

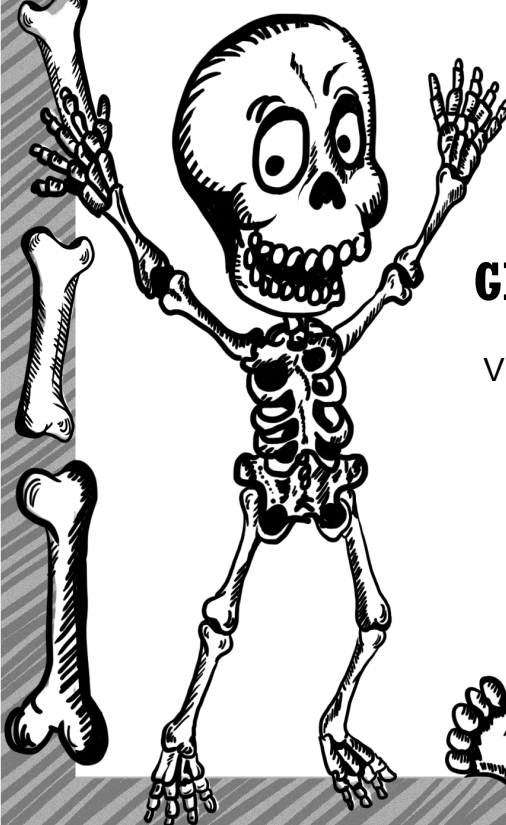


**STRATEGIC INTERVENTION  
MATERIAL (SIM) IN  
SCIENCE 6**

**THE**

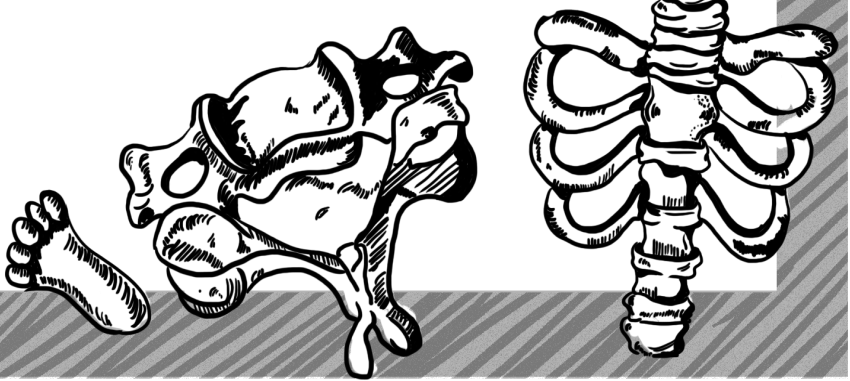
**SUPER**

**BONEMAN**



**GREACIA D. ALINCOMOT**

Teacher II  
VIOLETA INTEGRATED SCHOOL



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## **THE SUPER BONEMAN (Skeletal System)**

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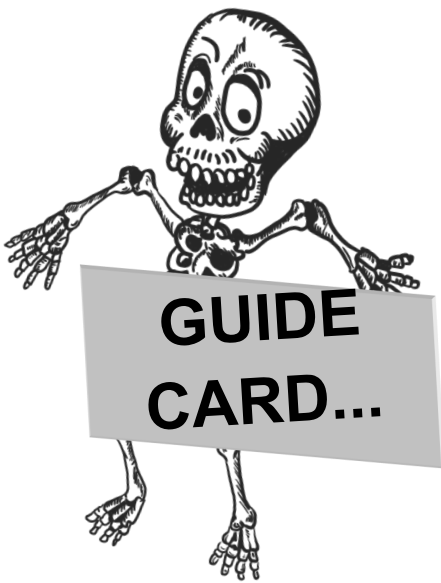
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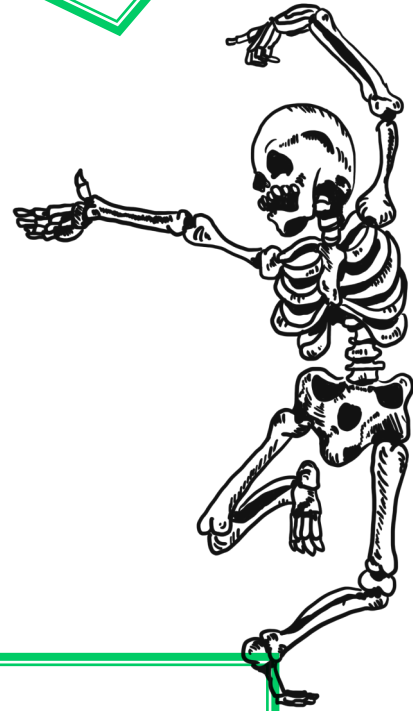


I'm the Super BoneMan,  
introducing to you the  
**Skeletal  
System**

**LEAST LEARNED COMPETENCY**

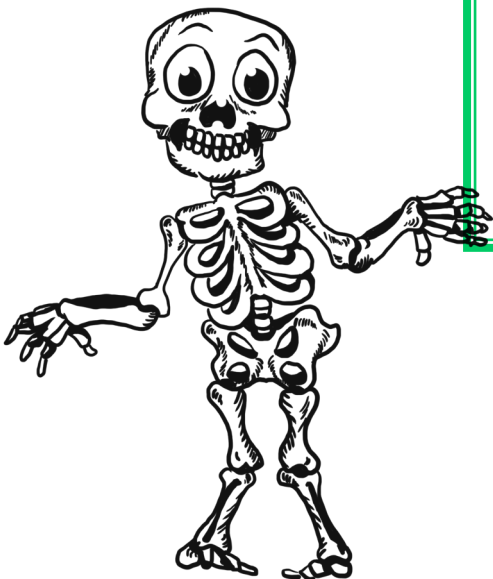
Explain how the organs of each  
organ system work together

