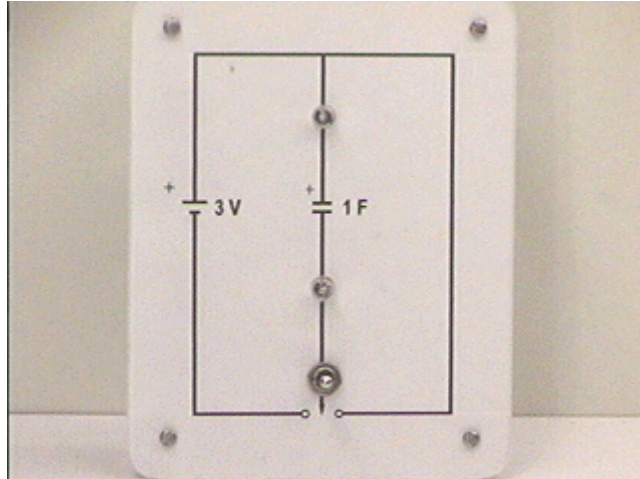
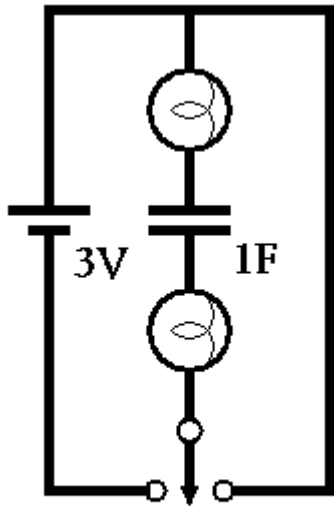


Question #74

The circuit shown at the left below has been rendered operable using the setup photographed at the right. Closing the switch by pushing it to the left connects a capacitor and the two light bulbs across the battery as shown in the circuit. This particular circuit uses a 3-volt battery, two 1.5-volt light bulbs, and a 1-Farad capacitor.



When the switch is closed, connecting the circuit, what would happen?

- (a) both lamps will light.
- (b) only the upper lamp will light.
- (c) only the lower lamp will light.
- (d) neither lamp will light.

If one of the lamps were to light, it would:

- (a) go on and stay on at the same brightness.
- (b) go on brightly and decrease its intensity to a constant zero level.
- (c) go on dimly and increase its intensity to a constant bright level.

Click here for [Answer #74](#) after July 23, 2001.

[Question of the Week](#)

[Outreach Index Page](#)

[Lecture-Demonstration Home Page](#)



For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).