

# Maudie

## Human Anatomy

CSOs - S.HS.HAP.5, 6, 8

Day1-Use notes to complete study sheet on bone classification and structure of a long bone

Day 2,3, 4, 5- begin long term project "Skeleton Puzzle" rubric included

Day 6- Complete bone marking worksheet-word bank included

Day 7- complete bone fractures worksheet- word bank included

Days 8 & 9- complete POGIL- "Ossification"

Day 10 – color coding vertebral column

# The Skeletal System: Dem CRAZY Bones!

Name: \_\_\_\_\_

## Here's What You'll Need to Create this Project:

- 11 x 14 Construction paper
- Bones Template
- Scissors
- Markers, Colored Pencils
- Other crafty supplies such as glitter, pipe cleaners, decorative papers, etc.

## What You do:

1. Cut out the paper model of the skeleton.
2. Put your model together in order using glue and the construction paper. (20 pts)
3. Your skeleton must **be in a scene** and your project must have a **TITLE!** (20 pts)
4. Label the following bones using a **pen** and **ruler** (WRITE SMALL AND NEAT): (70 pts)

LEFT SIDE	RIGHT SIDE
Ocular Orbit	Cranium
Maxilla	Frontal
Mandible	Nasal
Scapula	Cervical Vertebrae
Sternum	Clavicle
Xiphoid Process	Ribs
Thoracic Vertebrae	Humerus
Lumbar Vertebrae	Radius
Ilium	Ulna
Ischium	Carpals
Femur	Metacarpals
Patella	Phalanges
Tarsals	Sacrum
Metatarsals	Coccyx
Phalanges	Fibula
Calcaneus	Tibia

5. Outline ALL bones that are used for **protection** YELLOW. (5 pts)
6. Outline TWO bones that **make blood cells** (long bones) RED. (5 pts)
7. Draw and shade in a BLUE circle around **1 pivot joint**. (5 pts)
8. Draw and shade in a GREEN circle around **1 ball-and-socket joint**. (5 pts)
9. Draw and shade in a PURPLE circle around **1 hinge joint**. (5 pts)
10. Draw and shade in an ORANGE circle around **1 gliding/sliding joint**. (5 pts)
11. Create a KEY for your skeleton that explains the **colors used in # 5-10**. (10 pts)

# The Skeletal System: Dem CRAZY Bones!

Rubric

Copy these rubrics to use for grading your Dem Crazy Bones Projects:

Description of task	Points
Put your model together in order using glue and the construction paper. (20 pts)	_____/20
Your skeleton must <b>be in a scene</b> and your project must have a <b>TITLE!</b> (20 pts)	_____/20
Label the following bones using a <b>pen</b> and <b>ruler</b> (WRITE SMALL AND NEAT): (70 pts)	_____/70
Outline ALL bones that are used for <b>protection</b> <u>YELLOW</u> . (5 pts)	_____/5
Outline TWO bones that <b>make blood cells</b> (long bones) <u>RED</u> . (5 pts)	_____/5
Draw and shade in a <u>BLUE</u> circle around <b>1 pivot joint</b> . (5 pts)	_____/5
Draw and shade in a <u>GREEN</u> circle around <b>1 ball-and-socket joint</b> . (5 pts)	_____/5
Draw and shade in a <u>PURPLE</u> circle around <b>1 hinge joint</b> . (5 pts)	_____/5
Draw and shade in an <u>ORANGE</u> circle around <b>1 gliding/sliding joint</b> . (5 pts)	_____/5
Create a <u>KEY</u> for your skeleton that explains the <b>colors used in # 5-10</b> . (10 pts)	_____/10
<b>Total</b>	_____/150

Description of task	Points
Put your model together in order using glue and the construction paper. (20 pts)	_____/20
Your skeleton must <b>be in a scene</b> and your project must have a <b>TITLE!</b> (20 pts)	_____/20
Label the following bones using a <b>pen</b> and <b>ruler</b> (WRITE SMALL AND NEAT): (70 pts)	_____/70
Outline ALL bones that are used for <b>protection</b> <u>YELLOW</u> . (5 pts)	_____/5
Outline TWO bones that <b>make blood cells</b> (long bones) <u>RED</u> . (5 pts)	_____/5
Draw and shade in a <u>BLUE</u> circle around <b>1 pivot joint</b> . (5 pts)	_____/5
Draw and shade in a <u>GREEN</u> circle around <b>1 ball-and-socket joint</b> . (5 pts)	_____/5
Draw and shade in a <u>PURPLE</u> circle around <b>1 hinge joint</b> . (5 pts)	_____/5
Draw and shade in an <u>ORANGE</u> circle around <b>1 gliding/sliding joint</b> . (5 pts)	_____/5
Create a <u>KEY</u> for your skeleton that explains the <b>colors used in # 5-10</b> . (10 pts)	_____/10
<b>Total</b>	_____/150

## BONE FRACTURES

31. Using the key choices, identify the fracture (fx) types shown in Figure 5-14 and the fracture types and treatments described below. Enter the appropriate key letter or term in each answer blank.

