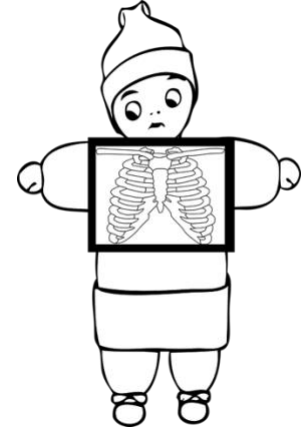


Age: 5+

# X is for...X-Ray

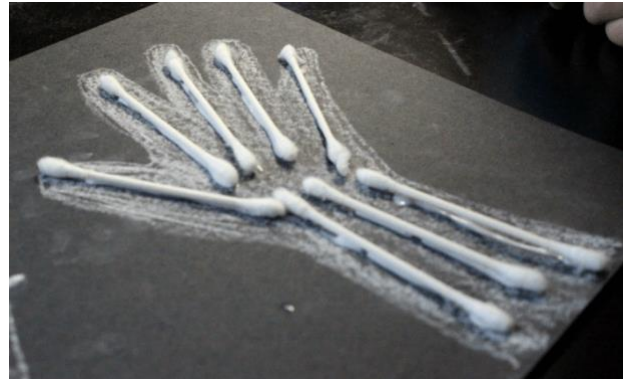


**X-rays** are a form of energy by powerful electromagnetic waves of high energy and short wavelength. They can see through substances that light cannot, including images inside of a suitcase or the human body. X-rays are often used in the medical field. Doctors used x-rays to look at broken bones and to find disease. They are also used at airports to look through suitcases.

**Craft:** Design your own x-ray

**Materials:**

- Black construction paper
- White crayon
- 8 Q-tips
- Glue



**Instructions:**

1. Trace your hand and wrist with a white crayon and color it in
2. Grab 5 Q-tips and place one on each finger on the construction paper. Next, grab 3 more and place them parallel to each other on the wrist.
3. Once you finish this you have a homemade x-ray of your hand/arm
4. If you have extra supplies, try it with your foot/leg.

**Job Exploration:**

- **X-ray service engineer:** An x-ray service engineers job is to install, repair, and perform maintenance on x-ray and other medical imaging equipment
- **X-ray technician:** An x-ray technician takes x-ray images by positioning someone's body and taking an image. These medical images detect broken bones, tumors, foreign objects, or other abnormalities
- **Physicists:** They study the way matter and energy interact. Some physicists also work with the design of equipment such as particle accelerators, electron microscopes, and lasers.

- **Medical physicists:** A medical physicist may work in healthcare and use their knowledge of physics to develop new medical technologies and radiation-based treatments.