**S6LTI1a-b-1**

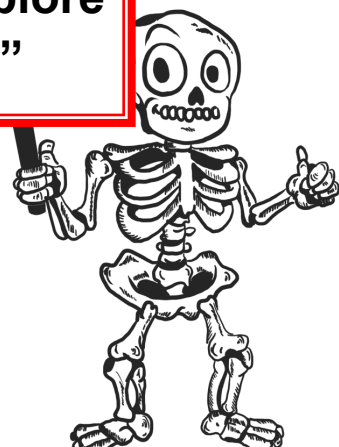


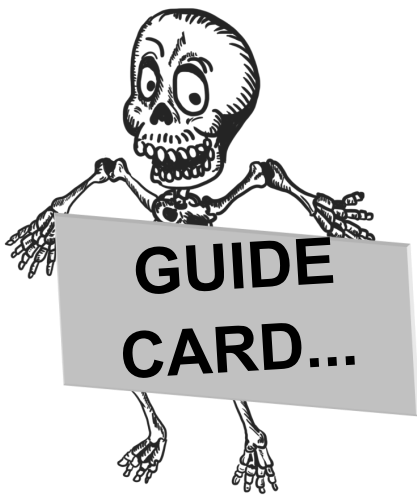
This SIM aims....

- to describe skeletal system and its functions;
- to identify what makes up the skeletal system; and
- to tell how to take care of the skeletal system.



**"Let's explore  
more!"**





**GUIDE CARDS**

**1**



**ACTIVITY CARDS**

**5**

ACT. 1 Puzzle Me  
Out

ACT. 3 Attach Me  
To You

ACT. 2 Circle-A-  
Word

ACT. 4 Can You  
Name Me?



**ASSESSMENT CARDS** Page 9



**ENRICHMENT** Page 11

ACT. 1 Touch  
Me, YES!

ACT. 2 Check  
On Me



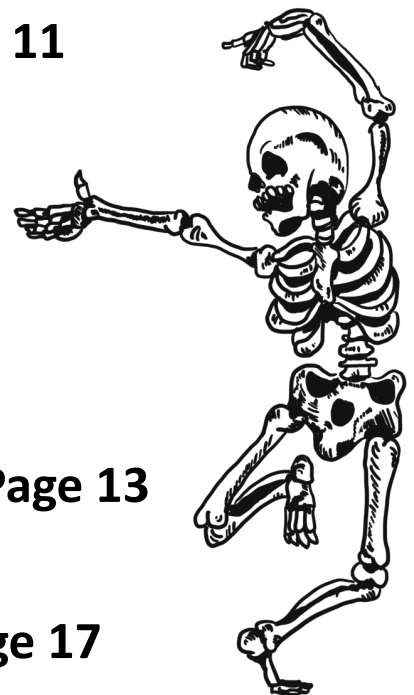
**ANSWER KEYS**

Page 13



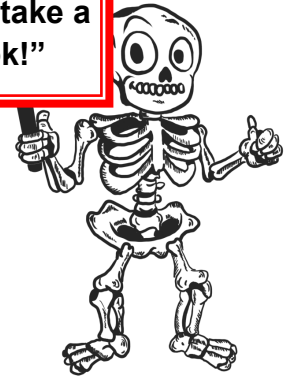
**REFERENCE**

Page 17





“Come, let’s take a closer look!”



## What makes our body in shape?

Let me tell you...

I once dreamt of being a jelly fish which used to swim in water. How hard I tried so well just to be in my destination. But the water keeps me flowing to where it will bring me. I shouted hard to be heard by somebody until I woke up in reality, thanking God that I am a human being with 206 bones.

I have super powers to teach you about your bones, that is why I am your—**Super Boneman**.

Let me start with my dream.

Have you seen a jellyfish? It has a soft body. It does not have any bone so it cannot stand in an upright position the way people do.

Your muscles and other body parts would collapse like a jellyfish if it were not for your body’s framework—the **skeleton**. The skeleton is like a frame. It gives your body shape and support. It supports your body as you move.

To tell you buddies, our body has a framework of bones with different sizes and shapes. There are long and short bones. There are flat bones and bones of irregular shapes. There are bones that support your weight and bones that protect some of the delicate organs in your body.

When you were a baby, your bones felt slightly softer and more flexible because they consisted mostly of cartilage ( cartilage—is a soft tissue that covers the ends of a bone). As you grew up, the cartilage cells were replaced with bone cells.

Let’s start with your bones in the head.

The bone forming the head is the **cranium**. Cranium and the facial bones make up your **skull**. It is like a built-in helmet. The skull protects the brain. It is hard and strong but it can be cracked if it receives a severe blow.

The **jawbones** or the **mandible** support the teeth and gums enabling us to bite and chew our food.

The **backbone** or the **spinal column** holds your head and body straight. It consists of 26 separate bones called vertebrae.



Your backbone is your main support.