*Key Choices*

- |                         |                        |                    |
|-------------------------|------------------------|--------------------|
| A. Closed reduction     | D. Depressed fracture  | G. Simple fracture |
| B. Compression fracture | E. Greenstick fracture | H. Spiral fracture |
| C. Compound fracture    | F. Open reduction      |                    |

- \_\_\_\_\_ 1. Bone is broken cleanly; the ends do not penetrate the skin
- \_\_\_\_\_ 2. Nonsurgical realignment of broken bone ends and splinting of bone
- \_\_\_\_\_ 3. A break common in children; bone splinters, but break is incomplete
- \_\_\_\_\_ 4. A fracture in which the bone is crushed; common in the vertebral column
- \_\_\_\_\_ 5. A fracture in which the bone ends penetrate through the skin surface
- \_\_\_\_\_ 6. Surgical realignment of broken bone ends
- \_\_\_\_\_ 7. A result of twisting forces

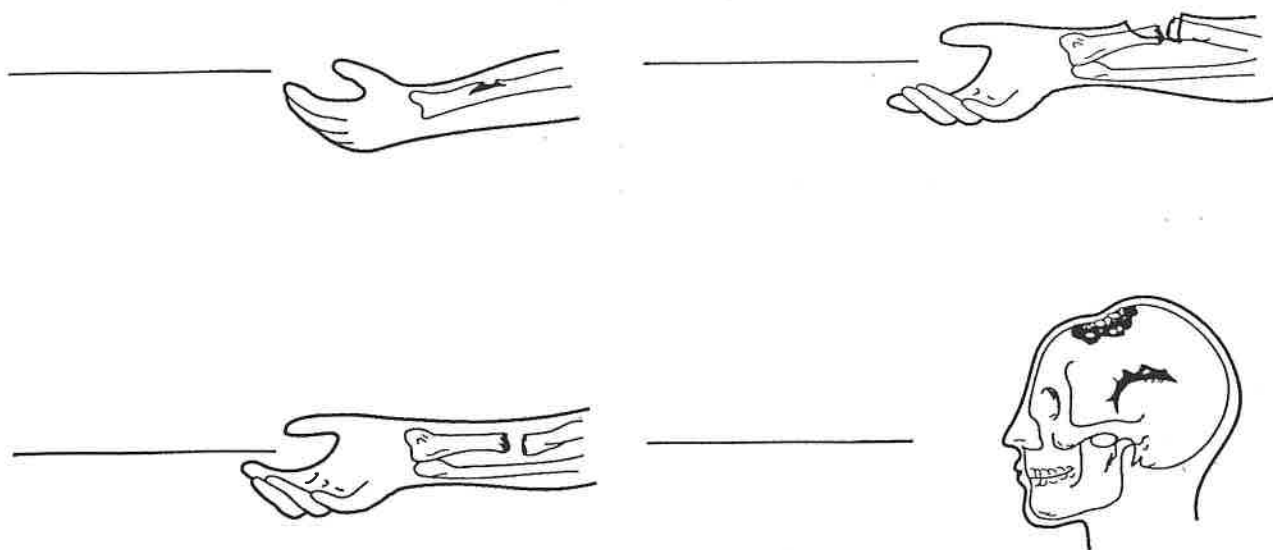
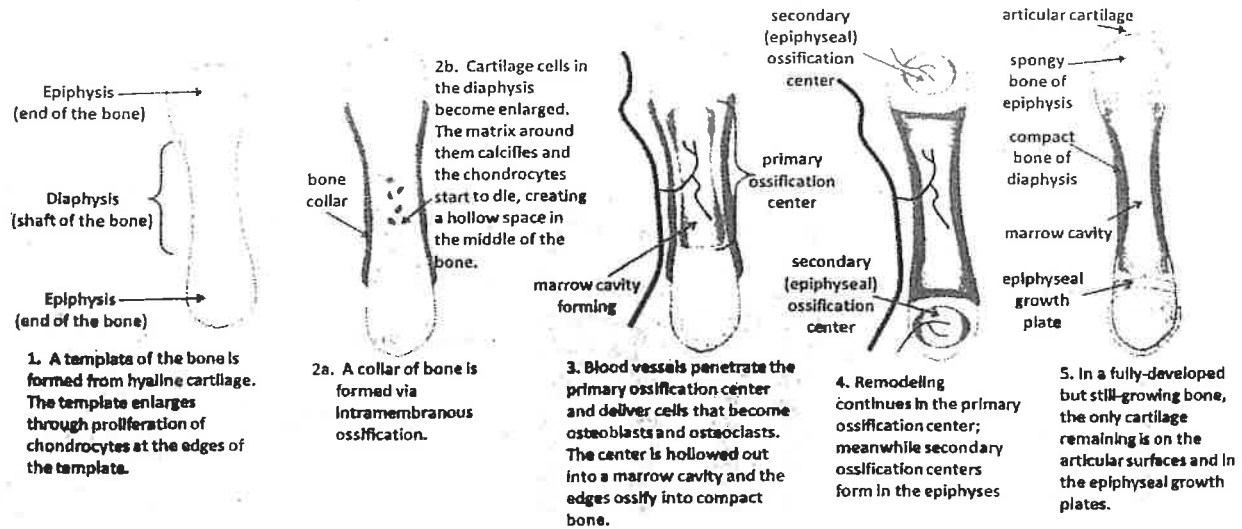


