

Subject: Sport Pre-University (Extension Material)

Know It (Knowledge)	Use It (Application)	Stretch It (Development)
Read this article which covers the Biomechanical Principles in sport. Select one of the principles that applies to a chosen sport and explain how you can improve your performance through applying the fundamentals of this principle. For example, adjusting the angle of release in a shot put. Follow Link 1 (below)	Write an article about the impact of lockdown restrictions on sport. Consider the impact for example of planning and preparation for major sporting events and how periodisation will have been impacted for athletes that were due to take part in the Tokyo Olympics. Follow Link 2 (below)	Research genetics in sport. Can athletic success be a hereditary hand-down gift? Follow Link 3 (below)
Research what is the most performance affecting drug in the world? Consider the physical impact by weighing up the advantages and disadvantages of the drug in question. Follow Link 4 (below)	Conduct a physical investigation to see if you can you improve your VO2 max over the course of lockdown? The average person can expect to improve their aerobic capacity by 15–20% through training. Discuss the statement that the degree to which you can improve your VO2 max varies and is based on genetics and the intensity of your training. Follow Link 5 (below)	Analyse to what extent has the development of technology impacted athletes? Follow Link 6 (below)
Treating acute and chronic overstrains in athletes. Investigate what method of recovery is more effective? Follow Links 7 & 78(below)	Research how football is addressing and reinstating the differing leagues in various countries as lockdown starts to ease for some countries. What are the benefits to spectators, sponsors and the media? Follow Link 9 (below)	How important is sports psychology in winning? Discuss the impact of sports psychology on performance in sport. Follow Link 10 (below)

Links to websites used in this Pre-University extension sheet:

Link 1: https://memberfiles.freewebs.com/37/84/82578437/documents/biomecanica-deportiva.pdf

Link 2: <u>https://eu.usatoday.com/story/sports/olympics/2020/03/24/2020-olympics-postponed-what-we-know-summer-games-move-2021/2863711001/</u>

- Link 3: https://sportmedbc.com/article/genes-and-sport-are-your-parents-responsible-your-wins-and-losses
- Link 4: https://www.science.org.au/curious/people-medicine/drugs-sport
- Link 5: https://www.runnersworld.com/training/a26066029/increase-vo2-max/
- Link 6: https://bellyupsports.com/2018/11/the-evolution-of-technology-sports/
- Link 7: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3899907/
- Link 8: https://www.sportsmedicineoregon.com/sports-medicine-recovery-journal/when-to-use-ice-or-heat-how-to-treat-sprains.php
- Link 9: https://www.bbc.co.uk/sport/football/52291542
- Link 10: https://www.psychologytoday.com/gb/blog/the-whole-athlete/201501/the-effects-psychology-athletic-performance