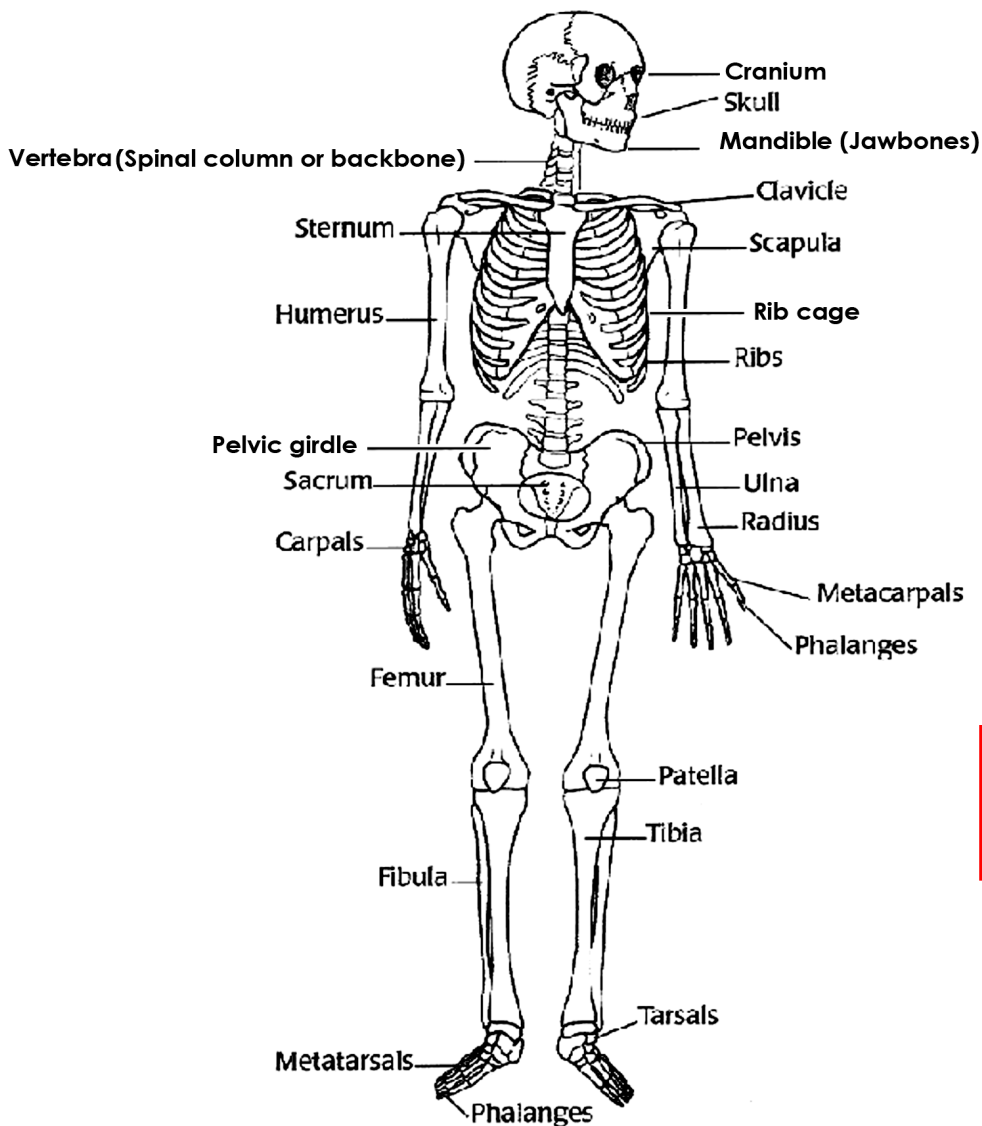
Your **rib cage** is made up of 12 pairs of long slender bones or ribs which are connected to the backbone. The top ten ribs are attached to the **breastbone** or **sternum**. The ribs protect the heart and lungs.

The **pelvic girdle** holds the weight of the body. The skeleton of the arm is divided into

**humerus** or the **upper arm**; **radius** and **ulna** or the **lower arm**; **carpals** or the **wrist bones**; **metacarpals** or **palm bones**; and **phalanges** or the **finger bones**.

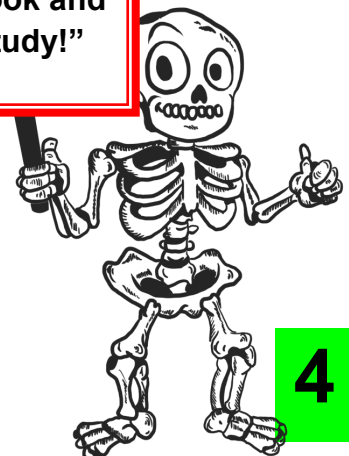
The bones of the leg consist of the **femur** or the **thigh bone** is the largest and the longest bone in the body; the **tibia** and **fibula** or **leg bones**; the **tarsals** or the **ankle bones**; **metatarsals** or **forefoot bones**; and the **phalanges** or the **toe bones**.

The **patella**, the bone at the front of the knee joins the femur and the tibia and the fibula.



Now, feel the bones of your body from head down to toes. Be ready to name them later. Go, let's go, let's study more...

"Look and Study!"





1

# PUZZLE ME OUT...

**Directions:** Put on the bones of a man to form its skeletal system. Write the correct number in the man's body.

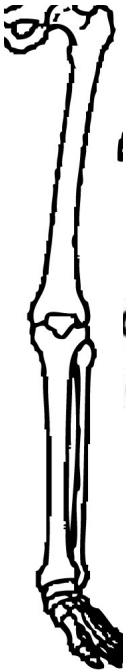
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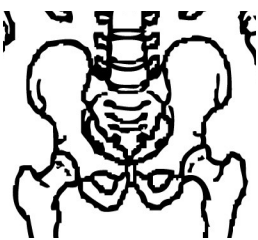
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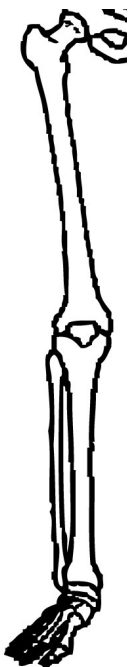
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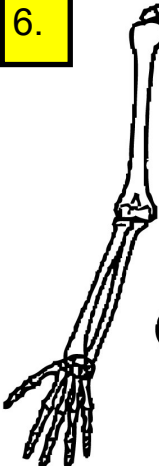
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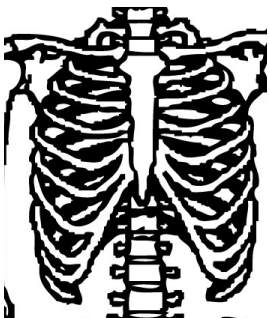
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6.



3.



5

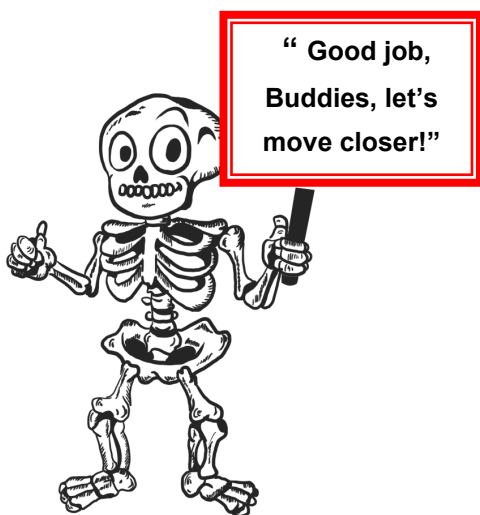


**2**

**CIRCLE A WORD...**

**Directions:** Look for all the hidden words in the diagram. The words are always in the straight line and may read up, down, forward, backward or diagonally. Cross a word off the list once you have circled it.

