

0 – 10 secs

10 – 60 secs

60 – 120 secs

% of total energy

100  
75  
50  
25  
0



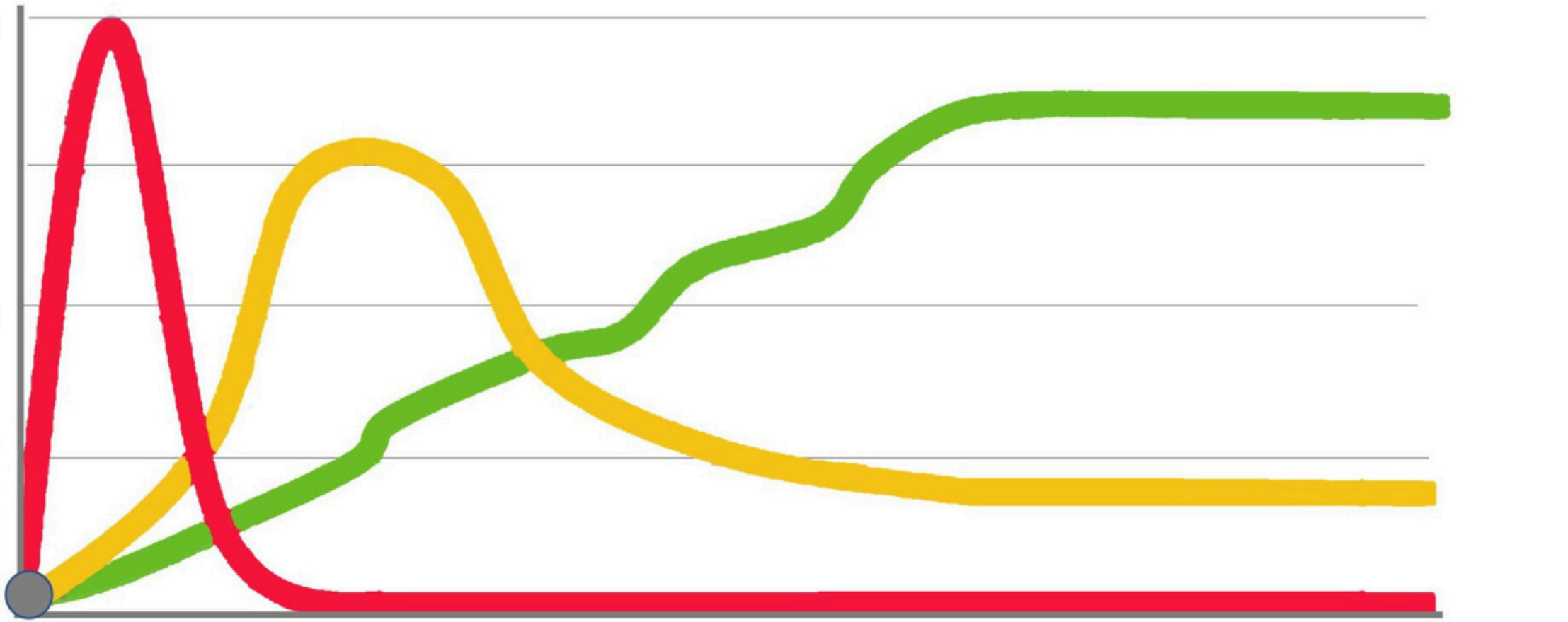
Immediate: ATP – CP



Short Term: Lactic / Glycolytic / Anaerobic



Long Term: Oxidative / Aerobic



**-The aerobic system that we just described has other components like the Krebs Cycle and Electronic Transport Chain. They can power the body for a long period of time. (endurance events)**

**- Know time frames for each system**



**S**PECIFIC

**M**EASURABLE

**A**TTAINABLE

**R**EALISTIC

**T**IMELY



Process and Outcome goals are  
also really important.



A process goal is shorter term.

