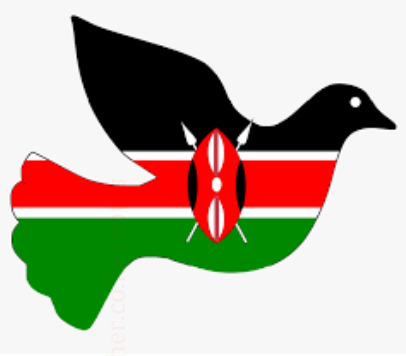


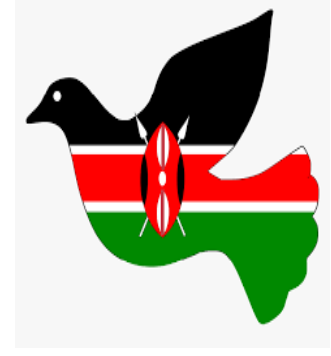
REFERENCE

BASE



CURRICULUM

Grade 8



PRETECHNICAL

1. Mention Care and maintenance of drawing instruments and equipments

- a) Clean them well after use
- b) Avoid dropping the instruments or equipment. This prevents them from cracking and breaking.
- c) Sharpen pencils when necessary. Do not press the pencil lead on a hard surface when sharpening.
- d) Use each instrument or equipment for its intended purpose. E.g. measuring tools should be used for measuring.
- e) Always store the instruments and equipment safely when they are not in use

2. What are the Uses of drawing instruments and equipments in various careers

Architects.

Use different drawing instruments to design good buildings.

Interior designers.

Use drawing instruments and skills to help people plan and decorate the spaces they live in.

Fashion designers.

Use drawing instruments to come up with creative ideas on how different outfits should be made. Most of the clothes we wear were design by somebody. Fashion designers work closely with tailors.

Tailors.

Use drawing instruments to draw designs of clothes before they are made.

Illustrators.





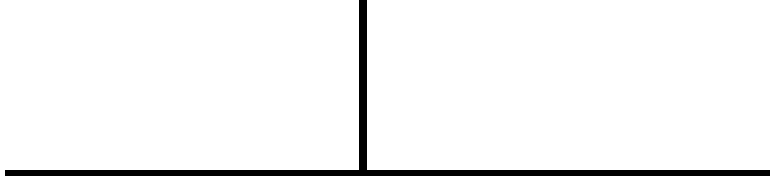


Draw pictures both in hard copies and in digital form. Most of the pictures in textbooks were drawn by illustrators.



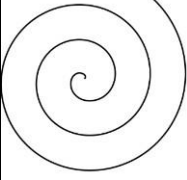

Carpenters.

Draw furniture before making them

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3. Mention the following types of lines used in free hand sketching

Type of line	
Horizontal	
Vertical	
Diagonal	
Parallel	
Perpendicular	
Thick and thin	
Curved	

Zigzag	
Wavy	
Spiral	
Dotted	



ENERGY RESOURCES

4. What is energy?
Energy is the ability to do work.

5. **Mention some uses of Energy.**

- a) Energy used by human beings to do work comes from food eaten.
- b) Energy used by animals to carry out their activities comes from the food they eat.
- c) Energy for drying things under the sun comes from the sun.
- d) Energy used by electrical appliances comes from electricity.
- e) Energy people use to warm themselves comes from burning fuels.
- f) Energy that blows away the chaff from the grains comes from wind.

6. **State Sources of Energy in your locality**

- a) Food.
- b) Sun.
- c) Electricity.
- d) Coal.
- e) Wood.
- f) Wind.
- g) Fuels such as petroleum and diesel.
- h) Water.

7. **Mention some of the Renewable sources of energy.**

- a) **Wind power**-power of fast-moving wind turns windmills to generate electricity.
- b) **Solar power**-energy from the sun heats the solar cells to generate electricity and heat.
- c) **Hydro power**- power of fast-moving water turns turbines to generate electricity.
- d) **Biomass**-generates electricity from organic plant matter.
- e) **Geothermal power**-heat from inside the earth produces pressure which turns turbines to generate electricity.