S	W	Y	T	A	R	S	A	L	S
L	C	R	A	N	I	U	M	Y	X
X	L	A	Y	X	B	W	W	W	H
W	A	F	P	Z	S	Z	X	Z	U
Y	V	G	R	U	M	E	F	L	M
T	I	B	I	A	L	X	N	H	E
Z	C	K	W	W	Z	A	Y	G	R
S	L	A	P	R	A	C	Z	F	U
X	E	L	X	R	A	D	I	U	S
P	A	T	E	L	L	A	Y	Z	W



CARPALS  
CLAVICLE  
CRANIUM  
FEMUR  
HUMERUS  
PATELLA

RADIUS  
RIBS  
SCAPULA  
TARSALS  
TIBIA  
ULNA



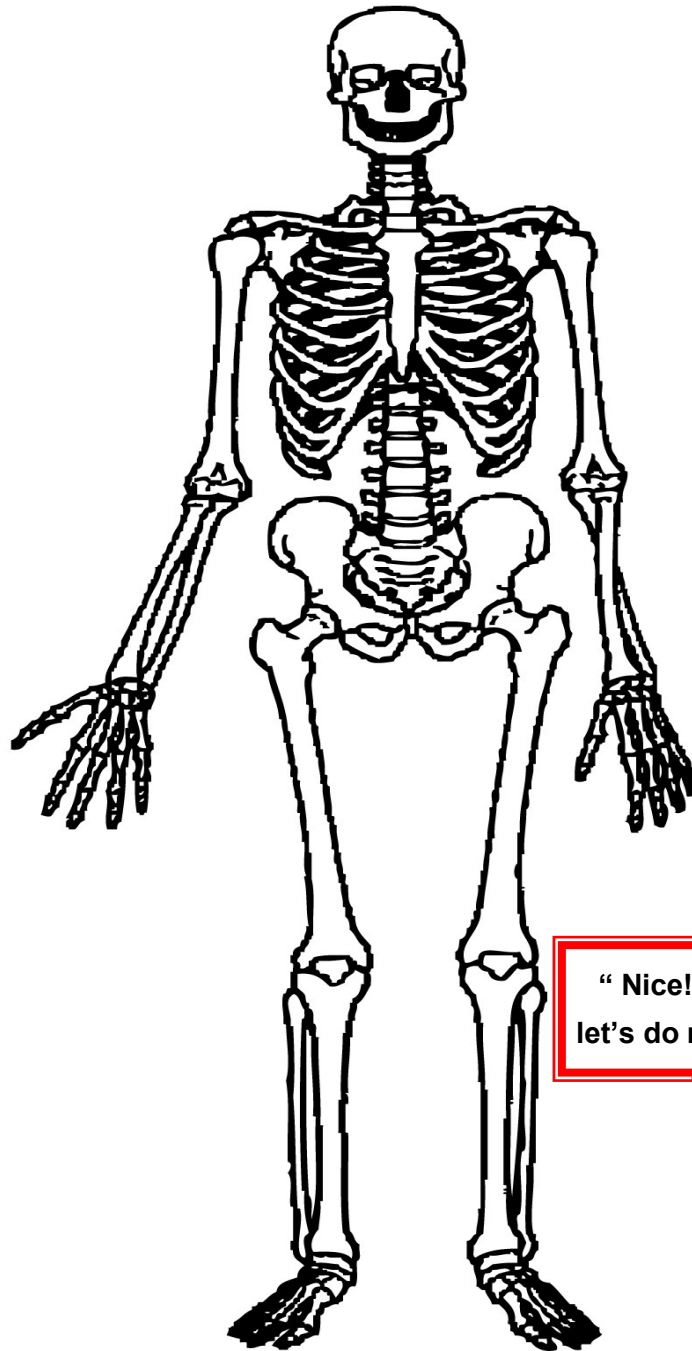


3

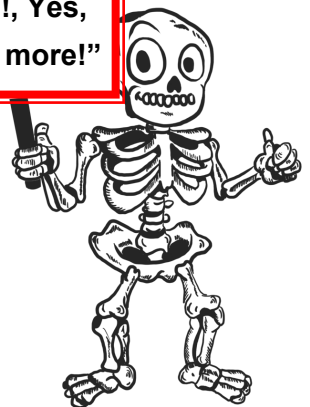
ATTACH ME TO YOU...

**Directions:** Draw a line from the word at the left that corresponds to the part of the picture at the right.

1. RIBS
2. SCAPULA
3. CRANIUM
4. CLAVICLE
5. TARSALS
6. PATELLA
7. FIBULA
8. METACARPALS
9. FEMUR
10. RADIUS



“ Nice!, Yes, let’s do more!”

