

PREP 4 • LESSONS 7–8

Using radiation and half-life

Ionising power, range and penetration • choosing a source • half-life from a graph

SCORE
/10

Name _____ Class _____ Due _____

Do Now REMEMBER

From earlier lessons • 1 mark each

- 1 State the standard unit of activity. [1]

- 2 Describe how the mass number and atomic number change when an alpha particle is emitted. [1]

- 3 State what a beta particle is. [1]

Key ideas LESSONS 7–8

Show your working

- 4 The most ionising radiation is alpha beta gamma [1]
- 5 A factory uses a radioactive source and a detector to check the thickness of paper.
Draw a ring around the radiation it should use: alpha beta gamma Explain your choice. [2]

- 6 The graph shows how the activity of a source changes with time.

- a Use the graph to find the half-life. Show on the graph how you did it. [2]

- b Define half-life. [1]

- c Radioactive decay is random. Explain what this means. [1]

