

ACTIVITY 3D: HEALTHY BONE REMODELING

Normal bone is always undergoing remodeling. This remodeling removes old bone tissue and replaces it with new bone tissue. The remodeling cycle, removing and building tissue, continues throughout life and is typically “in balance” to maintain healthy bone.

This remodeling cycle involves bone “resorption” by the osteoclasts. The osteoclasts remove the old stressed or worn-out mineralized bone. This recreates a “resorption pit.”

The “resorption” process causes osteoblasts to become attracted to the “resorption pit.” Osteoblasts rebuild new bone tissue by laying down an unmineralized matrix, called osteoid, which will eventually form new mineralized bone.

When this rebuilding is complete, the area of bone remodeling rests until the next remodeling cycle begins.

