Answer Key: ***Lesson 8 Capacitors and Push Buttons***

1. Instructions
2. Yes, you have to build it. When you push the plunger of the push button, the cap fills. Then when you disconnect from the voltage by releasing the plunger, the cap acts like a reservoir. What happens to the brightness of the LED as the cap drains? I can't tell you everything.
3. Instructions
    a. Instructions
    b. Instructions
    c. The cap should measure close to full voltage.
    d. The LED should light and go dim, just as if the PB had just been pushed & released.
4. The value of the capacitor relates directly to the amount of energy stored.

    a)

Capacitor Value	Time
1000 uF	About 5 to 6 seconds
470 uF	Couple of seconds
100 uF	Less than a second
10 uF	Turns off softly
1 uF	Snaps off

2: Corresponds to Table 8-2

b) Less capacitance means Less energy stored

5. Capacitors store electrical potential (voltage and current)
6. The LED fades when you push and hold the plunger. Remember, the action of the PBNC is opposite that of the PBNO.