

## **X-ray Pictures**

### **Apparatus**

two or three x-ray pictures

### **Action**

The students examine the pictures and identify areas of high and low x-ray absorption, and high and low tissue density.

### **The Physics**

X-rays are more strongly absorbed by denser tissues, such as bone. This is because these tissues have a higher proportion of elements with a large number of electrons, which the x-rays interact strongly with. These areas show up white on typical x-ray images, which are negatives.



### **Accompanying sheet:**

#### **X-ray Pictures**

Examine the x-ray films.

Why are some areas light and others dark?

In which areas are more x-rays absorbed?

Why are more x-rays absorbed in these regions?