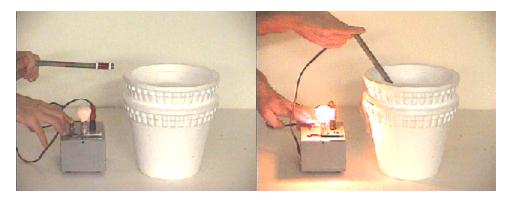
## **Answer #197**

The answer is (a): the light bulb will be brighter, as seen by comparing the photographs at the left and the right below.



When the copper coil is cooled, its resistance becomes lower, so more current will flow in the circuit, making the light brighter. Copper, like most metals, has a *positive coefficient of resistance*, meaning that its resistance increases as temperature increases over a wide range of temperatures.

## Archive 10

Question of the Week

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For questions and comments regarding the *Question of the Week* contact <u>Dr. Richard E. Berg</u> by e-mail or using phone number or regular mail address given on the <u>Lecture-Demonstration Home Page</u>.