Figure 5-14

## Model 2: Endochondral Ossification, Part 1



### Critical Thinking Questions

- According to the Model 2, what forms the template or model for a developing long bone?
- What tissue is laid down as a collar around this model?
- Based on what you learned from Model 1, what do you think is going to happen to the cartilage in the primary ossification center?
- In what portion of this *long bone* is the secondary ossification center located?
  - What is the name of the cartilaginous structure that separates the epiphysis from the diaphysis?
- Look back at Model 1, does it appear that flat bones begin with a cartilage template?
- In the space below, compose a sentence as a group that best describes the difference between intramembranous and endochondral ossification.

15. Figure 5-6 is a lateral view of the vertebral column. Identify each numbered region of the column by listing in the numbered answer blanks the region name first and then the specific vertebrae involved (for example, sacral region, S# to S#). Also identify the modified vertebrae indicated by numbers 6 and 7 in Figure 5-6. Select different colors for each vertebral region and use them to color the coding circles and the corresponding regions.

- 1. \_\_\_\_\_ ○
- 2. \_\_\_\_\_ ○
- 3. \_\_\_\_\_ ○
- 4. \_\_\_\_\_ ○
- 5. \_\_\_\_\_ ○
- 6. \_\_\_\_\_ ○
- 7. \_\_\_\_\_ ○

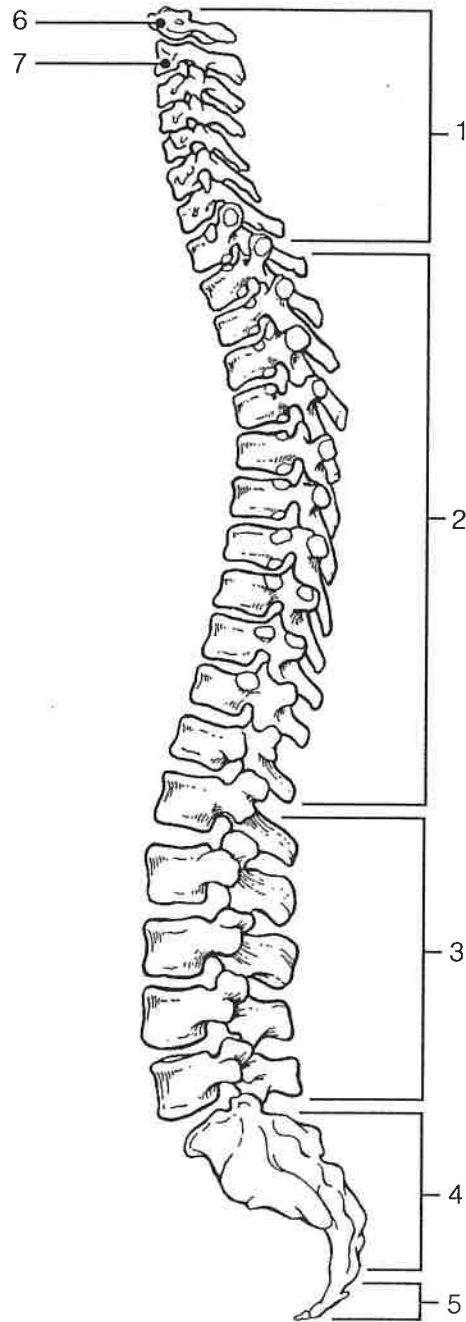


Figure 5-6