

X-Rays



1) a) What differences can you see between the two x-ray images?

.....

b) What year was x-ray 1 taken in? circle your answer

1795 1895 1995

c) Label a knuckle in each image

d) What is the feature marked in the left image?

2) Radiotherapy- fill in the gaps in the paragraph below using the words in the box

healthy dose dividing tumour kill
 cancerous DNA X-rays irradiating



X-rays and other radiation can damage the ___ in cells and kill them. Cells which are _____ rapidly are more likely to be killed, so we use x-rays to _____ the rapidly-dividing _____ cells. We must make sure that _____ tissue is undamaged. A linear accelerator generates _____. It rotates around the body, _____ the tumour from all directions.

This means the _____ receives a higher _____ than the healthy tissue.

3)

R A S I S O T I M I L E
 D I V I D I N G C O U M
 A C N D O M E A A X E I
 S I D X S R M H N I G R
 Y P A R E H T O I D A R
 P S L C Y G A C L Y M A
 C I N A A A E M V U A D
 E A J M N L R C O G D I
 C L M E L O T X E H I A
 M A R S T R U O M U T T
 G S I S O I E M E N R E

Radiotherapy
 Treatment, Plan
 Dose, Limit
 Cells, Dividing
 Mitosis, Meiosis
 DNA, Damage
 Linac, X-ray
 Gamma, Irradiate
 Cancer
 Tumour