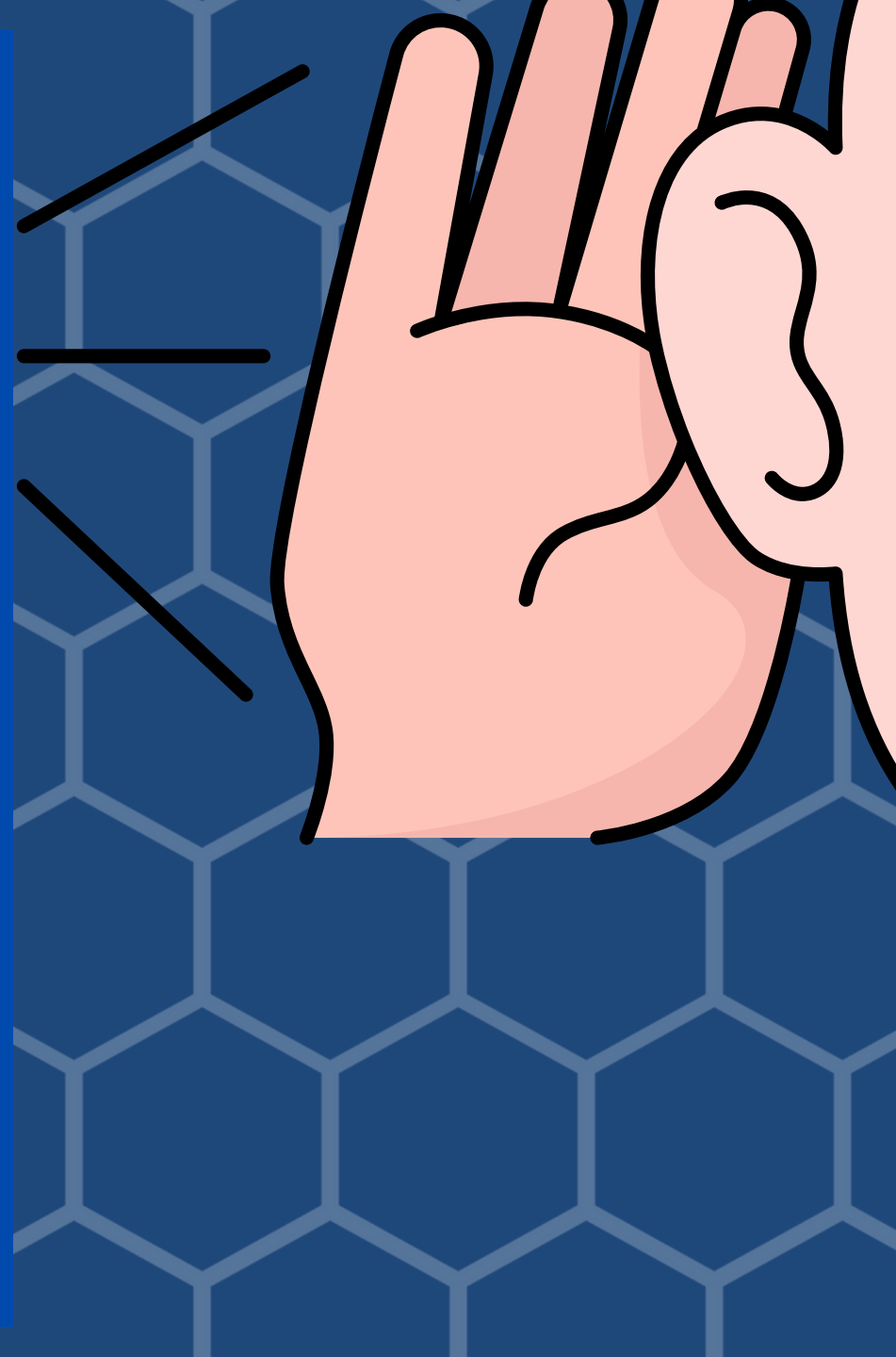
Completing a single session or making it  
to the gym are examples of process goals.