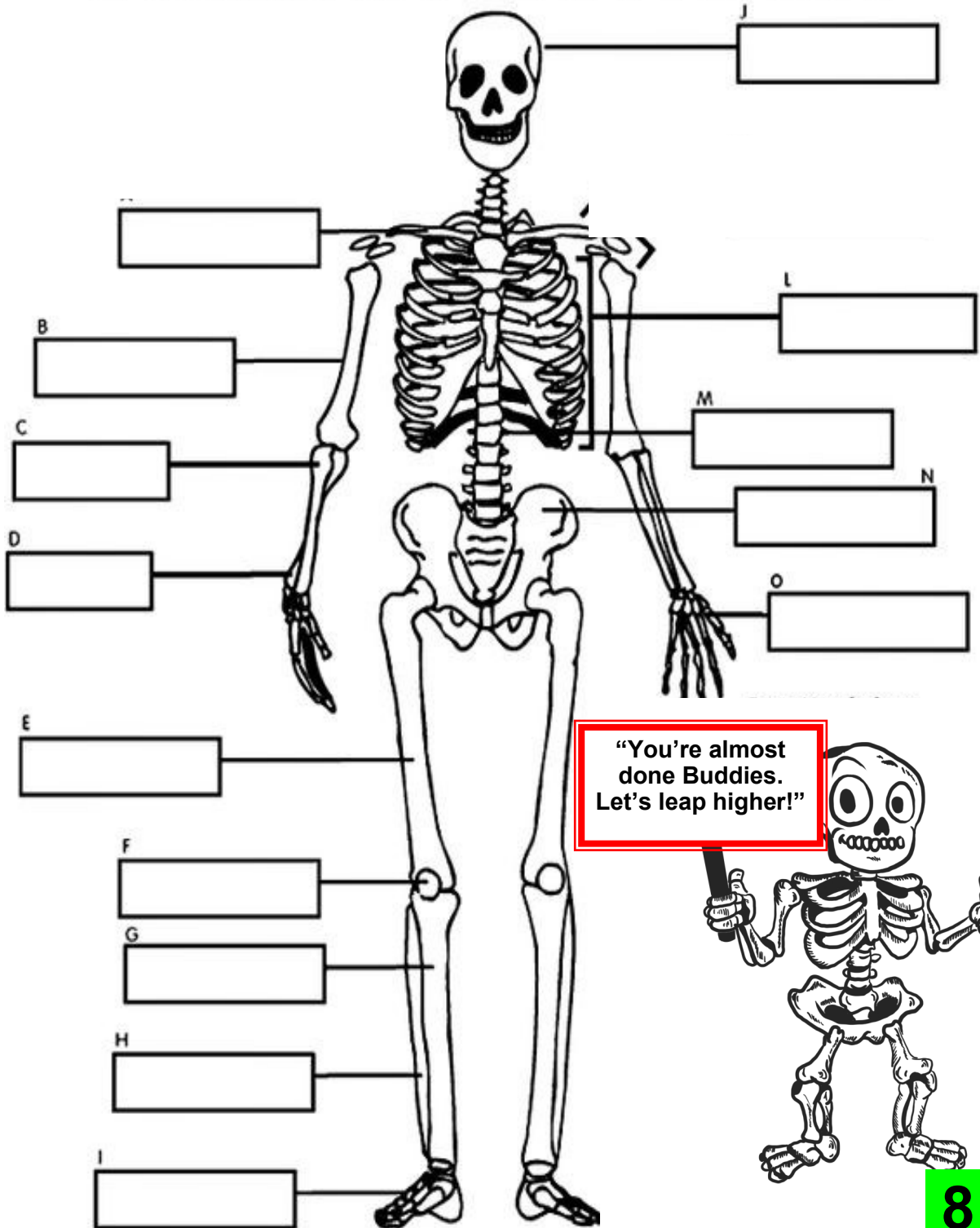


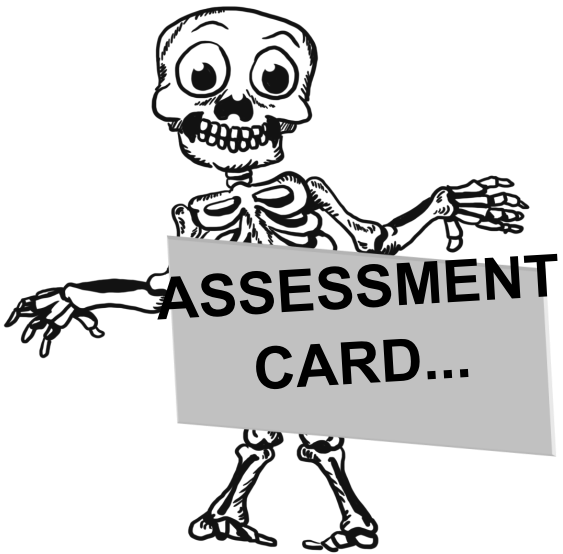


4

# CAN YOU NAME ME???

**Directions:** Study the skeletal system below. Label its parts. Write your answers in the box.





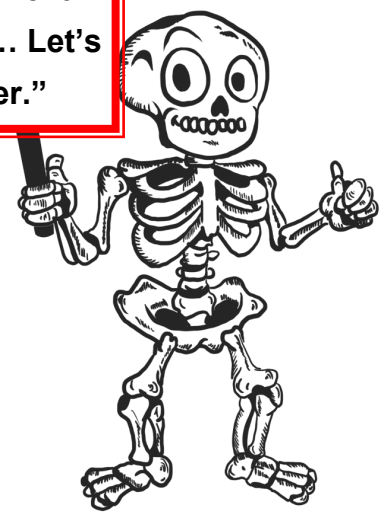
# IDEAS WRAP UP.....

**Directions:** Discuss the parts and functions of your skeletal system.

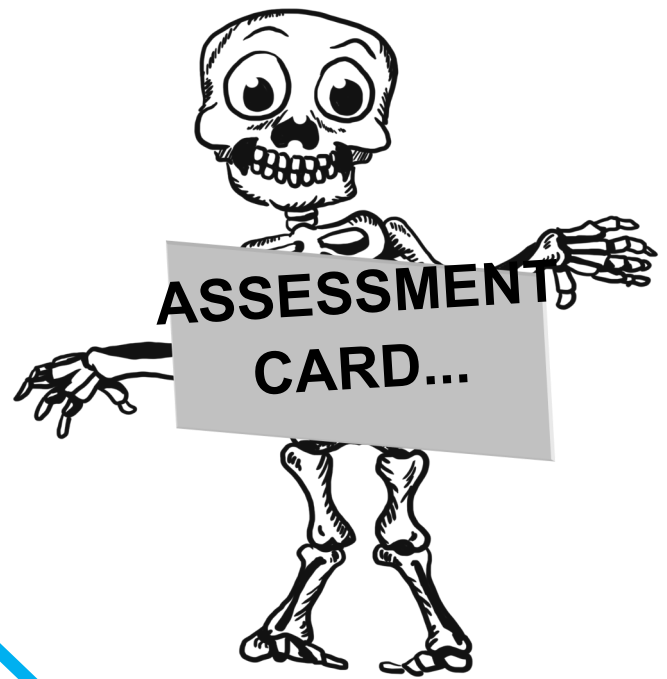
**A. What bones make up our skeletal system?**  
Give the bones that make up the body parts.

