


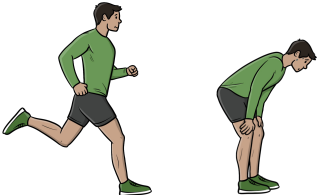


## CONCEPT: PRINCIPLES OF PHYSICAL TRAINING

◆ **Physical Training:** Physical activity/exercise for achieving, improving, or maintaining physical fitness and health.

- Before starting physical training, it is important to understand its \_\_\_\_\_ principles.

Principles of Physical Training	
<b>1. Individuality</b>	
	<ul style="list-style-type: none"><li>▸ Different people may respond differently to the same exercise.</li><li>▸ _____ play a role in determining the achievable level of fitness.</li></ul>
<b>2. Specificity</b>	
	<ul style="list-style-type: none"><li>▸ Different exercises improve different fitness components.</li><li>▸ Also applies to _____-related fitness components.</li></ul>
<b>3. Progressive Overload</b>	
	<ul style="list-style-type: none"><li>▸ <b>Overload:</b> Additional physical demand on the body over its _____ level of activity.</li><li>▸ Progressively increasing overload improves fitness.<ul style="list-style-type: none"><li>- Incorrect amount of overload can either be ineffective or cause _____.</li></ul></li></ul>
<b>4. Reversibility</b>	
	<ul style="list-style-type: none"><li>▸ The body adapts to _____ levels of physical activity like it does for overload.</li><li>▸ An individual can lose half of their fitness gains within ____ months of stopping exercise.</li></ul>

## EXAMPLE


A basketball player has a torn meniscus and per his doctor's orders he hasn't practiced or played in 12 weeks. Which principle of physical training can apply to his fitness level after 12 weeks?

- a) Progressive Overload      b) Specificity      c) Reversibility      d) Overtraining

## CONCEPT: PRINCIPLES OF PHYSICAL TRAINING

### The FITT Principle

- ◆ Different components of fitness require different type, amount, and duration of \_\_\_\_\_.
- The \_\_\_\_\_ principle is used to determine the optimum overload to achieve/maintain a particular fitness level.

The FITT Principle		
<b>Cardiorespiratory Fitness</b> (20-Year Old Runner) 	<b>F</b> requency	▪ Running frequency: 3-5 days/week.
	▪ Number of active sessions of activity/_____.	
	<b>I</b> ntensity	▪ Running THR: 64% - 96% of _____.
	▪ Each exercise has a target exertion level measured by THR. - Target Heart Rate (THR) = X% of MHR - Maximum Heart Rate (MHR) = 220 – Age	
	▪ MHR = 220 – 20 = _____ bpm    ▪ THR = _____ bpm to _____ bpm	
	<b>T</b> ime	▪ Running Duration: 20-60 min/session.
	▪ Duration of activity session.	
	<b>T</b> ype	▪ Running Focus: Continuous, rhythmic large muscle group activity.
	▪ Focus on a particular health-related fitness component.	

### EXAMPLE

Samuel is a 40-year-old software engineer who wants to commit to getting into shape. Which of the following choices would represent the highest possible value for his target heart rate after an intense run?

- a) 72 bpm                      b) 173 bpm                      c) 250 bpm                      d) 115 bpm

### PRACTICE

To increase her explosiveness at the start of the gate when swimming, Allison practices box jumps every week. Which of the principles of physical training is being followed?

- a) Specificity                      b) Reversibility                      c) Individuality                      d) Endurance Acceleration

## **CONCEPT: PRINCIPLES OF PHYSICAL TRAINING**

### **PRACTICE**

Hamilton is training for the local marathon that is 4 months away. To ensure he finishes it in record time he follows a strict 15-week training schedule. Week 1 he starts with a 30-minute light run and with each successive week he increases both his running time and overall pace. What principle of physical training is being followed for the upcoming marathon?

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- a) Specificity                      b) Reversibility                      c) Individuality                      d) Progressive Overload

### **PRACTICE**

Nicholas and Benjamin are both vying for a spot on the US Powerlifting Team. Both males have adhered to the same diet, done the same types of weightlifting regimens, and gotten the same amount of rest. Nevertheless, Benjamin's improvements in strength and endurance have seen a much larger jump at the time of competition. Which principle of physical training could account for this larger improvement in Benjamin when compared to Nicholas?

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- a) Progressive Overload                      b) Reversibility                      c) Individuality                      d) Specificity