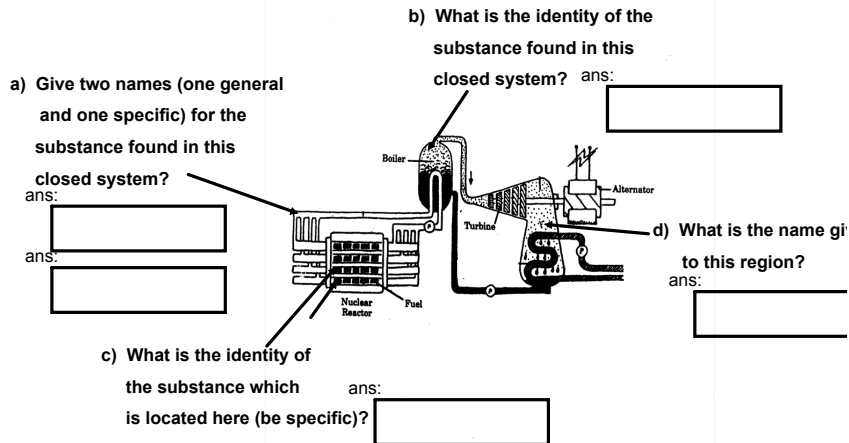


1. Place an A (for atomic bomb) or an H (for hydrogen bomb) on the lines below to indicate to which type of bomb each statement refers:

- ___ a) This bomb produces more energy than the other type of bomb.
- ___ b) Uranium or Plutonium can be used for this type of bomb.
- ___ c) A limited amount of material must be used to make this type of bomb.
- ___ d) This bomb is referred to as a "thermonuclear bomb".
- ___ e) This bomb is required to detonate the other type of bomb.
- ___ f) In theory, there is no limit to the explosive power of this bomb.
- ___ g) In this bomb, the fissile material is divided into two separate blocks, each with a mass lower than the critical mass.
- ___ h) Nuclear fusion is the major source of this bomb's energy.
- ___ i) This bomb killed about a quarter of a million Japanese civilians in 1945.
- ___ j) The first detonation of this type of bomb was carried out in 1952 by the United States.

2. Write the appropriate terms in the rectangles below (you cannot use the same term more than once):



3. Consider the power plant shown in question #2. Which of the following statements is/are true?

- a) Power output can be increased when there is an increase in demand for electricity.
- b) Waste from this plant can be reused.
- c) The reactor remains in operation during the times that new fuel is added.
- d) Energy is produced only in the nuclear reactor.

Answer/s: _____

4. Write T (for true) or F (for false) for each of the following statements:

___ a) Hydroelectric power plants produce chemical waste.

___ b) Nuclear power plants do not produce chemical waste.

___ c) Nuclear power plants and conventional power plants are both thermal power plants.

___ d) Conventional power plants convert the potential gravitational energy of water into electrical energy.

___ e) Mercury contamination of groundwater is the result of operating thermal power plants.

___ f) Cadmium rods are used in nuclear reactors to slow fission rates.

___ g) There is a condenser unit present in ALL power plants.

___ h) Nuclear fission is the source of energy in nuclear power plants.

___ i) Conventional thermal plants are the only power plants that greatly contribute to greenhouse gases and acid rain.

___ j) Coolant circulates in a closed system in the CANDU reactor.

Bonus: Why does the coolant in a nuclear power plant not boil and turn to steam?