

SPRING 2022 SPORTS MED STUDY GUIDE

* Required

1. Email *

2. Write your first and last name

4 points

3. Why is the human foot incredible? Discuss the percentage of bones, the arches formed and the function of the arches.

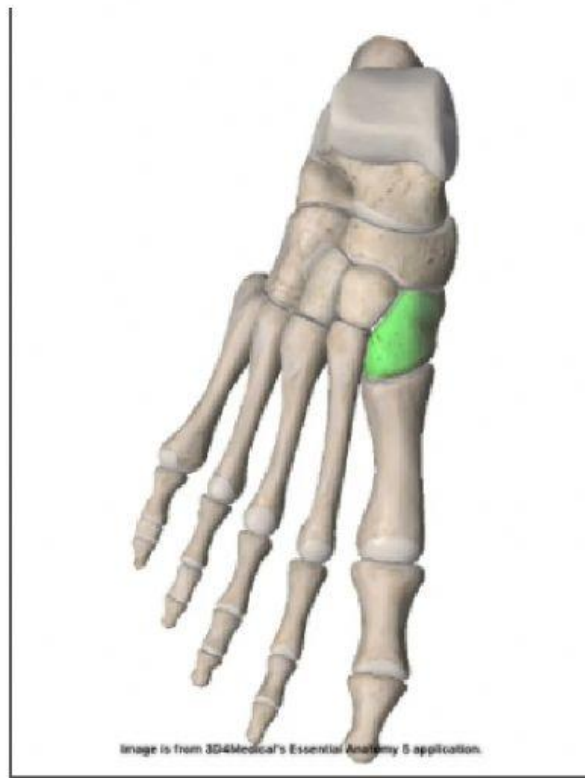
4 points

4. Which two arches account for stiffness of the foot?

4 points

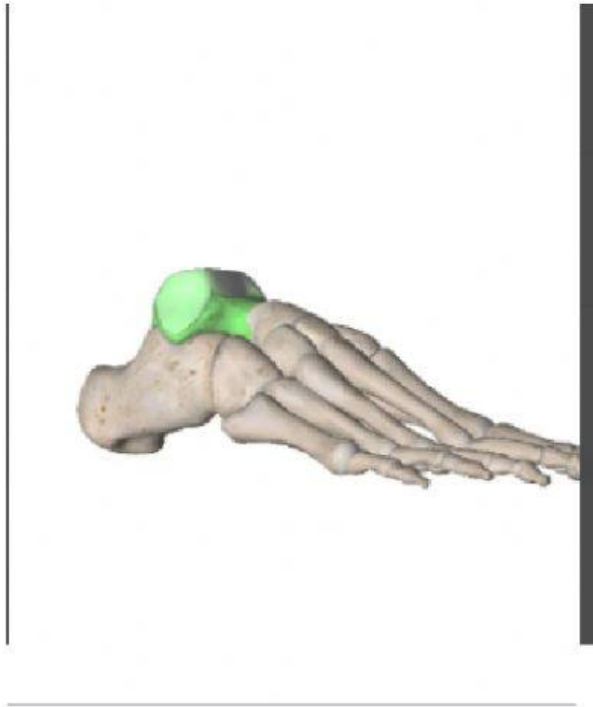
5. identify the bone

2 points



6. identify the bone

2 points



7. identify the bone

2 points



Image is from 3D4Medical's Essential Anatomy 5 application.

8. Which muscles within the foot contribute to foot stiffness?

4 points



9. What key structural feature of human feet distinguishes human feet from primates?

4 points

10. What mechanical properties does the longitudinal arch in humans exhibit

4 points

11. Stiffness of the foot is related to the arch and plantar intrinsic muscles. 4 points
What structure is given credit for its elasticity?

12. How does the body compensate for ineffective push-off during walking? 4 points

13. What lies under the skin of the foot and what is its function? 4 points

14. During elite level sprinting the body needs to absorb up to 12.5 times its weight. What structures work cohesively to counteract these forces? 4 points

15. What principle is imperative to remember when treating the foot and ankle? 4 points

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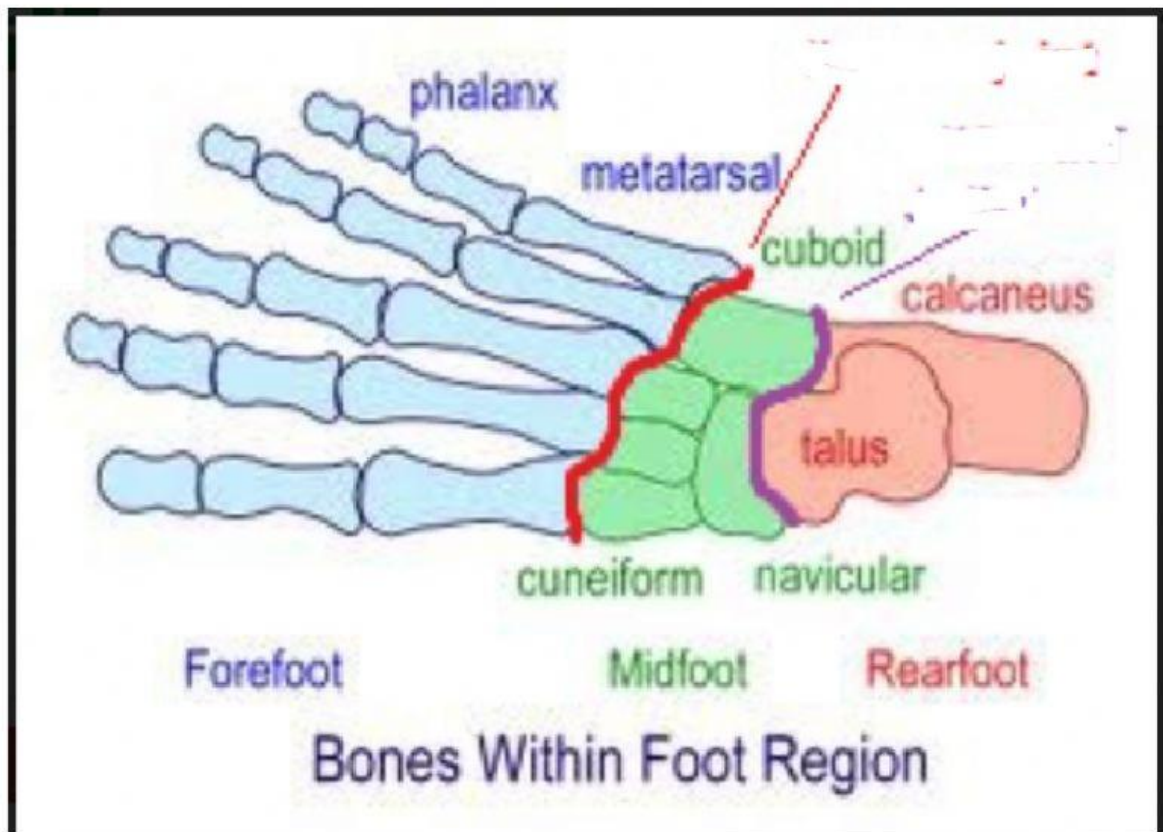
17. What would you consider in your treatment of a gastrocnemius strain? 4 points