- Head bone —
- Jaw bone —
- Backbone —
- Breast bone —
- Collar bones —
- Shoulder bones —
- Upper arm bone —
- Lower arm bones—
- Wrist bones —
- Palm bones —
- Finger bones —
- Thigh bone —
- Leg bones —
- Knee cap —
- Ankle bones —
- Fore foot bones —
- Toe bones —

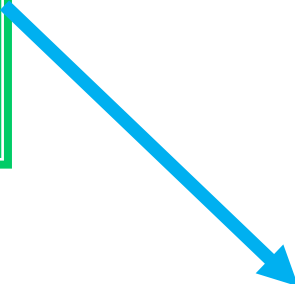
**Success! Next Level is on... Let's get better."**



**FILL ME IN...**

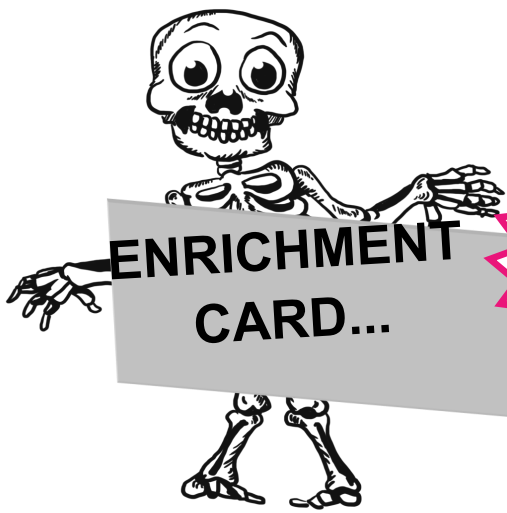


**B. How do bones function?**  
Give a short phrase that describes the functions of the bones.



Skull	—
Jaw bones	—
Ribcage	—
Spinal column	—
Pelvic girdle	—
Patella	—






1

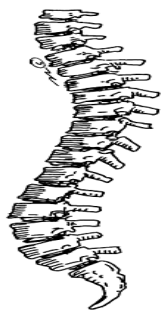
# TOUCH ME YES...

**Directions:** Read the instructions given. Follow carefully and give your answers to the questions that are listed.

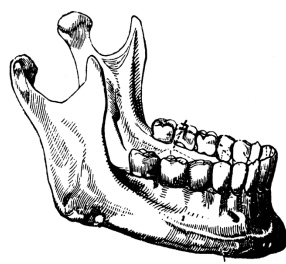
1. Touch your cranium.  
 ⇒ Is it soft or hard?




5. Feel the spinal column of a classmate.  
 ⇒ How does it feel?



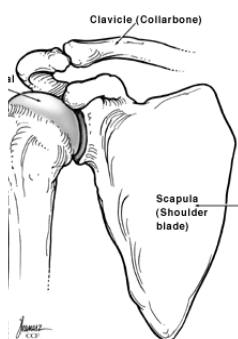
2. Move your jawbone.  
 ⇒ What parts of the body does it protect?



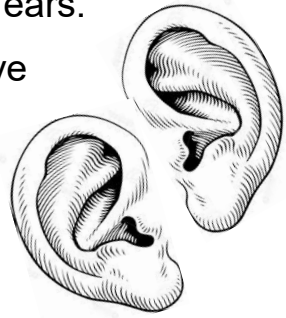
6. Feel your femur.  
 ⇒ What makes it different from the other bones in the body?



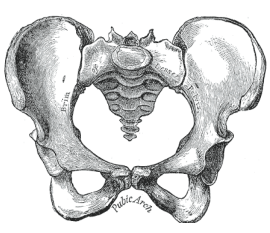
3. Feel your clavicle and scapula.  
 ⇒ Are they connected to one another?

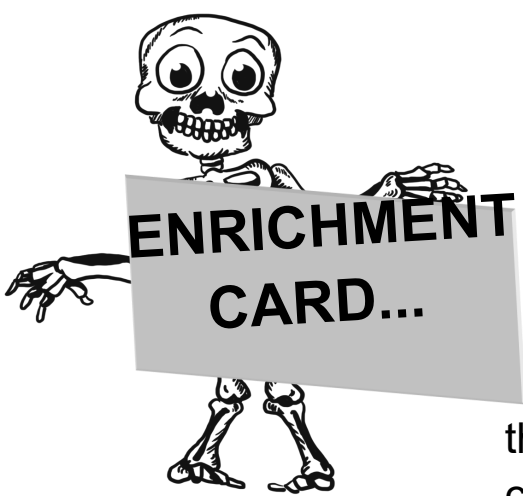


7. Touch your ears.  
 ⇒ Do they have bones? What are these?



4. Touch your hipbone.  
 ⇒ How does it help you?





2

# CHECK ON ME...

**Directions:** Study the pictures. Check the box beside the picture that shows proper care of our skeletal system.



1.

5.



