her flexibility levels would perform stretching exercises).
- **effects of different types of fitness activities:** could include:
  - strengthening muscles and bones in activities where you have to move and/or control some type of weight (e.g., fitness circuits and/or jumping and landing)
  - strengthening heart and lungs in activities where you are moving at a fast pace (e.g., jogging or running) for periods of time (e.g., games, swimming, biking)
  - reducing stress and/or anxiety levels in activities where you can participate outside and/or elevate the heart rate
- **food choices and eating patterns:**

  Key question:

  - What strategies can I use when planning my daily meal plan?
- **performance-enhancing supplements and drugs:** short-and long-term impacts of legal and illegal supplements and drugs (e.g., steroids, creatine, protein powder, weight-loss pills)