**A outcome goal represents a longer term change such as an increase in strength, or significant amount of weight loss. This is typically the client's long term goal or end result.**



# Active Listening

- Asking Questions
- Reflecting
- Summarizing
- Affirming
- Asking Permission



# Asking Questions

**NASM is big on  
open ended  
questions with a  
positive vibe.**

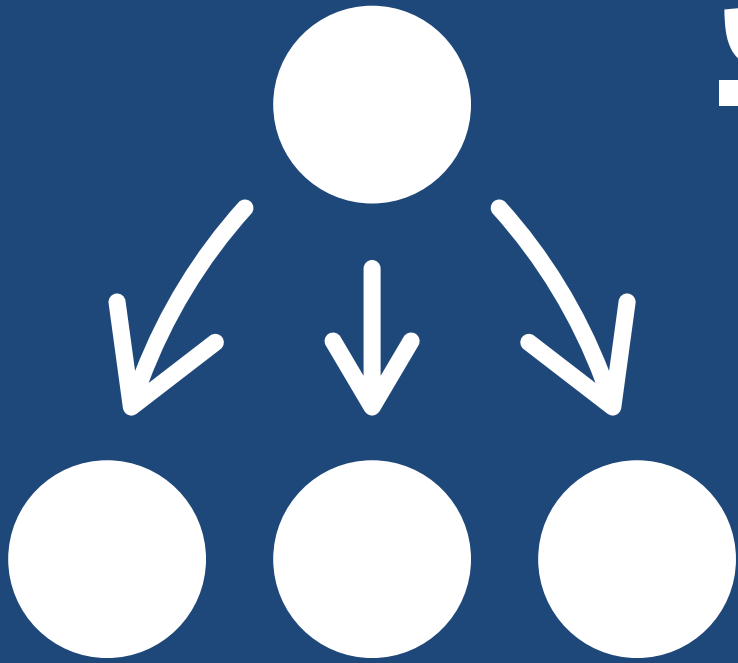


**Reflecting is  
basically when you  
repeat something  
back to a client  
to show that you  
understood them.**





# Summarizing



**This is the same as reflecting, but now you're reflecting multiple pieces of information to show understanding.**

**Affirmations show appreciation for clients and their strengths.**

**Compliments use "I" but affirmations don't and put more focus on the client.**



# Examples of asking for permission:



- "Do you want to try assisted stretching?"

- "Does that lunge variation look like something you'd be willing to try?"

