Lesson: Skeleton  
Length: 45 minutes

Grade Intended: 1st-2nd

Standards:
Science 1.1.1  Observe, describe, draw and sort objects carefully to learn about them.

Performance Objectives: After observing the skeletal model, students will draw at least three bones in the body with common names correctly.

Assessment: Students will draw and label three bones in the body correctly.

Advanced Preparation by Teacher:
- Packets of skeletal parts and brass fasters for each student
- Life size skeleton model
- Long-length paper for each student and markers
- Trade books about skeleton for transition period

Procedure

Introduction/Motivation: Read two poems from *A Light in the Attic*, by Shel Silverstein called "Day after Halloween" and "It's Hot!" Begin a class discussion over the two poems and their meanings. Ask engaging questions and take comments and connections. Ask questions such as, "What would it be like if we didn't have a skeleton? Why do we need bones in our bodies?" Explain to students that they will be learning the importance of their skeleton today! (Gardner: Verbal Linguistic)

Step-By-Step Plan:

1. Give each child several brass fasteners and a packet containing paper bones cut into the different major bones of the body using the prepared figure.

2. Ask the students to empty the packets and to manipulate the materials in any way they wish in an effort to determine what they can create with all the bones. Encourage them to use the brass fasteners to assemble the bones. (Gardner: Bodily Kinesthetic, Visual Spatial)
3. Walk around the room asking questions such as "What do you think all of these different parts make up? Do you think you know where all the parts go? What could the brass fasteners represent in a real body that helps us to move? How do bones in our body connect for real?" (Bloom’s: Comprehension, Application, Knowledge) (Gardner: Verbal Linguistic, Intrapersonal)

4. Show the students a model life-size skeleton. (Gardner: Visual Spatial) Ask the children if they know the nonscientific names of the bones. (Bloom’s: Knowledge) Write these on the board. If students are aware of any scientific names write these as well. Make sure to name all of the bones used in the packet (common names will be sufficient)

5. Show students a picture of the muscle system of the human body and briefly explain how the bones give the muscles support. (Gardner: Visual Spatial)

6. Now really grab the student's attention by walking around the room very stiffly. Encourage the children to do the same. (Gardner: Bodily Kinesthetic) Tell them they cannot bend their elbows or knees. Remind the students that they used brass fasteners to connect the bones in their skeleton.

7. Ask the students if they think brass fasteners are used in our bodies. What do we have? (Boom’s: Knowledge)

8. Ask the children to demonstrate what would happen to them when they are standing up if they did not have bones in their body. The students should drop to the floor.

9. Ask the students to complete this sentence about our skeleton: Our skeleton supports our _________ (muscles). (Bloom’s: Comprehension)

10. Now that the children have knowledge of the bones and what they do. Have children get into pairs. (Gardner: Interpersonal) Give each pair two sheets of long paper (as long as their height). Have each trace the other partner.

11. When this is done, have students independently identify, roughly draw, and label at least three bones in the body with common names. Collect these for assessment purposes.

Closure:

Review the lesson. Revisit the poems and now see if children can connect with the ideas in the poems. Ask, “How do joints help us move? How do bones connect together? (Bloom’s: Comprehension) As students transition to the next activity, allow them to look at trade books about the skeleton and body.
Adaptations/Enrichments:

**Student with limited fine motor skills:** Allow student to work with a partner.
**Student with ADHD:** This student will pass out the packets and distribute materials.
**For advanced student:** allow students who finish the assessment early or already know the bones of the body create a bone song using the Hokey Pokey rhythm.

**Reflection:**
Did students take the topic seriously?
What went well? What didn’t?
What would I do differently next time?
Did students have enough time to successfully complete the project?