18. Injury or damage to the foot can cause imprecise weight transfer with what subsequent kinematic effects? 4 points

19. According to the foot archs we studied? a person with which type of arch would run the fastest on the 40 yd dash? Low, neutral, high arch? 2 points
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20. What is the STAR Excursion Balance test and what is it good for? 4 points
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21. What is the implication for poor performance on the STAR Excursion test? 2 points
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22. What is a modified test based on the STAR test that can also be used to screen for lower extremity injury? 2 points
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23. What type of warm up routines were found to reduce risk of lower extremity injury and improve performance on Y-Balance test? 4 points
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24. Create a 3 phase Neuromuscular Training program, including 5 exercises in each phase and include any repetitions or time requirements. 8 points
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25. After performing a neuromuscular training regimen with a group of basketball players for several weeks, what type of test could you use to assess if the program is working? 4 points
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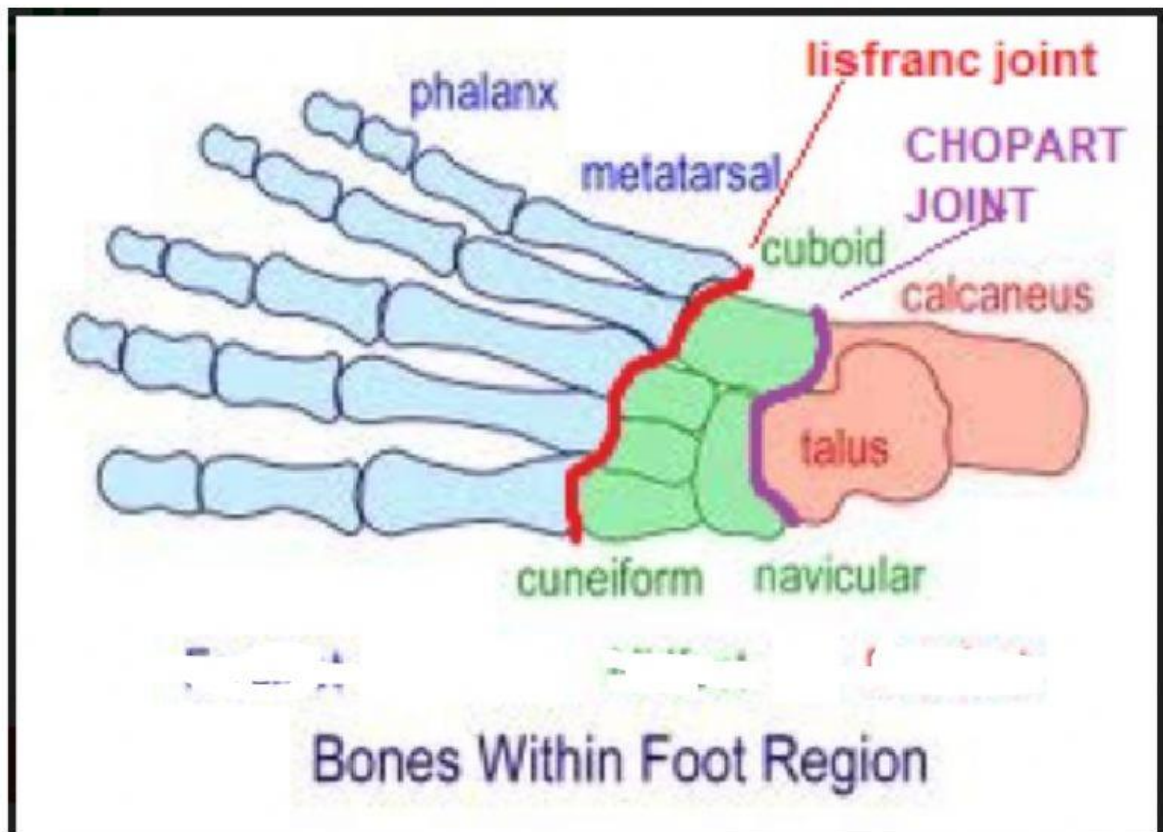
26. identify the joints in red and purple

4 points



27. which bones are included in the midfoot?

4 points



28. What is the relationship between forefoot, midfoot, and rearfoot anatomy and sprint speed?

4 points