

INTRODUCTION TO RESISTANCE TRAINING

PE20F

Why do we do Resistance Training?

- Strengthens tendons and ligaments
- Improves success at physical activities (makes you stronger, faster, and do things easier)
- Improves posture
- Lowers chance of injury
- Decreases the size of fat cells
- Increases metabolism (makes body burn more calories)
- Can control your body composition (body fat vs. lean muscle)

What are the rules of the FRC Weight Room?

- Must be changed in your gym clothes
- Do not go in without supervisor or teacher
- Must have clean gym shoes
- Do not fool around
- If you cannot do something, you can ask how to do it.
- If something is broken, tell the teacher so they can fix it.
- No food or drinks inside. Water is okay!
- No dropping weights on the ground.
- Clean the machine after using it.

Words you need to know:

Repetitions (Reps) – the number of times you do an exercise.

For example, if you do 10 push-ups, that is 10 “reps”.

Sets – A group of Repetitions (Reps)

For Example:

“3 sets of 10 reps” would mean...



MUSCULAR STRENGTH

Training your muscles to lift a lot of weight

How much weight can you lift?



Heavy Weights
Low Reps (Less than 8 reps)
Long Rest (30 seconds – 2 minutes)

MUSCULAR ENDURANCE

Training your muscles to lift a weight for a long time

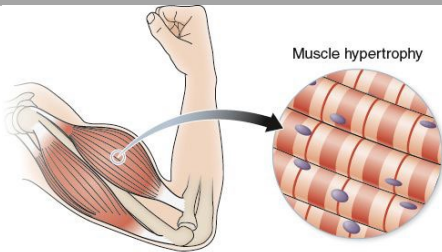
How many reps can you do?



Lighter Weights
High Reps (More than 12)
Short Rest (15 – 30 seconds)

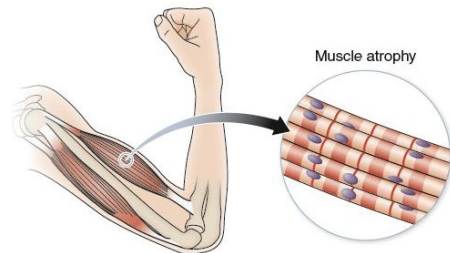
HYPERTROPHY

Increase in Muscle Size



ATROPHY

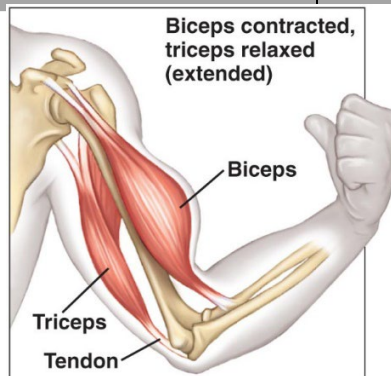
Decrease in Muscle Size



AGONIST

Primary Muscle Mover

Bicep is Agonist
Tricep is Antagonist

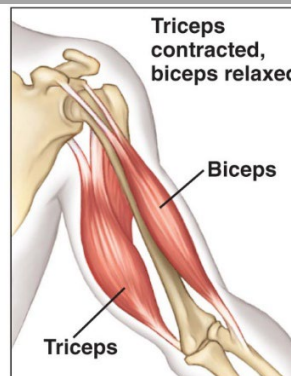


Biceps contracted, triceps relaxed (extended)

ANTAGONIST

Performs opposite movement to primary muscle mover

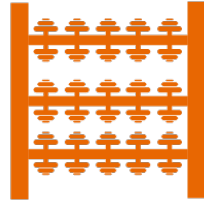
Bicep is Antagonist
Tricep is Agonist



Triceps contracted, biceps relaxed



Always Warm-up and Cool Down



Put equipment back after using it



Don't hog the machine!
Other people want to use it!



Don't be a stinker!
Use deodorant and wear clean clothes and shoes.



Give people space when they are exercising



No food or drinks in the weight room. Water only!

Weight Room Etiquette

How do you behave and act in a weight room?



