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| **Standard-based Lesson Template** |
| **Teacher:** Racquel Nanton | Date: 6/2/19 | Duration: 80mins |
| **Grade:** 6 | **Class Name:** Grade 6 Champions |
| **Subject:** Science | **Unit title:** Structure and Function |
| **Lesson Title:** The Skeletal System  |
| **Standards Addressed:** | **Content Standard*** ST. CS. LS.6: Pupils can identify the structure of the major systems of plants, animals and humans

**Performance Standard*** ST.6.LS.SF.1: Describe the parts and functions of each part of the main systems in human (e.g. skeletal)
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| **Lesson Objectives** | **Pupils will be able to:**1. Recall the parts of the skeletal system
2. Explain the functions of the skeletal system
3. Make a model of a skeletal system
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| **Essential/ focus Question(s)** | * Why are bones important to the human body?
* How would your body look if it didn’t have any bones?
* How would your body function if it didn’t have any bones?
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| **Content** | **Structure of the Skeletal System*** The vertebral Column or backbones run the length of the body between the skull at the upper and the pelvic girdles at the lower end.
* **Twelves** pairs of ribs and a breastbone or sternum in the chest gives protection to the lungs and other vital organs in the chest cavity.
* The shoulder or pectoral girdle consists of **fours, two** clavicles and scapula, which serve as a place of attachment for the arms.
* The bone structure of the arm consists of the humorous in the upper arm and the ulna and the radius in the lower arm. These are bones that forms the elbow joint
* There are **four** different types of bones found in the skeletal system. They are the **long bones, short bones, flat bones and irregular bones.**
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|  | **Functions of the Parts of the Skeletal System**

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| **Parts** | **Names of Bones** | **Functions** |
| Skull | CranuimFace bones Mandible (jaw bone) | Protects the brain |
| Ribcage | RibsSternum (breast bone) | Protects heart and lungs |
| Girdles | Pectoral Girdle (arms)Pelvic Girdle (legs) | Support arms and legs |
| Limbs | Upper Limb | Upper arm (humerus)Lower arm (ulna,  ( Radius Carpels 56 phalanges  | Hold things |
| Lower limb | Upper leg (Femur)Lower leg (tibia) (Fibula) Tarsals Phalanges Patella | Allow movement. |
| Vertebral Column | (33 bones) | Protects the spine |

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| **Vocabulary** | Skeletal system, axial skeletal, appendicular skeletal, frame work, anterior and posterior |
| **Previous Knowledge** | Parts of the skeletal system |
| **Materials/Resources Technology** | ICT tools; computer, video, speakers, projector, worksheets, whiteboard, papers, pictures, text |
| **Differentiated Instruction** | **Groups of students**Teacher will give students a set of materials and resources to make a model of a skeletal system with guided instructions. Some students will be given a model of the skeleton to assemble, whereas other would be given pictures. |
| **Assessment Strategies:****Formative/Summative (formal/informal assessment)****Include HOT questions** | * Observation
* Whole class discussion
* Worksheets
* Question paper
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| **Warm up/ Bellringer(5) mins** | * Students and teacher will sing and play the game the **“Head, Shoulders, Knees and Toes”(shortened version).**
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| **Introduction** | * Teacher will ask the question, “How would your body look if it didn’t have any bones?”
* Students will respond and demonstrate.
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| **Procedure:****Opening activating/ induction strategy****(10) mins** | * Students understanding will be heighten where teacher will **showcase a video presentation** using <https://www.youtube.com/watch?v=lzUNWeIJerg>
* on **the functions of the skeletal system**
* Students will pick out key words from the video, such as **Skull, Limbs,Ribcage, Girdles, Vertebral Column**
* Whole class discussion among teacher and students based on the video presentation. Then teacher will engaged students in learning about the **parts and functions** of the skeletal system through a song.
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| **Work session** **Guided practice (10) mins** | * Teacher will instruct students to work collaboratively in groups of fourto complete seat work (putting together a diagram of the skeletal system)
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| **Closure/culminating strategy** | * Teacher recaps and reinforces the concepts of the lesson by using review questions that ascertain that students can explain the function of the parts of the skeletal system. Students will answer the question,

How would your body function if it didn’t have any bones? |
| **Enrichment:**  | Students will research what other systems in the body would be affected by the lack of a skeletal system. |