

# **Virtual Learning**

# Weight Bearing Dorsiflexion Range of Motion and Landing Biomechanics with Ankle Instability **Biomechanics of Sports** 5/14/2020



#### Lesson: 5/14/2020

#### **Objective/Learning Target:**

1. The student will learn about weight bearing dorsiflexion range of motion and landing biomechanics with ankle instability

#### Ankle Commonalities

The range of motion of the ankle is to create stability with an unstable part of the body.

How would training with ankle weight be productive in creating stability?

How would training with ankle weight be destructive in preventing injuries?



## Ankle Stability

People with chronic ankle instability exhibit less weight-bearing dorsiflexion range of motion and less knee flexion during landing than people with stable ankles.

### Questions to consider

If athletes with less range of motion land more stiff, what is the potential injury prevalence for these athletes in a dynamic play for the ball in soccer?



# Range of Motion

Range of motion and Strength training in each of the areas listed in the figure create a more dynamic athlete along with a healthier athlete over time.

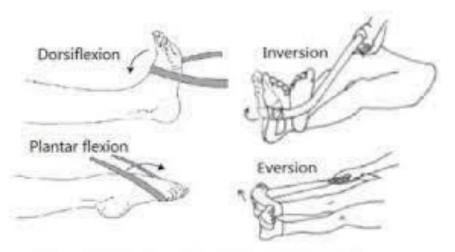


Figure 2: Thera band strengthening test for ankle