

Sports Science - Learning Journey



- Understanding risk
- Understanding safety
- Understanding training methods
- Understanding fitness
- Evaluating fitness
- Understanding the musculo-skeletal system
- Understanding impact of exercise
- Understanding the cardio-respiratory system
- Understanding health
- Understanding diet
- Evaluating nutrition

SPORTS NUTRITION

Exam & Post - 16 Destination

- What do nutrients do?
- How can we plan nutrition around sport?
- What nutrition is important for strength events?
- What is a dietary supplement?
- What are the benefits of supplements?
- What problems might supplements cause?
- How do we assess a diet?
- What is a balanced diet?
- How do diets vary?
- How does sport impact diet?
- What nutrition is important for endurance events?
- What is malnutrition?
- How can under-eating impact sport?
- How does hydration impact sport?
- How do we plan for a diet?
- How do we maintain a balanced diet?
- How do we record outcomes?
- What are the long term effects of exercise?
- What is the function of the cardio-respiratory system?
- How does cardiovascular fitness impact health?
- What is anaerobic respiration?
- What is aerobic respiration?
- What types of synovial joint are there?
- What are the key components of the cardio-respiratory system?
- What is connective tissue?

THE BODY'S RESPONSE TO PHYSICAL TRAINING

YEAR 11

- How do we measure effects of exercise?
- What are the short term effects of exercise?
- How does muscular endurance impact health?
- How does flexibility impact health?
- How does muscular strength impact health?
- How does the cardio-respiratory system work?
- How does the musculo-skeletal system work?
- What is the function of the musculo-skeletal system??
- How is the musculo-skeletal system organised?
- What is a synovial joint?
- What are the short term effects of exercise?
- How does muscular endurance impact health?
- How does flexibility impact health?
- How does muscular strength impact health?
- How does the cardio-respiratory system work?
- How does the musculo-skeletal system work?
- What is the function of the musculo-skeletal system??
- How is the musculo-skeletal system organised?
- What is a synovial joint?

APPLYING PRINCIPLES OF TRAINING

How do we assess a plan?

- What might we need to consider for a training plan?
- What is aerobic exercise?
- What is anaerobic exercise?
- Why is flexibility important?
- How do we avoid reversibility?
- What is normative data?
- How do we ensure tests are reliable?
- How do we get the most from training?
- What is sub-maximal training?
- How do we support medical conditions?
- How do we identify injuries?
- What is a principle of training?
- What are the components of fitness?
- What is the Coopers' Test run?
- How do we ensure tests are valid?
- How do we get the most from training?
- What is sub-maximal training?
- How do we treat injuries?
- What is a chronic injury?
- What is the difference between a risk and a hazard?
- How can performers alter their own risk?
- How can equipment alter risk?
- How can the environment impact risk?
- How might coaching increase risk?

REDUCING THE RISK OF INJURY IN SPORT

YEAR 10

- What is an acute injury?
- What goes in a cool down?
- What are the physical benefits of a cool down?
- What are the psychological impacts of a warm up?
- What are the physical impacts of a warm up?
- How do extrinsic and intrinsic factors differ?
- What are posture related injuries?
- What psychological factors impact risk?
- What is a risk assessment?
- Which sports pose highest risk?
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