Problem 1. A lamp is not turning on in your living room. Describe the process of how you would figure out why the lamp is not working.

A: There are a multitude of causes for a lamp to not work, including fai my method of approach is to deconstruct the lamp to its basic components that are necessary for the lamp to become lit. If the whole is the sum of its parts, we must deconstruct the whole and examine each part separately. By stripping away everything but the accessories (lampshade, base; etc), the main functioning parts would be the bulb, the switch to open the circuit, the power cord wiring), the plug and the socket in which the bulb is held. The parts that provide the electricity circuit are composed of the circuit breaker, the fuse,

Bulb- The bulb is the key to creating the light and therefore the most important. The light bulb must be inspected to ensure that it is the correct type for the given fixture and also the correct wattage, if both are correct the structural integrity must be inspected, including the filament inside the bulb is intact. The bulb will not light if the filament or the outer glass of the bulb is damaged, as the glass holds argon to allow the filament to work.

Socket- The socket is the component that the bulb itself sits in. The socket must be free of corrosion, rust or any other obstruction that will not allow the bottom of the bulb to receive power when the switch is turned on. The socket must be the correct size and have the correct grooves to ensure that the bulb fits properly and allows no room for movement to allow the circuit to open and close.

Switch- Inspect the switch to insure the connectivity to the wiring and the bulb socket are intact, as the switch is the key to averting and diverting electricity to the bulb. The switch opens and closes the electrical circuit, which will allow it to be turned on and off without the need to

Wiring-If the wiring in the cord or the wiring at the bottom of the bulb are damaged, frayed or exposed the circuit will be free to disperse the electricity needed to power the bulb. The wire must remain completely intact to avoid a power shortage, or an outside interference such as water that could cause corrosion.

Plug- The plug to the wiring that completes the circuit by connecting to the electrical outlet must also be undamaged. A missing or damaged prong will not allow electricity to travel through the wiring to light the bulb.

Outlet- The electrical outlet allows electricity to flow from the fuse through the cord in order for the lamp to produce light. The outlet and the plug must have the appropriate configurations in order for the connection to be made. Outlets can become burned or overcharged by the improper bulb being placed in the lamp causing too much electricity to flow through it.

Fuse- The fuse is the source of the electricity. If the fuse is not working, damaged, missing, or has any other variable such as a power outage from the grid, the entirety of the lamp will be essentially be made useless even if all the parts are intact.