

CHAPTER OVERVIEW

31: Radioactivity and Nuclear Physics

The exploration of *radioactivity* and the nucleus revealed fundamental and previously unknown particles, forces, and conservation laws. That exploration has evolved into a search for further underlying structures, such as quarks. In this chapter, the fundamentals of nuclear radioactivity and the nucleus are explored. The following two chapters explore the more important applications of nuclear physics in the field of medicine. We will also explore the basics of what we know about quarks and other substructures smaller than nuclei.

[31.0: Prelude to Radioactivity and Nuclear Physics](#)

[31.1: Nuclear Radioactivity](#)

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[31.3: Substructure of the Nucleus](#)

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[31.E: Radioactivity and Nuclear Physics \(Exercises\)](#)

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