

TECH: Radiology Technician Activity (HS)

Group Size

Small Groups

Background for Teachers

- Who is the person who takes your x-rays? A Radiology Technician
- Radiology technicians use x-ray machines, ultrasound machines, MRI (magnetic resonance imaging) scanners, PET (positron emission) scanners, and other technologically advanced machines to help diagnose and treat illnesses and injuries under the direction of a physician.
- They are responsible for explaining and getting patients ready for radiological tests and treatment that will be performed. They place the equipment at the right distance and correct angle from the patient to make the appropriate images for the physician.
- Radiology technicians also assist physicians in performing sophisticated procedures.
- It is their responsibility to ensure that the radiology equipment is properly maintained.
- Rad Techs work in hospitals, clinics, medical laboratories, nursing homes, and in private industry.
- Average salary: \$24,000 to \$38,500 per year.
- Educational requirements: Must complete a two-year training program in a hospital or at a college. (Some colleges award this as an Associate's degree.)
- What is the difference between a Radiology and a Radiology Technician?
- A Radiologist is a medical doctor who interprets radiological images. They can also perform procedures and surgeries related to radiological procedures (biopsy tumors, drain fluids, open arteries and veins, etc). A Radiology Technician takes the images.

Instructional Procedures

Step 1

Go over the basic bones of the human anatomy (see handout) with the students. See how many they already know and teach them the new ones.

- The human skeleton consists of 206 bones. We are actually born with more bones (about 300), but many fuse together as a child grows up. These bones support your body and allow you to move. Bones contain a lot of calcium (an element found in milk, broccoli, and other foods). Bones manufacture blood cells and store important minerals.
- The longest bone in our bodies is the femur (thigh bone). The smallest bone is the stirrup bone inside the ear. Each hand has 26 bones in it. Your nose and ears are not made of bone; they are made of cartilage, a flexible substance that is not as hard as bone.
- Joints: Bones are connected to other bones at joints -- knee, elbow, shoulder, hip, wrist, ankle, etc.
- Difference in male and female bones: Males and females have slightly different skeletons, including a different elbow angle. Males have slightly thicker and longer legs and arms; females have a wider pelvis and a larger space within the pelvis, through which babies travel when they are born.

Step 2

Have the students practice their "radiology" skills by matching the x-rays in the packets with the correct problem (or diagnosis) on the answer sheet.

- Students should work in groups -- each group needs an answer sheet, writing utensil, and x-ray packet. One person in the group is responsible for writing down the number of the x-ray next to the diagnosis they choose as a match.

Step 3

Review the correct answers with the students, noting the different bones and various injuries and surgical "repairs" as shown on the answer keys.

Authors

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