

Today – April 2nd



- **Intro** – Warm-Ups out; 7th laptops/ headphones out too
- **Advanced** – Warm-Ups out
- **Reminders n' Stuff:**
 - CLUB MED meeting 9am rm 1406
 - No Teacher Offerings tomorrow
 - Binder Check #2 **due Friday**
 - All missing 3rd quarter coursework are **due the Monday after break**
 - Job shadow needs...?



Today – April 2nd

Introduction to Sports Medicine

- **Warm-Up:** Whole Unit Review
- **Assignment:** Periodization Practice

Advanced Sports Medicine

- **Warm-Up:** Neuromuscular Control Review
- **Lecture:** Finish Neuromuscular Control; begin Injury & Rehab



Warm-Up (No notes, no blanks)

Intro

- Number 1-27
- Identify the images presented on the screen.

Advanced

1. Define *neuromuscular control* in your own words.
2. What are at least 3 differences between *feedforward* and *feedback* NMC mechanisms?
3. What are the advantages of *pre-activating muscles* for a task?
4. Define *kinesthesia*.
5. Physiologically speaking, how do we achieve “muscle memory”?





5

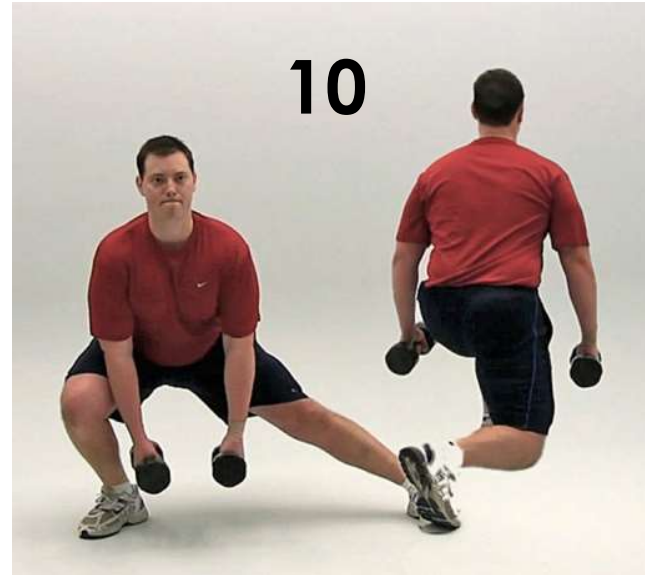


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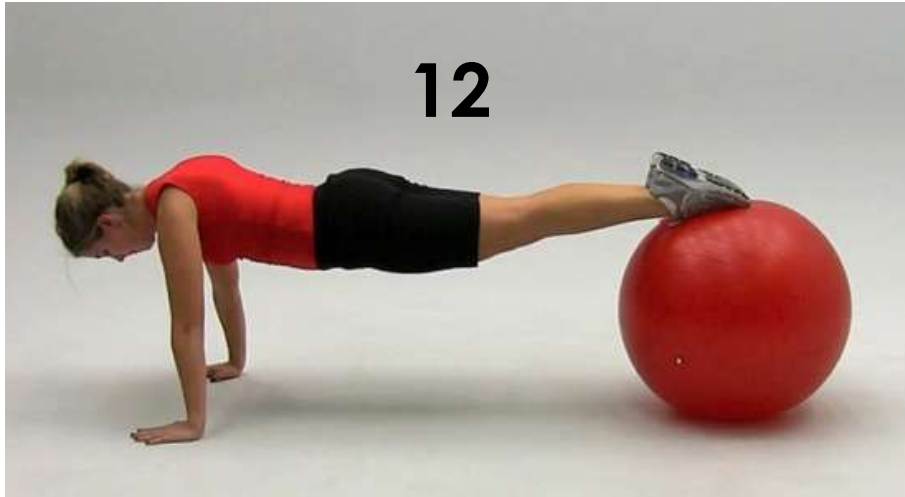


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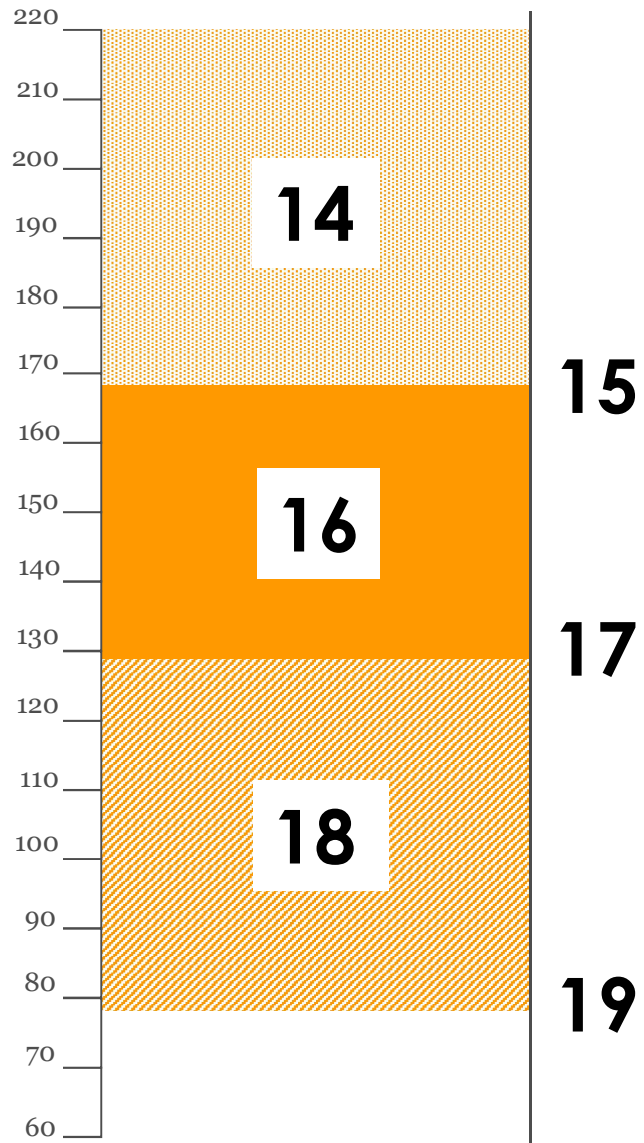


