

Crossword: Nuclear Reactors

Directions: Use the words and/or phrases from the word bank to complete the paragraph below.

Definitions

1. Reactor _____: where the chain reaction occurs
2. keeps neutrons moving at a safe pace
3. placed between fuel rods to ensure safety
4. prevents escape of radiation to the environment
5. spins because of exposure to heat energy
6. converts mechanical energy to electrical energy
7. Cooling _____: carries away excess heat
8. _____ tower: transfers waste heat to the atmosphere
9. moves water into and throughout the reactor core

Answers

1. core

Feedback: The nuclear chain reaction takes place in the reactor core.

2. moderator

Feedback: The moderator, which is usually water, slows down the neutrons.

3. control rods

Feedback: Control rods keep the nuclear chain reaction moving at a safe pace.

4. containment

Feedback: The containment structure prevents escape of radiation.

5. turbine

Feedback: The turbine spins in reaction to heat energy from steam.

6. generator

Feedback: The generator converts mechanical energy to electrical energy.

7. water

Feedback: The cooling water carries away excess heat.

8. cooling

Feedback: The cooling tower transfers waste heat to the atmosphere.

9. pump

Feedback: The pump moves water into and throughout the reactor core.