

Bone Logic Puzzle

Place an X in the boxes for answers that are false, and an O in the boxes for answers that are true. Use the clues to solve this puzzle and to discover the types of bones and where they are in the body.

CLUES:

1. The sacrum is located in the spine.
2. The ulna is not a flat or short bone, but it is in the arm.
3. The tarsal is short, but is not in the chest.
4. The bone that is flat is in the chest.
5. The irregular bone is not in the arm.

		Type				Where in the body			
		Long	Irregular	Flat	Short	Ankle	Spine	Arm	Chest
Names	Ulna								
	Tarsal								
	Sacrum								
	Sternum								
Where in the body	Ankle								
	Spine								
	Arm								
	Chest								

Names	Type	Where in the body
Ulna		
Tarsal		
Sacrum		
Sternum		

BONE FACTS:

- You have **300** bones when you are born.
- You only have **206** bones when you are an adult.
- There are three main types of bone cells which constantly repair and reshape your bones as your body needs: osteoclasts, osteoblasts, and osteocytes.
- **Osteoclasts** remove old or damaged bone, and **osteoblasts** make new bone in its place.
- **Osteocytes** act as “sensors” to monitor the mechanical forces that occur due to exercise and control the activity of the osteoclasts and osteoblasts.

HOW EXERCISE EFFECTS YOUR BONES:

- Exercises that apply forces against your bones stimulate bone cells to build up your bone density.
- Most people obtain what is called their **peak bone mass** when they are between 16-25 years old, which is the maximum amount of bone a person has during their life.
- If you can build your peak bone mass to be as strong as possible when you are young, it will prevent you from having too much bone loss later in life.

IMPACT EXERCISES:

- A good way to build your peak bone mass is with impact exercises that exert forces on your bones such as walking, running or jumping.
- Exercises that require powerful jumping movements, called “plyometrics”, are a fantastic way to build your bones.
- Good examples of impact exercises can be found at: <https://youtu.be/dvggf9hPwtM?list=RDQMqnhgXaz7Fb4>

ANSWERS:

Names	Type	Where in the body
Ulna	Long	Arm
Tarsal	Short	Ankle
Sacrum	Irregular	Spine
Sternum	Flat	Chest