



COLORADO ANATOMY IN CLAY® COMPETITION

- Purpose:** To encourage Health Science students to showcase their knowledge of Anatomy.
- Description of Event:** This event involves a team of 2-3 students identifying directional terms, bone and marking identification using the ANATOMY IN CLAY® Learning System and a MANIKEN® model. The team will also build muscles in clay on a MANIKEN® model to determine the function. This is a Colorado event only, there is not a competition at the national level.
- Rules and Procedures**
1. Competitors in this event must be active members of HOSA in good standing in the category in which they are registered to compete (Secondary or Postsecondary/Collegiate).
 2. Each team will have 20 minutes to identify directional terms, bone and marking identification on an ANATOMY IN CLAY® Learning System MANIKEN® model.
 3. Teams will have to build at least one muscle, but no more than 3 muscles, on a MANIKEN® model. Experience with ANATOMY IN CLAY® Learning System is not required but may be helpful.
 4. Students will be expected to know directional terms, bones, bone markings, origins, insertions, actions (*see the study guide on page 3*) and be able to build and correctly place 1 to 3 muscles complete with striations onto a MANIKEN® model.
 5. Competitors must be familiar with and adhere to the **“General Rules and Regulations of the National HOSA Competitive Events Program.”**

Required Personnel:

1. One Coordinator
2. 5 Event Assistants
3. 1-2 Judges

Facilities, Equipment and Materials:

1. Hotel room.
2. Tables for MANIKEN® models
3. Pencils(***)
4. Clipboards for each competitor
5. Anatomy in Clay® MANIKEN® models
6. Labels
7. Terra cotta clay
8. Cutting Board
9. Basic Tool sets plus Rollers and Scrapers
10. Paper Towels

For more information about the ANATOMY IN CLAY® Learning System and the MANIKEN® model, visit: www.anatomyinclay.com or call Marie Bauer at 970-667-9047

ANATOMY IN CLAY® COMPETITION JUDGE'S RATING SHEET

Competitor # _____

Judge's Signature _____

Items Evaluated	Points Possible				Points Allocated
	Correct Term		Correct Spelling		
1. Directional Terms:					
Flag #1 to Flag #2	1		1		
Flag #3 to Flag #4	1		1		
Flag #5 to Flag #6	1		1		
Flag #7 to Flag #8	1		1		
Flag #9	1		1		
Flag #10	1		1		
2. Bone Marking and Skeletal Identification:					
Flag #1	1		1		
Flag #2	1		1		
Flag #3	1		1		
Flag #4	1		1		
Flag #5	1		1		
Flag #6	1		1		
3. Muscle Building:	Origin	Insertion	Action	Striations	
Muscle 1	1	1	1	1	
Muscle 2	1	1	1	1	
Muscle 3	1	1	1	1	
Muscle 4	1	1	1	1	
Total Possible Points					
Tie Breaker Points					
			TOTAL POINTS		

ANATOMY IN CLAY® COMPETITION

Study Guide

Material that students could be tested on will cover the following:

Anatomical Terms: proximal/distal, superior/inferior, anterior/posterior, and lateral/medial.

Bones: this will include a basic list of bones.

Axial Skeleton: skull, mandible, vertebral column (cervical, thoracic, lumbar, sacral and coccyx), sternum, and the ribs.

Appendicular Skeleton: scapula, clavicle, humerus, ulna, radius, carpals, metacarpals, phalanges, pelvic girdle, femur, tibia, fibula, tarsals, metatarsals and patella.

Bony Landmarks: Students will need to identify major landmarks.

Examples: body, head, neck, margin, angle, ramus, condyle, facet, line or linea, crest, spine, process, tubercle, tuberosity, trochanter, epicondyle, foramen, canal or meatus, fissure, sinus, fossa, notch, groove or sulcus.

Muscles: *Students will be tested on 4 different muscles from the following list. Origin and insertions will be given. Students will need to correctly build the muscle, draw fiber direction and give a function for the given muscle (see grading rubric).*

Temporalis, Orbicularis oculi, Orbicularis oris, Masseter, Buccinator, Zygomaticus, Depressor Anguli Oris, Platysma, Occipitofrontalis, Sternocleidomastoid, Multifidus, Intercostales (internal and external), Serratus Anterior, Rectus Abdominis, External and Internal Obliques, Pectoralis (major and minor), Rhomboideus (major and minor), Levator scapula, Quadratus lumborum, Latissimus dorsi, Trapezius, Teres (major and minor), Infraspinatus, Supraspinatus, Subscapularis, Gluteus (minimus, medius, and maximus), Peroneus longus, Supinator, Pronator teres, Interossei dorsales, Brachioradialis, Extensor pollicis longus, Extensor digitorum, Flexor pollicis longus, Flexor digitorum superficialis, Palmaris longus, Triceps brachii (medial, lateral and long head), Biceps brachii (short and long head), Deltoideus, Flexor hallucis longus, Flexor digitorum longus, Soleus, Gastrocnemius, Extensor hallucis longus, Extensor digitorum longus, Tibialis anterior, Quadriceps group (Vastus intermedius, Vastus lateralis, Vastus medialis and Rectus femoris), Adductor longus, Gracilis, Hamstrings (Semimembranosus, Semitendinosus, Biceps femoris), and Sartorius.