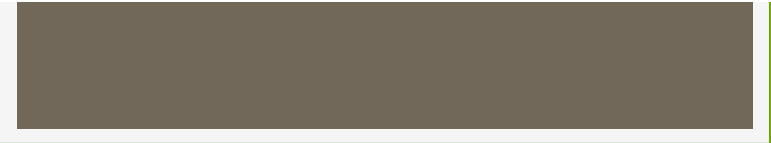
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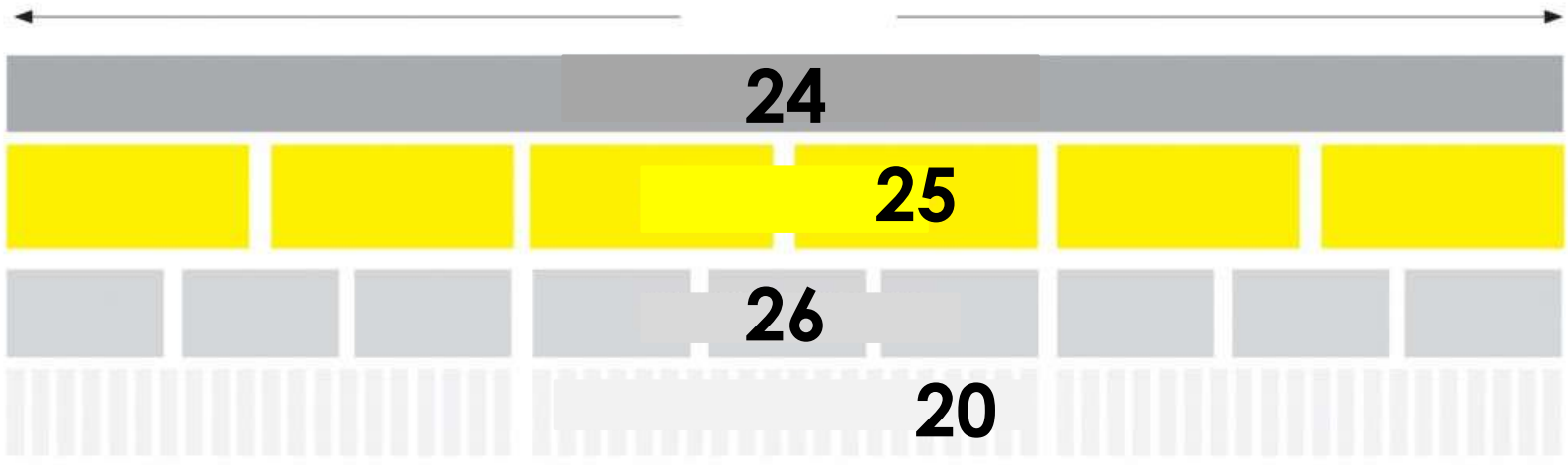
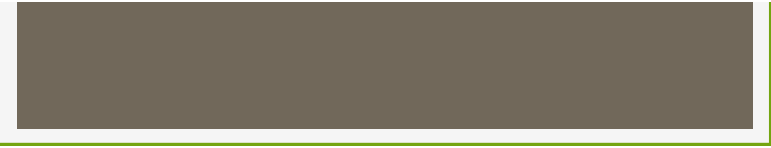
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Warm-Up Key

Intro

1. Dyn. Stretch – hip
2. Dyn. Stretch – thighs/trunk
3. Dyn. Stretch – calves
4. Dyn. Stretch – trunk
5. Free weights
6. Resistance equipment
7. Weight machines
8. Core Stability
9. Functional
10. PRE or PRT
11. Core Stability/Functional
12. Isometric/Core Stability
13. Isokinetic
14. Anaerobic training zone
15. Anaerobic threshold
16. Aerobic training zone
17. Aerobic threshold
18. No fitness gains
19. Resting heart rate
20. Static – hamstring; back
21. Static – groin
22. Static – quads
23. Static – hip flexors
24. Macrocycle
25. Mesocycle
26. Microcycle
27. Individual Session

Advanced

1. Varying student responses. Technical definition: The efferent response to sensory information.
2. Feedforward – less EMD, afferent, preparatory, preactivation
Feedback – more EMD, efferent, reflexive, continuously adjusts on-going muscle activity
3. Advantages – increased mm activity causes increased mm stiffness leading to increased joint stability (one advantage)
4. The awareness of jt motion
5. Whether conscious or unconscious, neural pathways which are used over and over again become “stronger”; the pathway becomes “engrained” such that less energy is needed to perform a task or recall a thought because the brain does not have to focus on the “details” (my seating chart example)