Batteries Types and How to Increase Battery Life

A battery is a device consisting of one or more electro-chemical cells that convert stored chemical energy into electrical energy.

The symbol of battery is shown below:

![Battery Symbol](image)

Here I'm discussing about how the batteries work.

**Working of battery:**

Generally batteries contains three parts.

1. Anode(-)
2. Cathode(+) 
3. Electrolyte

![Battery Diagram](image)

If you observe the figure, some reaction will occur between chemicals used in it which is called as electro-chemical reaction. Due to these reactions, some electrons will be produced and they
will make grab at the position of anode. These electrons try to go to the place where there is less number of electrons are present.

In battery, the only place with less number of electrons is cathode. But there is a material called electrolyte which stops those electrons so they try in another way. When we connect a wire from anode to cathode through the bulb, the electrons try to go to cathode side through bulb. In the meanwhile they cross the resistance held in bulb and produce lightning. In this way the batteries switches or supplies a specific amount of voltage to circuits or electric goods.

**Types of Batteries:**

There are generally 2 types of batteries available.

1. Primary cell (non rechargeable):
   - Carbon-zinc
   - Alkaline
   - Lithium cells
   - Silver oxide cells
   - Zinc oxide cells

2. Secondary cell (rechargeable):
   - Rechargeable alkalines
   - Nickel-cadmium
   - Lithium ion
   - Lead acid

Now-a-days there are so many batteries are invented and they are also coming under the above two types only. We can not take all the description about the all batteries but some of them are commonly used in our life and in our mobiles also we are using the secondary cell type batteries.
Mostly using batteries are

- Nickel cadmium (first invented)
- Nickel metal hydride
- Lithium batteries
- Smart batteries

**How to Increase Life of Batteries:**

In the past, the people used to do one main mistake i.e. they used to put charge reversal. As a result, the batteries got polarity change and became damaged. But now a days there is no such problem due to the manufacturing of chargers.

Another problem is that putting the batteries charging so much time so that their life reduces. And other safe things have to do are as follows:

The battery that is not used for more time will gets discharged itself slowly. The important thing for new batteries is that we have to use them up to their maximum discharge at least 3 times to increase it’s capable level. And also we have to charge it fully. And also do not carry the battery separately, we have to use batteries in a specific order and then we can increase life of them and at last, do not put batteries near to the metals. It also causes some damages and another one is that do not place the battery at a place nearer to heat. It will cause damage to the chemicals in battery.