

# **Scientist profile: Angela Lamb**

## **Discovering Richard III's diet**

### **Worksheet**

Separate Science - Chemistry - Key Stage 4

C8 Chemical Analysis

Mr Robbins



# Independent task - part 1 of 2

1. What is the definition of an isotope?
2. How can you determine the number of neutrons in an isotope?
3. What does the number of protons determine about an atom?



## Independent task - part 2 of 2

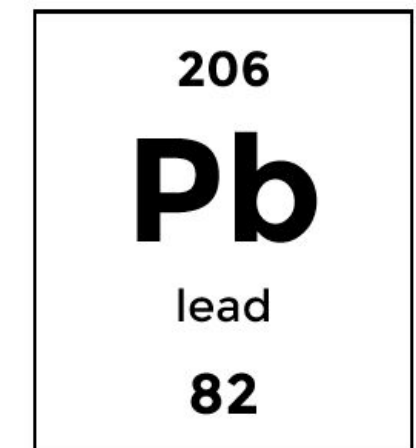
4. Uranium has two natural isotopes, uranium-235 and uranium-238.

Use the correct answer from the words below to complete the sentence.

**electrons      neutrons      protons**

The nucleus of a uranium-238 atom has three more \_\_\_\_\_ than the nucleus of a uranium-235 atom.

5. How many protons are there in the nucleus of a lead-206 atom?



6. How many neutrons are there in the nucleus of a lead-206 atom?



# Independent task

1. What is the keyword that describes elements with the same number of protons but different numbers of neutrons?
2. Which elements did Angela Lamb's team investigate?
3. Which bone remodelled slowly?
4. Which bone remodeled fast?
5. Where did all our atoms come from?

