

### **Unit 19 – Sources of Energy(1)**

### Activity 19.1

## Understanding the concepts of renewable and non-renewable energy sources

You will need: Two same sized glass fish tanks, three same sized cups, another cup half in size than the other cups, four buckets Method:-

- Name the two tanks as "A" and "B".
- Ask two of your friends to be near the tank "A" and another two near the tank "B".
- Fill 3/4 of each tank with water.
- Give two same sized cups to the friends near tank "A". Give the other two cups to the friends near tank "B".
- Ask one friend near the tank "A" to take out a cup of water from the tank and ask the other to put a cup of water into the tank. Notice the level of water in the tank.
- Ask the friend with the big cup who is near the tank "B" to take out a cup of water from the tank and ask the other friend with the smaller cup to put a cup of water into the tank. Notice the level of water in the tank "B".
- The tank "A" represents renewable energy sources while the tank "B" represents non-renewable energy sources.

0	Renewable energy sources are energy sources that are reproduced during use or within a short period of time after use.  Examples:
0	Non-renewable sources are not reproduced after use. Otherwise it takes a long period of time to be reproduced.  Examples:

### > Renewable energy sources

# Activity 19.2 Constructing a simple solar heater

You will need:- A water tank, a rubber pipe, plastic pipes, a black coloured coverlet

#### Method:-

- Prepare the set up as shown in the figure. It is a model of a solar heater.
- Record the temperature of the water in the tank.