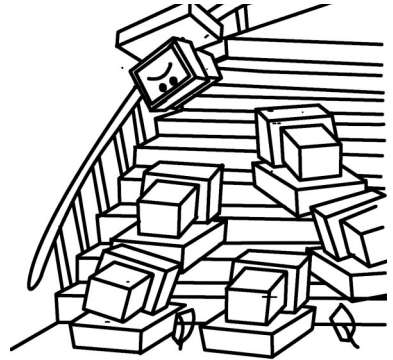
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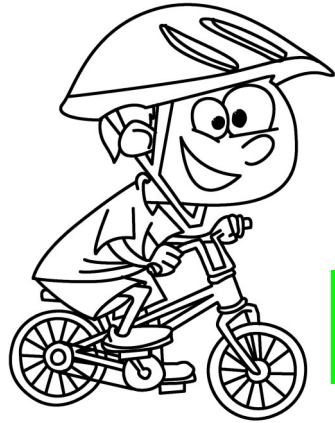
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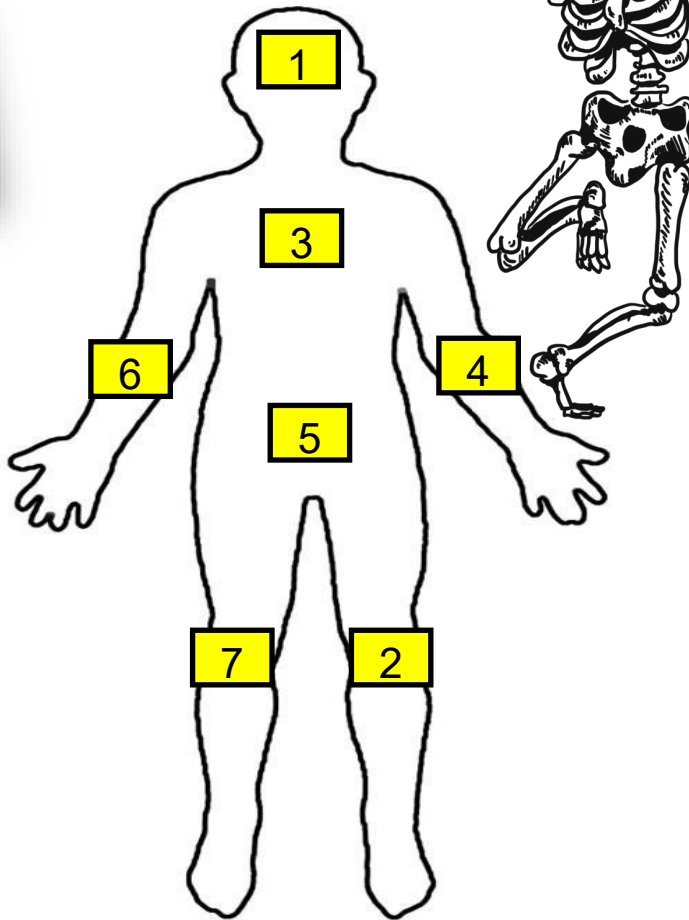
8.



LET'S ANSWER...

Good Job!  
٥

PUZZLE ME OUT...



CIRCLE A WORD...

S	W	Y	T	A	R	S	A	L	S
L	C	R	A	N	I	U	M	Y	X
X	L	A	Y	X	B	W	W	W	H
W	A	F	P	Z	S	Z	X	Z	U
Y	V	G	R	U	M	E	F	L	M
T	I	B	I	A	L	X	N	H	E
Z	C	K	W	W	Z	A	Y	G	R
S	L	A	P	R	A	C	Z	F	U
X	E	L	X	R	A	D	I	U	S
P	A	T	E	L	L	A	Y	Z	W

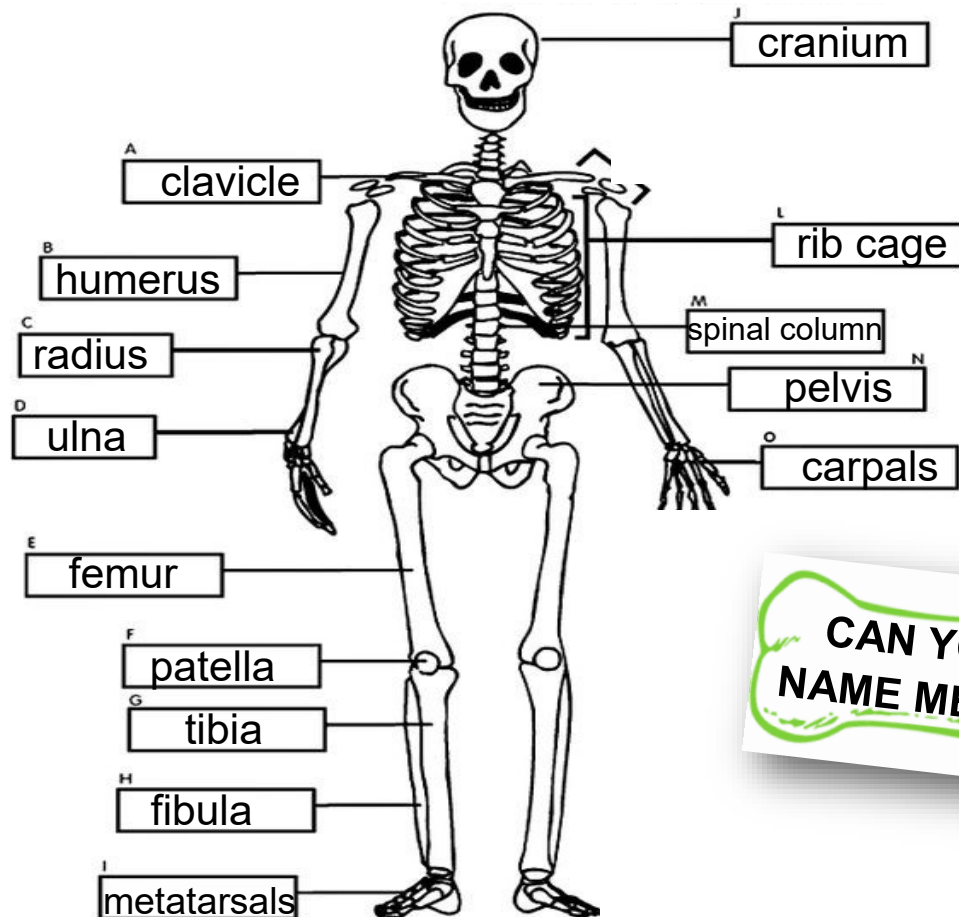
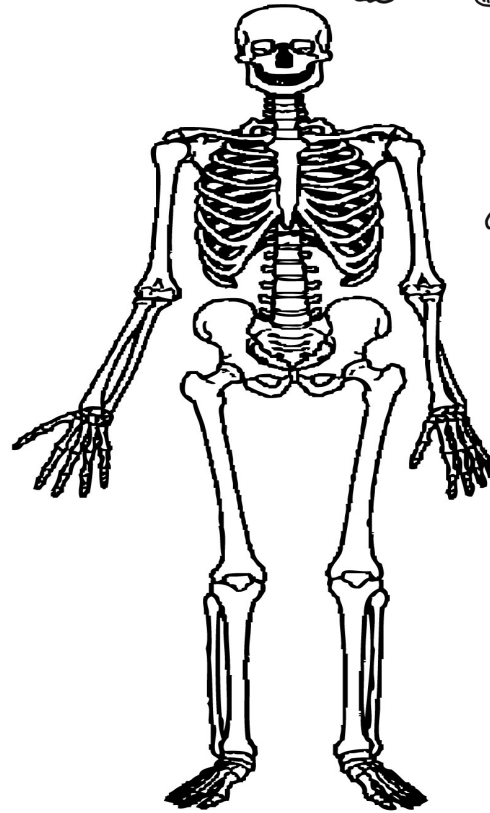
ATTACH ME  
TO YOU...