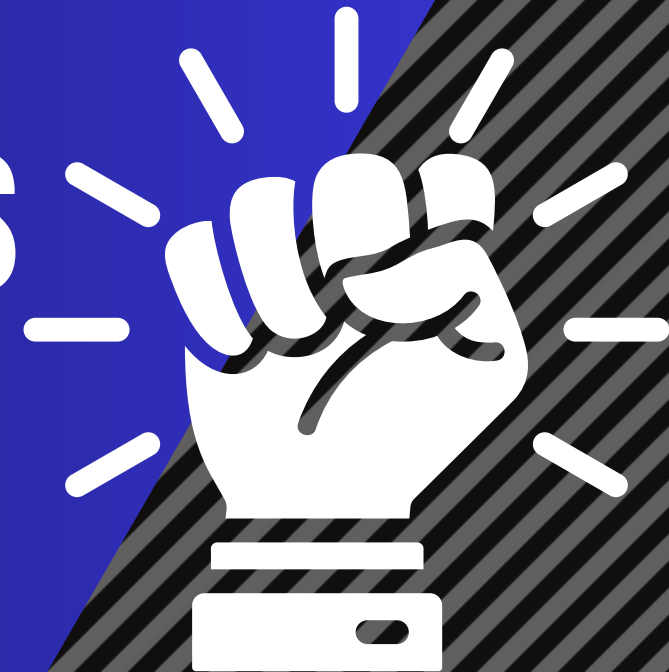
# Cognitive Strategies

Intended to change the way  
someone thinks about  
exercise/activity

- Positive Self Talk
- Psyching Up
- Mental Imagery



**Positive self-talk is a form of encouraging and motivating internal dialogue that increases self-efficacy.**

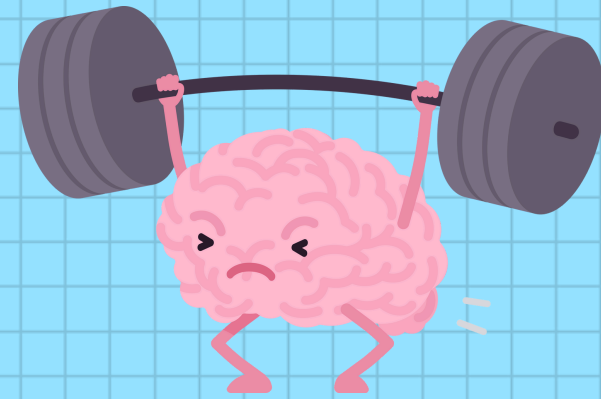


**Psyching Up: When internal dialogue is developed and used to increase excitement and motivation before exercise. Even listening to music before exercise can be an example.**



# Mental Imagery

**Imagining a situation that improves client self efficacy, confidence and motivation to exercise.**





# Motivation Types

**Amotivation: Not motivated**

**Intrinsic motivation: Internally motivated.**

**There's a sense of self satisfaction.**

**Extrinsic motivation: There's an external reward or satisfaction for someone else.**



# Session #1

- 1 Discuss health concern goals**
- 2 Clarify fitness goals**
- 3 Review past exercise experiences**
- 4 Fitness assessment**



**Something you're pretty likely to be asked about on the test is the transtheoretical model.**

**There are five stages to that.**



1

**PRE-CONTEMPLATION**

2

**CONTEMPLATION**

3

**PREPARATION**

4

**ACTION**

5

**MAINTENANCE**

**First, we have pre-contemplation where people are physically inactive. They're not intending on beginning an exercise program, and they don't see exercise as worth their time.**



**Then you have contemplation.**

**People who are inactive, but thinking about becoming more active in the next six months go here. They're still weighing the pros and cons of exercise, but they're starting to consider the benefits.**



**Next is preparation. People in this stage are doing some physical activity and preparing to adopt a more consistent activity program.**

---

**These people are only doing things like sporadic walking, but they're ready to adopt an active lifestyle.**

**Then you have the action stage. People are here when they're engaging in regular physical activity but have been doing so for less than six months.**

**ACTION**



**Lastly, you have maintenance.**

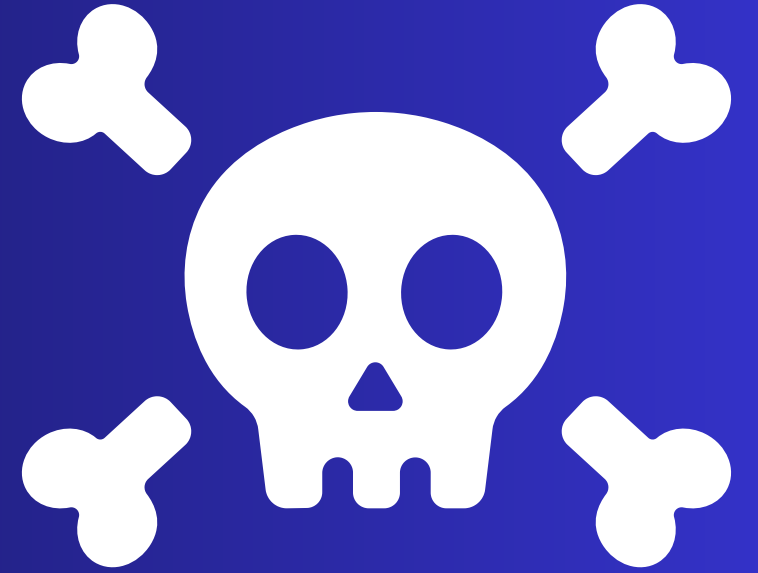


**People on this stage have  
been working out consistently  
for longer than six months.**

**Be able to identify where a  
person is within this model!**



**There's a bonus stage  
called termination, but it  
doesn't really apply to us  
because you should do  
some form of exercise  
for your entire life.**



