FITNESS FOR LIFE

UNIT FOUR STUDY GUIDE

Flexibility

Question One

Define Flexibility

The ability to move your joints through a full range of motion
(ROM)

Question Two

Apply the Principle of Overload, Progression, and Specificity to Flexibility

Overload: Stretch your muscles longer than normal to increase your flexibility

Question Two

Flexibility...

Progression: Gradually increase the length or time of your stretch

Specificity: Flexibility exercises improve only the specific muscles at specific joints

Question Three

A ___ is a place in the body where bones come together.

Joint

Question Four

List some joints that are located in the body...
Ankles
Knees
Hips
Wrists
Elbows & Shoulders

Question Five

List the two types of joints in the body:
1. Hinge: permits movement in only two directions

2. Ball & Socket: allows movement in all directions

Question Six

List the benefits of having good flexibility:

1. Improved function in daily activities

2. Improved health and wellness

Question Seven

Generally, _____ tend to be more flexible than_____.

Females
Males

Question Eight

One important reason for doing regular stretching exercises when you are young is to reduce the risk of _____ problems when you are older.

Joint

Define the following terms....

9. Hypermobility: Range of motion that is in excess of what is considered healthy for a specific joint

10. Arthritis: A disease in which the joints become inflammed

11. Joint laxity: looseness of a joint resulting from overstretched ligaments

12. Static Stretching: Stretching slowly as far as you can without pain.

13. PNF Stretching:

(Proprioceptive Neuromuscular Facilitation)
A variation of static stretching that involves contracting a muscle before stretching it

14. Ballistic Stretching:

A series of quick but gentle bouncing or bobbing motions used to stretch

Question Fifteen

Exclusive use of _____ exercises can lead to a loss of ____.

Strength
Range of Motion (ROM)

Question Sixteen

A balanced exercise program includes both _____ and _____ exercises for all muscles.

Strength
Flexibility

Question Seventeen

Why should you do some mild cardiovascular exercise before you stretch?

You should never stretch a cold muscle! Stretching a cold muscle can cause injury.

A brief warm up helps to prepare the muscle for stretching

Question Eighteen

Apply the FITT principles to Flexibility

Frequency: Daily or at least 3x a week
Intensity: Stretch the muscle beyond its normal point
Time: Hold the stretch for 15 – 30 seconds / 2 – 3 sets
Type: Static is recommended!

Question Nineteen

List (3) guidelines for flexibility exercises.

1. Start with a general body warm up

2. Do not overstretch

3. Be sure to overload when stretching warm muscles

Basic Principles and Strength

Define the Following…

1. Muscular Endurance: the ability to contract muscles many times without tiring

2. Strength: The amount of force a muscle can produce

3. Progressive Resistance Exercise (PRE): The gradual increase in resistance used to improve muscular fitness

4. Resistance: A force that acts against the muscles

5. Hypertrophy: An increase in muscle size

6. Repetitions: The number of consecutive times a person does an exercise

7. Sets: A group of repetitions of a specific exercise

Question Eight

Muscle Fitness is located on what level of the Physical Activity Pyramid?

Level Three

Question Nine

How is strength training different from muscle endurance training?

Strength is developed by doing an exercise only a few times, but with a lot of resistance Muscle endurance is developed by doing an exercise many times, but with less resistance

Question Ten

List and describe the three types of muscles in the body.

1. Smooth: muscles that make up the walls of your internal organs

2. Cardiac: heart muscle

3. Skeletal: muscles attached to bones and make movement possible

Question Eleven

Which of the three muscles are called voluntary muscles?

Skeletal

Question Twelve

List and describe the three types of exercises used to develop muscular fitness:

1. Isotonic: an exercise in which body parts move

2. Isometric: an exercise in which body parts do not move

3. Isokenetic: an exercise that regulates the resistance or speed of movement through a full range of motion

Question Thirteen

List the three types of muscle fibers:

Slow twitch
Intermediate twitch
Fast twitch

Question Fourteen

What are some different ways you can assess muscle fitness?

