



Maryhill High School PE Department
UNIT 4 : Anatomy & Physiology in Sport
ASSIGNMENT 1 **NEW SPECIFICATION**

Scenario You are completing a work experience placement with the PE Department at Maryhill High School. Mr Bunn has asked you to produce a teaching aid for pupils, which will develop their knowledge and understanding of the muscular and skeletal systems and their roles in sporting activity.

Key Skills C2.1a, C2.1b, C2.2, C2.3

Learning Outcomes

Outcome 1 – Know the structure and function of the skeletal system

Outcome 2 – Know the structure and function of the muscular system

Task(s): Produce a teaching resource (Powerpoint) using relevant diagrams and pictures, which describes and explains the structure and functions of the muscular and skeletal systems.

Preparing for a PASS :

1. **Describe** the structure and function of the skeleton, and how bones grow **(P1)**
2. **Describe** the different types of joint and the movement allowed at each **(P2)**
3. **Identify** the major muscles of the body **(P3)**
4. **Describe** the different types of muscle and muscle movements **(P4)**

Preparing for a Merit Grade, you must do the above plus: -

1. **Identify** the movement types occurring at two synovial joints during four different types of physical activity e.g. Over-arm cricket bowl; Hockey Push Pass; Breast-stroke arm pull. **(M1)**
2. Give examples of different types of muscular contraction relating to three different types of physical activity **(M2)**

To prepare for a DISTINCTION grade, you must do the above plus: -

1. **Analyse** the musculoskeletal actions occurring at four synovial joints during four different types of physical activity **(D1)**

Date handed out:

Date to hand in:

Unit 4 ASSIGNMENT 1 – checklist

What you need to cover

PASS :-

1. Produce a labelled diagram identifying the major bones of the body.
2. Produce a simple table describing 5 functions of the skeletal system.
3. Describe the process of how bones grow - ossification.
4. Identify briefly the effects that exercise has on bones.
5. Identify briefly the effects that exercise has on synovial joints.
6. Produce a labelled diagram identifying the major muscles of the body.
7. Describe briefly how antagonistic muscle pairs work, using sporting examples.
8. Identify the effects that exercise has on muscles.

MERIT (the above PLUS): -

1. Produce 3 pictures showing 3 different sporting actions. On each picture identify the movement occurring at each synovial joint.
2. Explain the effects of exercise on both bones and joints, using specific sporting actions where possible.
3. Choose 4 different sporting actions and explain the type of muscular contraction that is occurring.

DISTINCTION :-

1. Analyse the effect of different types of exercise on the musculoskeletal systems. Again, you can use sporting pictures to help you.