

“Bones”

(art + physical education; art + science)

Self-awareness may well be a child’s most valuable asset. It establishes a basis for mature decision-making throughout a lifetime. Children accept their bodies without much thought and use them automatically. The wonder and curiosity of how their bodies work transfers to knowledge of math, science and the arts. This project will help children discover parts of their bodies that aren’t readily apparent to them, and help them understand how their bones work with the rest of the body to provide movement and strength for work and play. Creating bones and joining them with flexible wire reinforces the concept of movement that children cannot see because their bones are hidden beneath their skin.

Skeletal structure is something that even younger children (K-2) can understand, and the skeleton is a good tool to help them understand movement. This lesson also introduces the more serious aspects of the skeleton for all grade levels — that it’s not just a Halloween decoration, for instance! Younger children can participate by drawing bones or using Model Magic in a more limited way than older students, just making arms, for example, and then adding other body parts.

Knowledge of movement is the key goal for this lesson plan. A full skeleton created by students in grades 3-6 illustrates movement during a wider range of activities. The addition of a background turns this project into a more complete artwork.

Grade Levels 3-6

Note: instructions and materials based on a class of 25 students. Adjust as needed.

Preparation

Encourage students to talk and exchange ideas about how and why their bones are important. Use the skeleton to demonstrate how the bones connect everything related to the body’s movement. Stress areas of dance, sports and everyday movement. During this part of the process, students should handle the skeleton and become familiar with the range of motion that bones and joints provide.



Materials

My First Skeleton (21620-1003); need one to use for demonstration

Blick® Canvas Panels, 11" x 14" (07008-1114); need one per student

Blick® Economy Graphite Pencils (20302-2009), package of 12, need one pencil per student

Blickrylic™ Mixing Colors, 6-pint set (00711-1039); share one set across classroom

Plastic Paint Trays (03090-1010), package of 10; need one per student

Crayola® Model Magic®, White, 2-lb bucket (33214-1002); share two buckets across classroom

Jewelry Making Wire, Silver, 28-gauge (60685-2410), share one 40-yard roll across classroom

Snippy Scissors, pointed (57040-2009), package of 12, need one pair per student

Blick® Plastic Ruler, (55403-1012); need one per student

Elmer's® Glue-All, 7-5/8 oz bottle (23810-1005); share eight bottles across classroom

Reeves® Hog Bristle Brush School Pack, (06004-2003); share one 144-brush package across classroom

Sharpie® Ultra-Fine Point Marker, Black (21315-2003); need one per student

Process

1. Have students draw a body in action on an 11" x 14" canvas panel using a pencil. Encourage them to keep it simple, but include clothing in their drawings.
2. Have students enhance their drawings with acrylic paint, and draw a background. Suggest using ultra-fine point markers for detail.
3. Using scissors, have students trim the jewelry wire into 1-1/4" long pieces. Each student will need 24 pieces per skeleton, two pieces per joint (cut a few extra).
4. Have students create bones out of Model Magic. They should use the skeleton as a guide and think about how each section of bone would fit into their painted action figures' bodies. Have them only create the bones that make up the major joints in the body — shoulders, elbows, wrists, hips, knees and ankles. Individual students may want to make more detailed bones and joints. The head, torso and pelvis should be created as one unified piece for purposes of this lesson.
5. Have students form the pieces of wire into "U" shapes, then hook two "U" wires together by twisting the two ends to make a point at each end. Add the "U" joints to the bones by sticking the points into the ends of the two connecting bones. Let dry. The bones will dry in approximately 30 minutes to a hard, rubber-like consistency. If the wire seems loose, have students apply a small dot of glue to the wire tip and reinsert it into the bone.
6. Have students carefully glue the skeleton to their action figures by placing glue on the skeleton parts that touch their painting. This glue dries clear and hard. The final result is "An Artist's X-Ray"!

National Standards

Content Standard #2 — Using knowledge of structures and functions

K-4 Students use visual structures and functions of art to communicate ideas

5-8 Students select and use the qualities of structures and functions of art to improve communication of their ideas

Content Standard #6 — Making connections between visual arts and other disciplines

K-4 Students identify connections between the visual arts and other disciplines in the curriculum

5-8 Students describe ways in which the principles and subject matter of other disciplines taught in the school are interrelated with the visual arts