LET'S  
ANSWER...

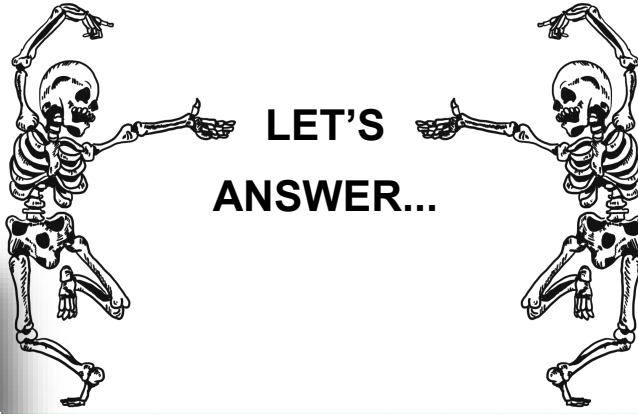


1. RIBS
2. SCAPULA
3. CRANIUM
4. CLAVICLE
5. TARSALS
6. PATELLA
7. FIBULA
8. METACARPALS
9. FEMUR
10. RADIUS



CAN YOU  
NAME ME???





LET'S  
ANSWER...

IDEAS WRAP  
UP...

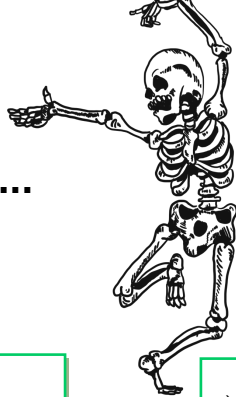
Head bone	—	Cranium
Jaw bone	—	Mandible
Backbone	—	Spinal Column
Breast bone	—	Sternum
Collar bones	—	Clavicle
Shoulder bones	—	Scapula
Upper arm bone	—	Humerus
Lower arm bones	—	Radius Ulna
Wrist bones	—	Carpals
Palm bones	—	Metacarpals
Finger bones	—	Phalanges
Thigh bone	—	Femur
Leg bones	—	Tibia Fibula
Knee cap	—	Patella
Ankle bones	—	Tarsals
Fore foot bones	—	Metatarsals
Toe bones	—	Phalanges

Skull	—	protects the brain
Jaw bones and teeth	—	protects the gums
Ribcage	—	protects the heart and lungs
Spinal column	—	protects the spinal cord
Pelvic girdle	—	protects the body in sitting
Patella	—	covers the knee

FILL ME  
IN...



LET'S ANSWER...



TOUCH ME YES...

⇒ It is hard.

⇒ It's hard and long.

⇒ It protects the gums and teeth.

⇒ It is the longest and the largest.

⇒ Yes, they are.

⇒ Yes, they have.

⇒ It carries my weight when sitting.

CHECK ON ME...



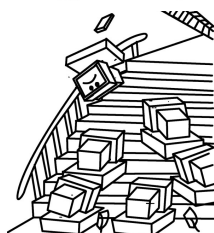
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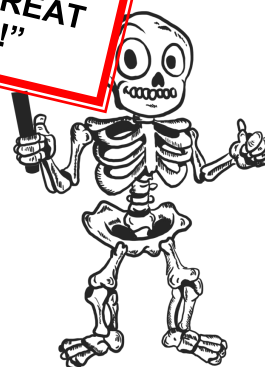
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/



Ahha, You did well!, GREAT Job!"





## For more information please read or visit:

Science for Daily Use 4 Textbook pp. 3-12

Science and Health for a Changing Environment 4 Textbook pp. 3-16

Skeletal system black and white - ModernHeal.com

Colorful Human Bone Image - Anatomy Ideas - yunoki.info

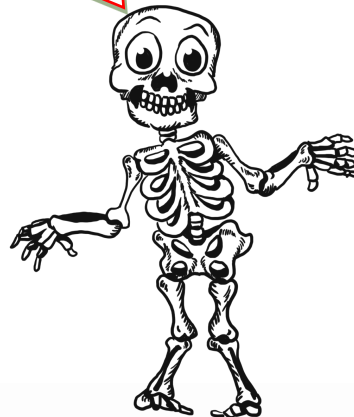
Collection of images |Piaf Tactile by Harpo piaf-tactile.com

The lower jaw | ClipArt ETC Educational Technology Clearinghouse - University of South Florida The lower jaw

**“You’ve reached the end line, Buddies. CONGRATULATIONS!**

**As you move forward, be ready to work on the body system that helps the skeletal system as you move your body parts.**

**“I hope that my Superpowers have helped you Buddies! ‘Til we meet again, enjoy learning!”**



**The End**