Skeleton Systems-Major Body Parts

Summary
Students will be introduced to and learn about the skeletal system as one of the major body systems. Students will know the technical names of the major bones in the Skeletal System. This is part one of the main body systems.

Main Core Tie
Health Education - 4th Grade
Strand 6: HUMAN DEVELOPMENT (HD) Standard 4.HD.1:

Time Frame
1 class periods of 70 minutes each

Group Size
Small Groups

Materials
- index cards
- ipads
- computer and projector
- tape
- smartboard

Background for Teachers
The SKELETON has many important functions in the body. It provides:
- SUPPORT for the body -- The hardness of the bones provides a strong framework that helps us stand upright, and anchors muscles and organs.
- PROTECTION of the internal body organs -- The ribs protect the heart, lungs, kidneys, and liver; the vertebral column surrounds the spinal cord. The hip bones give support and some protection. The skull encases the brain.
- MOVEMENT of the body -- All muscles in the body attach to bones and all muscles cross joints. Muscles connect one bone with another bone. When the muscles move (contract) the joint moves and the bones that make up the joint move closer together.

The SKELETON has 206 bones.
Teacher will use any of the websites from the list on their Ipad or smartboard to project them to the screen with connection at computer and through projector.
Can use Bill Nye: Bones and Muscles or Magic School Bus: Inside Ralphie. This will be done with the whole class.

Intended Learning Outcomes
Students will be introduced to the major bones of the body and where they are found using their I pads both in small group settings and individually.

Instructional Procedures
Split class in groups of 3-4 students. Give each student an index card with a name of a bone or group of bones.
List: Skull, facial bones, clavicle, scapula, ribs cage, humerus, radius, ulna, metacarpals, carpels, phalanges(hand), sternum, vertabral column (spine), pelvic girdle, femur, patella, tibia, fibula, metatarsals, and tarsals.

10-15 minutes: Using their I-pads, have the groups find out things about their bone(s), where to find it in the body, common name for it, and facts about it. Bring groups back together. Display a skeleton picture on the body using Ipad hooked up to projector (there is a good example on freeze ray). As student groups introduce their bone(s) they will place their index card as a label next to the correct bone on the skeleton.

When finished discuss what bones are for.

Have students watch Bill Nye: Skeletons Student may use the following games to practice their bones names and placement.

Strategies for Diverse Learners
Use other video, games, and research tools found in web sites.

Have students use recorder on their Ipads to make a music video about the bones in the body.

Have students create a learning example on a sketch app.

Have students make flashcards using Evernote or other flashcard maker.

Extensions
Students will use apps on their own ipads to review and learn interesting things about the body. Apps include: Know Your Body (This can be used in front of the class); Human Body; My Body Parts; Bones for Kids;Build a Body; The Human Body by tinybop; Human Body Parts for Kids. There are games, quizzes, and all kinds of information.

Assessment Plan
Can use quiz on website Sheppard Software to assess how students are progressing in their understanding of the skeletal system. If student create a diagram, a video, or music video for diverse learning or extensions this rubric is a basic assessment tool.

Rubrics

Skeletal System

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