1. 1 Repetition Maximum: the maximum amount of weight a group of muscles can lift one time
2. Modified 1 RM: percentage of your 1 RM that is recommended for teens to use when testing and lifting
3. Calisthetics: A test in which the number of repetitions is counted

Question Fifteen

How do strong muscles help you look better and prevent health problems?
Strength helps you to work and play without getting fatigued
reduces risk of backache
reduces risk of osteoporosis
gives your body a firm appearance
muscles burn more calories than fat
helps maintain good posture

Question Sixteen

Apply the (3) training principles to strength.

Overload: 60% of 1RM

Progression: Increase the amount of weight you lift over a period of time

Specificity: Exercise the specific muscles you wish to develop

Question Seventeen

Apply the FITT principles to strength

Frequency: 2/3 days a week on non-consecutive days
Intensity: 60 – 90% of 1RM
Time: 1 to 2 sets / 3 – 8 reps
Type: Isotonic, Isometric, Isokenetic

Question Eighteen

List the resistance training guidelines.

1. Use the "S" method: smooth, slow, steady
2. Exercise through a full range of motion
3. Always use a spotter on free weights
4. Start with a moderate program
5. Do not hold your breath when lifting

Chapter Twelve

Muscle Fitness…
Muscular Endurance

Question One

List the benefits of developing muscular endurance:

Improves appearance

Improved fitness

Improved physical & mental health

Increases lean body mass

Decreases fat

Strengthens bones

Question Two

Apply the FITT principles to Muscular Endurance:

Frequency: 3 days per week
Intensity: 20% of 1RM
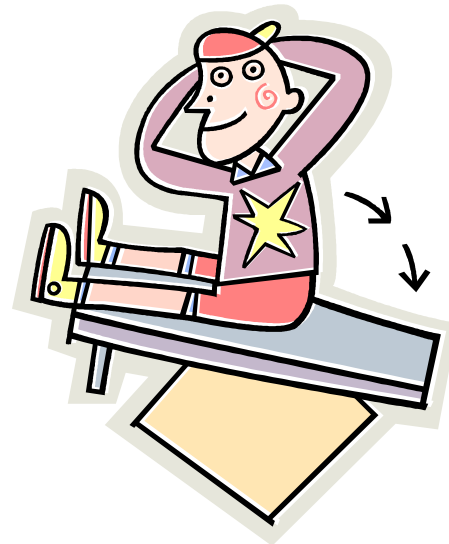Time: 1 – 2 sets / 11 – 25 repetitions
Type: Isotonic, Isometric, Isokenetic

Question Three

Why can muscular endurance exercises be done on most days of the week?

They do not require maximal contractions

Question Four

What are the guidelines for building muscular endurance?

1. Always warm up and stretch
2. Control your breathing
3. Start with low-intensity and progress slowly
4. Use good body mechanics

Biomechanical Principles

5. Always move through full range of motion
6. Vary your routine to avoid boredom

Define the Following Terms…

5. Plyometrics: exercises using jumping or hopping motions that cause lengthening of the muscle followed by a shortening contraction

6. Periodization: a method of scheduling progressive resistance exercise to provide variety and to enhance peak Performance

7. Interval Training: Physical activity in which short bursts of high-intensity exercise are alternated with rest periods

Review Questions…

Question One

List the five health related fitness components and their levels on the Physical Activity Pyramid.

Question One

Health RelatedPhysical Activity Pyramid

Cardiovascular Fitness1. Level Two

Muscular Endurance2. Level Three

Strength3. Level Three

Flexibilty4. Level Three

Body Composition5. All!!

Question Two

List the six skill related fitness components.

1. Agility
2. Balance
3. Coordination
4. Power
5. Speed
6. Reaction Time

Question Three

Write the formula for computing Target Heart Rate Zone

Step One: 208 − (.7 x age) = MHR

Step Two (Threshold of Training): MHR x (.65)

Step Three (Target Ceiling): MHR x (.90)

Question Four

Give the FITT guidelines for Cardiovascular Fitness

Frequency: 3 days per week
Intensity: Target Heart Rate Zone
Time: 30 – 60 minutes
Type: Continuous Activity
Example: Jogging, Aerobics, Biking

Question Five

List the three principle of training:

Overload
Progression
Specificity