Year 13 Science: Dating geological events

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. Charcoal has 25.0% of its original carbon-14. How old is it?

2. Bone has 60.0% of its original carbon-14. How old is it?

3. In a cliff, a dike cuts layers 1 to 3 and is itself offset by a fault. Which happened first, the dike or the fault?

4. A peat layer lies between the Taupō tephra and the Kaharoa tephra. What is its age range?

5. Why can a sandstone not be dated by potassium-argon on its own grains?

Fix the mistake

6. Correct this statement: "Carbon-14 dating shows the granite is 96 million years old."

7. Correct this statement: "After two half-lives all the parent isotope has gone."

8. Correct this statement: "The dike is older than the layers because it is underneath them."

9. Correct this statement: "A sandstone can be dated by measuring argon in its grains."