8. **Name Non-renewable sources of energy.**

- a) **Petroleum products.**
- b) **Coal.**
- c) **Natural gas.**
- d) **Nuclear energy.**

9. **Mention Advantage and disadvantages of Renewable energy in the table below**

	Advantages	Disadvantages
1	Renewable energy such as sunshine, wind, geothermal and hydropower does not run out. They are Inexhaustible.	Technologies are typically more expensive to install than traditional energy generators.

2	Maintenance requirements are lower for renewable sources of energy. Equipment such as solar and turbines requires overall less maintenance than generators.	Many of the renewable energy resources are reliant on weather elements which may not be available throughout.
3	Renewable sources save money, when using technology that generates power from the sun, wind, steam and water, one does not have to pay to refuel.	High cost of storing using batteries and capacitors.
4	Renewable sources of energy do not pollute the air.	

10. State Advantage and disadvantages of Non-renewable energy

	Advantages	Disadvantages
1	Non-renewable are higher in energy intensity than renewable sources. Coal and petrol burn more fiercely	Non-renewable sources are exhaustible for example, firewood be depleted
2	Non-renewable energy sources are readily available, wood energy is easy to find.	Non-renewable energy pollutes the environment for example, diesel produces smoke.
3	Most of the non-renewable sources of energy are also very easy to store for example, kerosene can be stored in a container.	It is expensive to install and distribute, it is expensive to install oil pipeline and distribute to different places.

11. Mention Careers related to sources of energy.

- Engineering.
- Electrical technician.
- Merchandisers of energy equipment and appliances.
- Trainers.

12. State the Importance of Energy.

- Energy sector creates employment opportunities.
- It enables people to get information through radios, watch television and other forms of entertainments using electronic devices.
- It enhances convenience in performing tasks.
- Energy enables people to do different forms of work.

13. Mention the Forms of energy.

- Wind energy from wind.*
- Solar energy from the sun.*
- Chemical energy from biomass and petroleum products.*
- Electrical energy comes from electric cells or batteries, hydropower, wind power. Solar*

- power and geothermal.*
- e) *Thermal or heat energy from hot objects.*
 - f) *Mechanical energy from moving objects.*

14. State whether the forms of energy below are either kinetic or potential.

- a) **Mechanical energy**- *can be either potential or kinetic.*
- b) **Electrical energy** -*is kinetic.*
- c) **Heat energy** -*can be either potential or kinetic.*
- d) **Chemical energy**- *is potential.*
- e) **Wind energy**- *is kinetic.*
- f) **Sound energy**- *is kinetic.*
- g) **Light energy**- *is kinetic.*

15. State the Uses of the different forms of energy in different sectors.

a.) **Domestic.**

- ✓ For cooking needs.
- ✓ Electricity is used for all electrical appliances.

b.) **Transportation.**

- ✓ Diesel, petrol and jet fuel are used to run transport machines such as cars, motor cycles, lorries, airplanes among others.

c.) **Commercial.**

- ✓ Electrical energy is need for office and communication equipment, appliances among other commercial activities.

d.) **Industrial.**

- ✓ Electrical energy, biomass and diesel is also used to run industrial machines.

16. What is the Role of Energy?

- ✓ Carrying out tasks at home.
- ✓ Performing transportation activities.
- ✓ Performing commercial activities.
- ✓ Running industrial activities.

17. State the Careers that require the use of energy.

career	Use of energy
Welding	Welders use electric energy to operate machines when repairing and Manufacturing metallic items such as furniture and tools.
Electrical engineering	An electrician installs and repairs electrical installations in factories, homes and businesses.
Electronic engineering	An electronic technician installs and repairs electronic equipment such as radios, television sets and fridges among others.

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