# Pre-Participation



**The PAR-Q+ is a subjective yes or no questionnaire that is used to determine whether it's safe or not for a client to begin an exercise program. It has follow up portions to reduce false positive readings.**



**The Health History  
Questionnaire is next.  
It's similar to the PARQ, but  
it's not yes or no questions.  
It gets you more detailed info  
on your client. Things like  
what medications they're  
taking, family history,  
etc. are covered.**

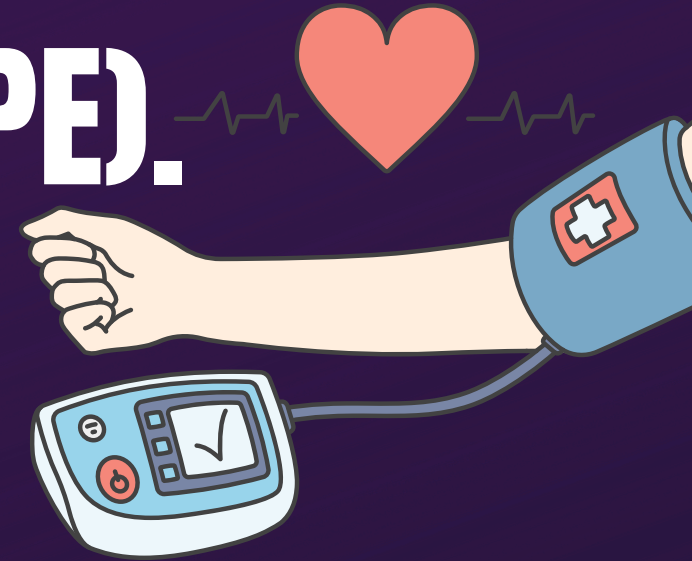


**There are also medical  
release forms.**



**These are from a physician  
and they go over limitations  
a client may have.**

**Subjective assessments would be things that reflect what an individual feels (PAR-Q, HHQ, RPE).**



**Objective things are quantified through data collection (blood pressure, HR).**

# Planes Of Motion And Movement



**Superior - toward the head end of the body**

**Inferior - away from the head or lower**

**Anterior - front of the body**

**Posterior - back of the body**

**Medial - toward the midline of the body**

**Lateral - away from the midline of the body**

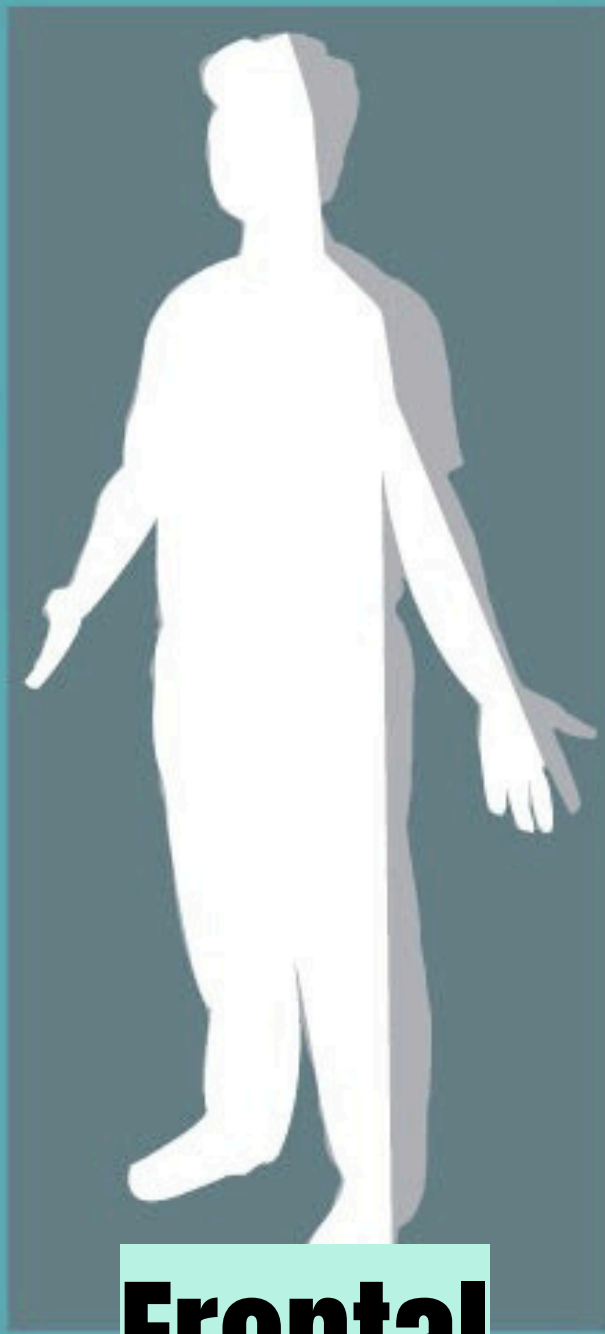
**Proximal - nearest the trunk or the point of origin**