No one needs a lot of people to do 1 exercise. Don't stand around and watch



Use your phone for music, not to take pictures, texting/phone calls, or watch videos

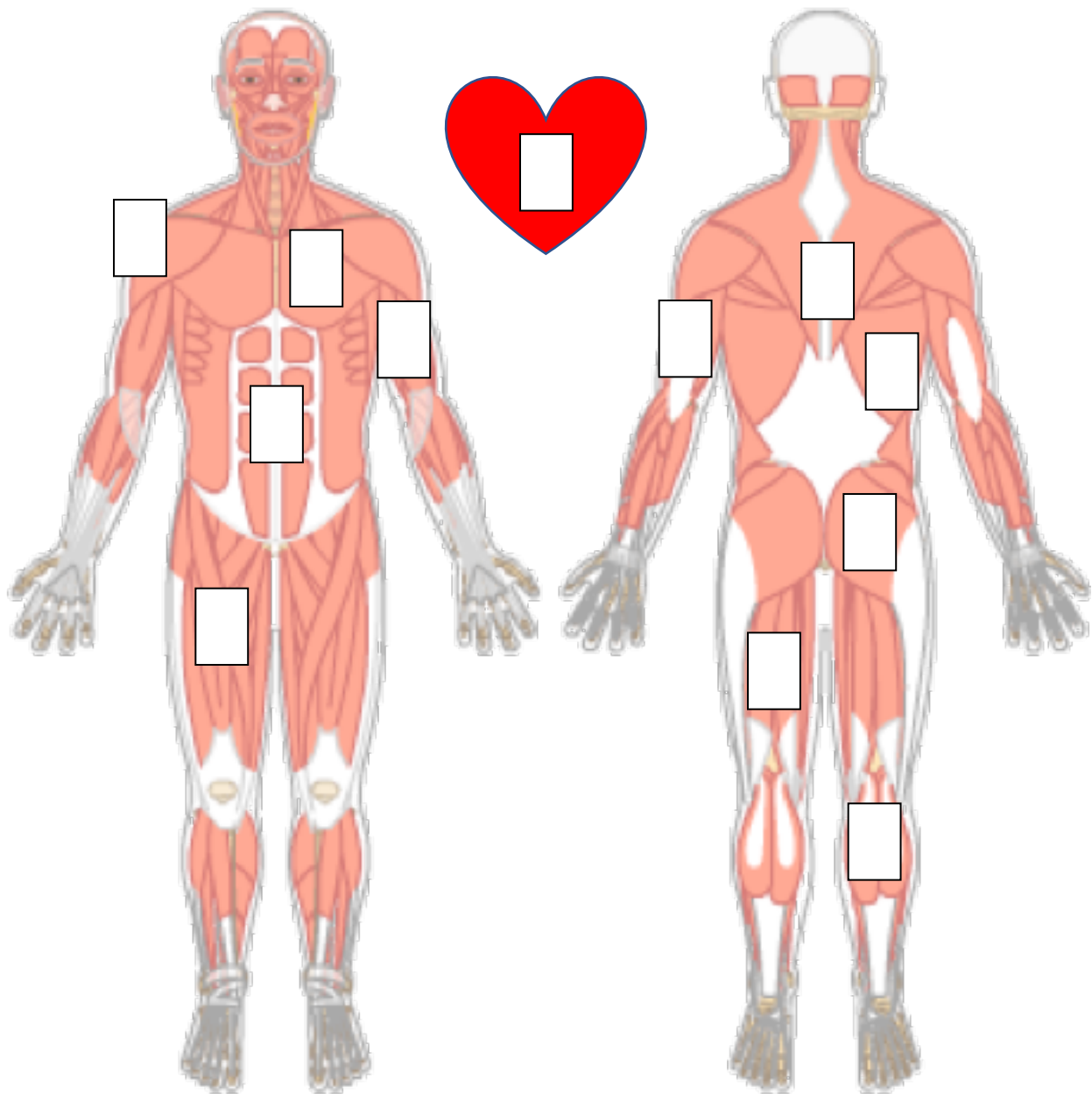


If someone asks for help, you can help them.
If they don't ask for help, don't help them!



Use headphones to listen to YOUR music

What areas of the body do we exercise?



