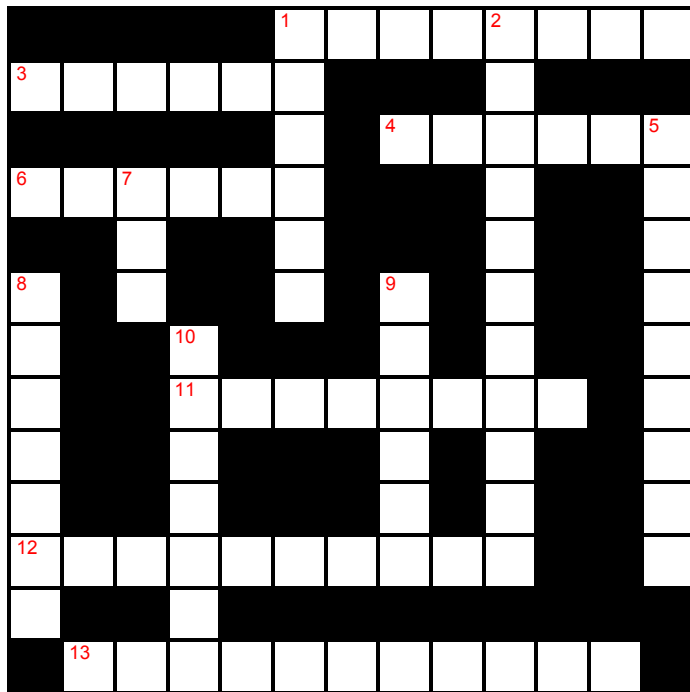


Solar_heating_13x13_2008-10-20

B.B. Huria



Across

- 1 Apparatus that extracts heat from a liquid that is at a higher temperature than its surroundings. (4,4)
- 3 ____ System: Solar heating or cooling system that requires external mechanical power to move the collected heat. (6)
- 4 ____ Convection: Convection of heat through fluids that are driven by fans, blowers or pumps. (6)
- 6 ____ Solar Energy System: A system that uses both

active and passive methods in its operation. (6)

- 11 Blacked surface in the collector. (8)
- 12 A semiconductor device made of materials whose resistance varies as a function of temperature. (10)
- 13 ____ of Heat Transmission is the rate of heat loss in BTU per hour through a square foot wall. (11)

Down

- 1 Pipe running across the edge of a series of solar collectors, gathering the heat transfer fluid from individual collectors. (6)
- 2 An instrument for measuring solar radiation. (11)
- 5 A unit used in estimating fuel requirements for heating a building. (6,3)
- 7 The quantity of heat needed to raise the temperature of one pound of water one degree Fahrenheit.

(3)

- 8 ____ Convection: Natural movement of heat taking place when a warm fluid rises and a cool fluid sinks under the influence of gravity. (7)
- 9 ____ Radiation is the solar radiation that comes straight from the sun. (6)
- 10 The quantity of heat needed to raise the temperature of one gram of water one degree Celsius. (7)