**Distal - farthest from the trunk or the point or origin**





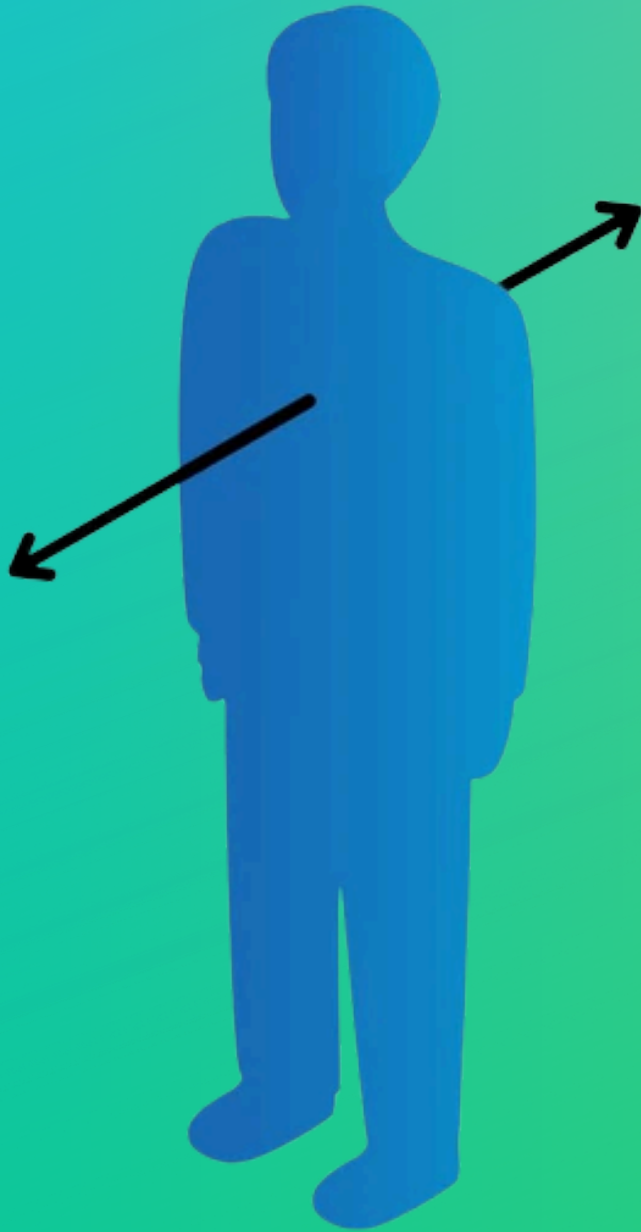
**Transverse**



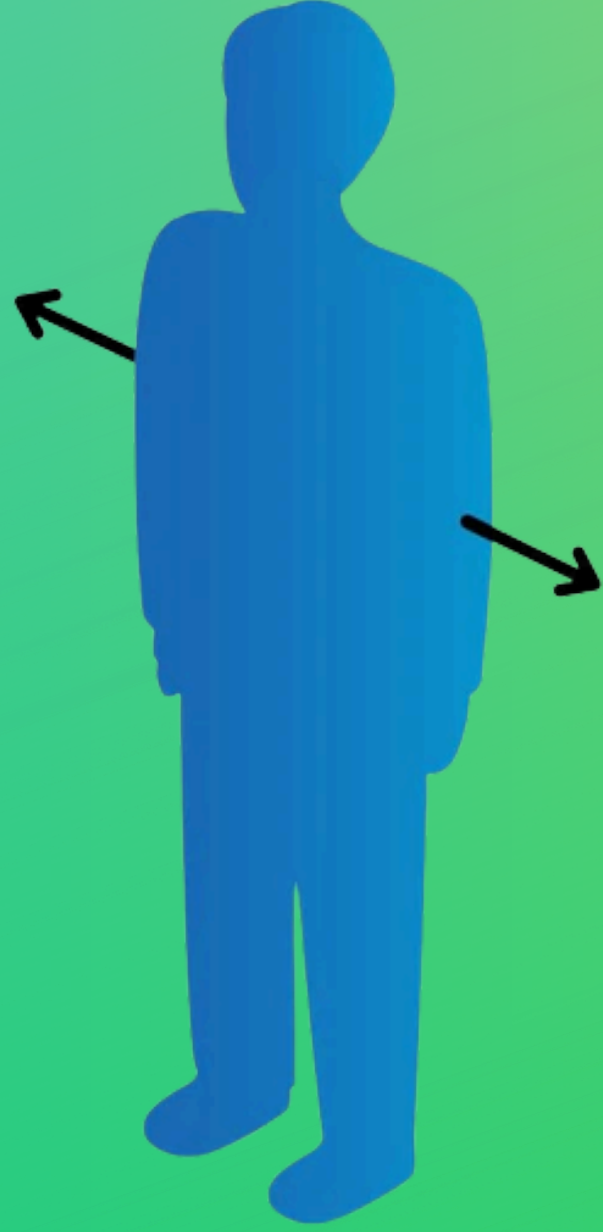
**Frontal**



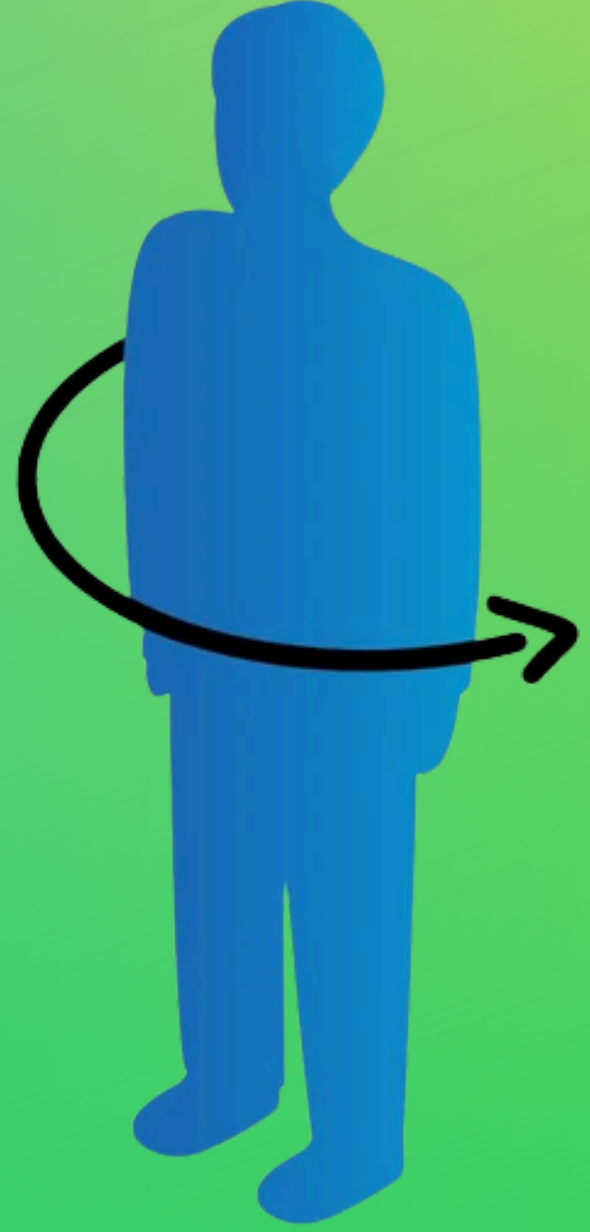
**Sagittal**



**Sagittal**



**Frontal**



**Transverse**

# Movements In the Sagittal Plane

Flexion: Decreasing the joint angle

Extension: Increasing the joint angle

Dorsiflexion: Moving the top of the foot toward the shin (ankle only)

Plantarflexion: Moving the sole of the foot down towards the ground (pointing toes)



# **Movements In the Frontal Plane**

**Adduction: Movement toward the midline**

**Abduction: Movement away from the midline of the body**