1) Deltoid (Shoulder)	2) Abdominals (Abs/Core/Stomach)
3) Rhomboids, Trapezius (Back)	4) Biceps (Arms)
5) Gluteus Maximus (Glutes)	6) Cardio (Heart)
7) Hamstrings (Legs)	8) Triceps (Arms)
9) Chest (Pecs)	10) Quadriceps (Legs)
11) Calf (Legs)	12) Latissimus Dorsi (Back)



Fit ball Crunch

Abdominals



Russian Twist

Abdominals



Machine Leg Curl

Hamstrings



Videos of these exercises are here!



Machine Chest Press

Chest (Pecs)



Machine Mid Row

Back



Machine Leg Press

Hamstrings, Quadriceps,

Gluteus Maximus



Machine Assisted Chin-up

Back



Leg Lifts

Abdominals



Machine Back Extension

Back



Videos of these exercises are here!



Machine Lat Pulldown

Back



Machine Leg Extension

Quadriceps



Machine Shoulder Press

Shoulder (Deltoid)



Machine Bicep Curl

Biceps



Machine Chest Fly

Chest (Pecs)



Dumbbell Tricep Extension

Triceps



Videos of these exercises are here!



Cable Tricep Press

Triceps



Lateral Dumbbell Raise

Shoulder (Deltoid)



Dumbbell Bicep Curl

Biceps



Standing Calf Press





Calf







WORKOUT 1

CARDIO (15 minutes total)





Treadmill	Arc Trainer	Bike	Rower
 <p>1.5% Incline Minimum 5.0 mph speed Time: _____</p>	 <p>Stay above 140 SPM Time: _____</p>	 <p>Gear 8 - 10 RPM minimum 100 Time: _____</p>	 <p>Stay above 25 SPM Time: _____</p>


MUSCULAR STRENGTH & ENDURANCE (Check box when complete)


Machine Chest Press		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Machine Mid Row		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Machine Chest Fly		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Machine Lat Pulldown		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3

<p>Push-ups</p>		<p>8 – 12 Reps Set 1</p>	<p>8 – 12 Reps Set 2</p>	<p>8 – 12 Reps Set 3</p>
<p>Assisted Pull-up</p>		<p>Weight Used</p>	<p>Weight Used</p>	<p>Weight Used</p>
<p>Dumbbell Chest Press on Incline bench</p>		<p>Weight Used</p>	<p>Weight Used</p>	<p>Weight Used</p>
<p>Back Extension</p>		<p>Weight Used</p>	<p>Weight Used</p>	<p>Weight Used</p>
<p>Fit ball Crunch</p>		<p>20 Reps Set 1</p>	<p>20 Reps Set 2</p>	<p>20 Reps Set 3</p>
<p>Leg Lifts</p>		<p>8 – 12 Reps Set 1</p>	<p>8 – 12 Reps Set 2</p>	<p>8 – 12 Reps Set 3</p>

WORKOUT 2

CARDIO (15 minutes total)			
Treadmill	Arc Trainer	Bike	Rower
 <p>1.5% Incline Minimum 5.0 mph speed</p> <p>Time: _____</p>	 <p>Stay above 140 SPM</p> <p>Time: _____</p>	 <p>Gear 8 - 10 RPM minimum 100</p> <p>Time: _____</p>	 <p>Stay above 25 SPM</p> <p>Time: _____</p>

MUSCULAR STRENGTH & ENDURANCE (Check box when complete)				
Machine Leg Press		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Machine Bicep Curl		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Machine Leg Extension		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Tricep Press		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3

Machine Leg Curl		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Machine Shoulder Press		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Air Squat		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Front and Side Shoulder Raise with Dumbbell		Weight Used	Weight Used	Weight Used
		8 – 12 Reps Set 1	8 – 12 Reps Set 2	8 – 12 Reps Set 3
Russian Twist with Medicine Ball		Weight Used	Weight Used	Weight Used
		20 Reps (10 each side) Set 1	20 Reps (10 each side) Set 2	20 Reps (10 each side) Set 3
Plank		Weight Used	Weight Used	Weight Used
		30 Seconds Set 1	30 Seconds Set 2	30 Seconds Set 3