

## CHAPTER 8: SCIENCE, TECHNOLOGY AND SOCIETY 1

### Uses of some metals YouTube

The properties of different metals will determine their uses in industry or in everyday life.

#### Copper

Copper is a reddish-brown shiny solid. Because it is a good conductor of electricity and heat, copper is often used in electrical products, motor vehicle radiators, air conditioners and home heating systems. Water pipes and other plumbing parts are also made of copper.

#### Iron

Iron is a grey shiny solid. Iron is used to make steel. In turn, steel is used to make buildings, bridges, railway tracks and vehicles of all kinds.

#### Silver

Silver is a grey shiny solid. Because it conducts electricity very well it is used to make electrical products, including batteries. Silver also reflects light extremely well and it is therefore used to make mirrors. It is also used in jewellery.

#### Gold

Gold is a golden shiny solid. It is also used to make jewellery because it does not tarnish and it does not corrode. Gold is also used in electronics because electricity flows through it very well.

#### Aluminium

Aluminium is a grey shiny solid. Its properties make aluminium alloys ideal for making parts for aeroplanes and other vehicles. Aluminium is also used to make certain building materials, refrigerators, air conditioners and soft-drink cans. Because aluminium also conducts heat very well, it is often used to make pots and pans. Aluminium is also used to make electrical wires because it conducts electricity well.

#### Tin

Tin is a grey shiny solid. Because it melts easily, tin is used to make solder. Tin is also used to coat steel products to prevent them from rusting. Many food containers are made of steel that have been coated with a thin layer of tin. Tin is also used to make bronze and other alloys.

### The need for conserving metals

Metals are non-renewable resources and people are overexploiting them, that is, they are using them too fast. Thus, conservation of metal helps people manage them so that they are kept in good supply.

#### Recycling of metals

Recycled items are put through a process that makes it possible to create new products out of the materials from the old ones. Since metal ores are finite resources, there is a need to recycle metals like aluminium and copper. This helps to preserve the environment and it costs less to recycle than to extract.