**Elevation: Moving to a superior position (scapula)**

**Depression: Moving to an inferior position (scapula)**

**Inversion: Tilting the foot towards midline**

**Eversion: Tilting the foot away from the midline**

# **Movements In the Transverse Plane**

**Rotation: When the torso or a limb moves around its vertical axis**

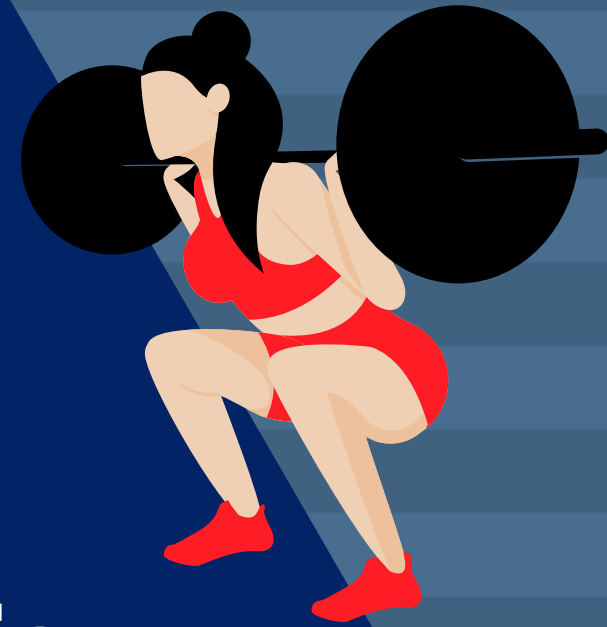
**Pronation: Rotating the forearm or foot to a palm-side or foot-side down position**

**Supination: Rotating the forearm or foot to a palm-side or foot-side up position**

**Horizontal abduction: Moving the upper arm away from the midline of the body when it is elevated to 90 degrees**

**Horizontal adduction: Moving the upper arm towards the midline of the body when it is elevated to 90 degrees**

**It's possible that you'll get a question or two where you'll be shown an exercise, and you'll have to identify what movement is taking place. You will also have to identify what plane of motion the movement is occurring in.**





**Sagittal Plane Exercise Examples:**

**Biceps curl, squats, pull-ups, rows**

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**Frontal Plane Exercise Examples:**

**lateral band walk, lateral raise**

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**Transverse Plane Exercise Examples:**

**Russian twist, torso rotation, wood chops**

# Exercise Regressions, Progressions & Form

