# Topic 1: Anatomy

### The skeletal system – 4 hours

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| **Group** |  | **Assessment statement** | **Obj** | **Teacher’s notes** |
| A | 1.1.1 | Distinguish anatomically between the axial and appendicular skeleton. | 2 | Axial skeleton: limit to the skull, ribs, sternum and vertebral column consisting of cervical–7 bones, thoracic–12 bones, lumbar–5 bones, sacral–5 bones (fused as 1) and coccyx–4 bones (fused as 1).  Appendicular skeleton: limit to the pectoral girdle (scapulae and clavicles), humerus, radius, ulna, carpals, metacarpals, phalanges, pelvic girdle (ilium, ischium and pubis), femur, patella, tibia, fibula, tarsals, metatarsals and phalanges. |
| A | 1.1.2 | Distinguish between the axial and appendicular skeleton in terms of function. | 2 | Consider the anatomical functions attachment, protection, movement and support. |
| B | 1.1.3 | State the four types of bone. | 1 | Limit to long, short, flat and irregular. |
| B | 1.1.4 | Draw and annotate the structure of a long bone. | 1,2 | Limit to epiphysis, spongy bone, articular cartilage, diaphysis, compact bone, bone marrow, marrow cavity, blood vessel and periosteum. |
| B | 1.1.5 | Apply anatomical terminology to the location of bones. | 2 | Limit to inferior, superior, proximal, distal, medial, lateral, posterior and anterior. Limit to the bones listed in the axial and appendicular skeleton (see 1.1.1). Assume anatomical position. |
| C | 1.1.6 | Outline the functions of connective tissue. | 2 | Limit to cartilage, ligament and tendon. |
| C | 1.1.7 | Define the term *joint*. | 1 | A joint occurs where two or more bones articulate. |
| C | 1.1.8 | Distinguish between the different types of joint in relation to movement permitted. | 2 | Limit to fibrous, cartilaginous and synovial joints. |
| D | 1.1.9 | Outline the features of a synovial joint. | 2 | Limit to articular cartilage, synovial membrane, synovial fluid, bursae, meniscus, ligaments and articular capsule. |
| D | 1.1.10 | List the different types of synovial joints. | 1 | Consider hinge, ball and socket, condyloid, pivot, gliding and saddle. |

# Topic 1: Anatomy

### The muscular system – 3 hours

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| **Group** |  | **Assessment statement** | **Obj** | **Teacher’s notes** |
| E | 1.2.1 | Outline the general characteristics common to muscle tissue. | 2 | Limit to contractility, extensibility, elasticity, atrophy, hypertrophy, controlled by nerve stimuli and fed by capillaries. |
| E | 1.2.2 | Distinguish between the different types of muscle. | 2 | Include smooth, cardiac and skeletal. |
| F | 1.2.3 | Annotate the structure of skeletal muscle. | 2 | Limit to epimysium, perimysium, endomysium, muscle fiber, myofibril, sarcomere, actin and myosin. |
| F | 1.2.4 | Define the terms *origin* and  *insertion* of muscles. | 1 | Origin: the attachment of a muscle tendon to a stationary bone.  Insertion: the attachment of a muscle tendon to a moveable bone. |
| G | 1.2.5 | Identify the location of skeletal muscles in various regions of the body. | 2 | Include the muscles from:   * the anterior—deltoid, pectoralis, iliopsoas, sartorius, quadriceps femoris (rectus femoris, vastus intermedialis, vastus medialis, vastus lateralis), tibialis anterior, abdominus rectus, external obliques and biceps brachii * the posterior—trapezius, triceps brachii, latissimus dorsi, gluteus maximus, hamstrings (biceps femoris, semitendinosus, semimembranosus), gastrocnemius, soleus, erector spinae |