

Answer Key: Lesson 7 The LDR

- 1 . In the light, the LDR will have a resistance as low as 1000 ohms.
- 2 . A good dark lid will get the resistance of the LDR to at least 100,000 ohms. In a dark room, using a flashlight to see the multimeter readouts, it will easily pass 1,000,000 ohms.
- 3 . This is directions. And you should do it. Note that the darkness increases the resistance. The LED should become dimmer. The brighter the light, the easier it is for electrons to move. It has less resistance the LDR provides. Conversely, the less light (darker), the harder it is for electrons to mover. The resistance has increased.
- 4 . You would need direct sunlight to get the resistance of the LDR to even think of going below 400 ohms.
- 5 . The brightest condition would mean that the LDR has the LEAST resistance. The LEAST resistance uses the LEAST voltage. The condition presented in "D" goes first. C is last because the LDR is using the most voltage. That coincides with the darkest condition that creates the most resistance.