

**➤ Main Ideas, Key Points, Questions:**

*After watching the video segment, write down key points, main ideas, and big questions.*

**➤ Objective(s):**

- *Describe the conditions under which nuclear fission occurs.*
- *Understand and calculate the amount of energy released when nuclear fission occurs.*

**➤ Notes:**

*During the video segment, use words, phrases, or drawings to take notes.*

**➤ Summary:**

*After watching the video segment, write at least three sentences explaining what you learned. You may ask yourself: "If I was going to explain this to someone else, what would I say?"*

**Answer the following.**

1. Define nuclear fission in your own words.

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2. What determines whether small nuclei are stable?

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3. Why are nuclei unstable if they have fewer neutrons than protons?

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4. When there are more than \_\_\_\_\_ protons in the nucleus, the nucleus is unstable because the strong nuclear force cannot hold it together.

5. How does a nuclear reaction inside of a nuclear reactor begin?

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6. Write Albert Einstein's famous equation that relates energy and mass.

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7. Briefly describe how nuclear energy in a power plant is converted to electricity.

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8. The amount of radioactive material required to maintain a chain reaction is called what?

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