# FFC MODEL SCHOOL

# General Science

# Class 4

# Final Term Syllabus

**Name** _____

**SUBJECT TEACHER: -**

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## FFC MODEL SCHOOL GOTH MACHHI

## (Unit-5 to 10)

## CLASS: IV ( P, D, S) SUBJECT: G-SCIENCE

## MCQS

## Unit 5: Environment

**Tick ( ) the correct option.**

1. **Diversity means _____?**
   a. Protection b. differences c. competition d. desert

2. **Humans visit other habitats to _____.**
   a. Find food b. find air c. find shelter d. find sunlight

3. **If people who lived before us had cut down trees, the result would be:**
   a. No fresh air to breathe.
   b. No place for birds to live.
   c. No enough wood to build houses.
   d. All of the above.

4. **Conservation means:**
   a. Polluting air b. polluting water c. protecting environment d. minerals

5. **Which is a natural resources ?**
   a. Sunlight b. electricity c. medicines d. plastic

6. **Which is not a natural resources?**
   a. Water b. electricity c. wind d. gas

7. **Which natural resource is used to make clothes?**
   a. Water b. coal c. trees and plants d. wood

8. **Plants need _____ to grow.**
   a. Water b. minerals c. sunlight d. all of them

9. **Which one of the following is a renewable energy resource?**
   a. Coal b. oil c. The sun d. gas

**10. Coal, oil and gas are _____ energy resources.**

a. renewable b. non-renewable c. man-made d. none of them

## Unit 6: Matter and Materials

**Tick ( ) the correct option.**

**1. Which state of matter doesn't have colour or shape but may have smell?**

a. Solid
b. Material
c. Gas
d. Solid and gas

**2. Which state(s) of matter is/are able to flow?**

a. Solid and liquid
b. Liquid and gas
c. Gas
d. Liquid

**3. The tiniest form of matter is known as:**

a. An electron
b. An atom
c. A molecule
d. A nucleus

**4. The nucleus of an atom contains:**

a. Electrons and protons
b. Liquids and gases
c. Matter and material
d. Protons and neutrons

**5. Where in the atom is the nucleus located?**

a. The top
b. The center
c. The right
d. The left

**6. A water molecule is made up of:**

a. Two hydrogen and two oxygen atoms
b. One hydrogen and one oxygen atom
c. One hydrogen and two oxygen atoms
d. Two hydrogen and one oxygen atom

**7. Particles in a liquid have _____ to move around.**

a. No room

b. Space
c. Material
d. No molecules

8. **Why are solids not able to change their shape?**
   a. Their particles can move freely.
   b. Their particles are packed tightly together.
   c. Their particles are packed loosely together.
   d. Their particles have a lot of space.
9. **How does an ice cube change to water?**
   a. Heating
   b. Boiling
   c. Stirring
   d. Cooling
10. **A solution is a mixture in which solid material _____ in liquid.**
   a. Separate b. dissolve c. do not dissolve d. mixture

## Unit 7: Heat, Light and Sound

**Tick ( ) the correct option.**

1. **A thermometer measures:**
   a. Sound
   b. Light
   c. Electricity
   d. Temperature
2. **Which of these is not a scale to measure temperature?**
   a. Newton
   b. Celsius
   c. Kelvin
   d. Fahrenheit
3. **Water boils at _____ on the Celsius scale.**
   a. 50
   b. 100
   c. 150
   d. 200
4. **Why does the mercury rise in the thermometer?**
   a. The molecules become totally free.

b. The molecules start to create space.
c. The molecules are packed together.
d. None of the above

**5. Which of the following are needed to form a shadow?**

a. A light source, a translucent object and a background.
b. A light source and a background.
c. A translucent and an opaque object
d. A light source, an opaque object, and a background.

**6. Shadows cause eclipses which are formed by:**

a. Transparent objects
b. Translucent objects
c. Opaque objects
d. All of the above

**7. Sound waves are measured by their :**

a. Energy
b. Temperature
c. Length
d. Weight

**8. Sound travels fastest through:**

a. Solids
b. Crests
c. Gases
d. Vibrations

**9. Sound intensity is measured on the :**

a. Kelvin scale
b. Fahrenheit scale
c. Decibel scale
d. Celsius scale

**10. Which of the following is the unit of sound frequency?**

a. Decibels
b. Hertz
c. Kilograms
**d.** Degree

## Unit : 8 force, tools and machines

1. **Boats are able to float in water due to :**
   a. Friction b. air resistance c. buoyancy d. gravity
2. **_____ has the most powerful force of gravity.**
   a. The sun b. the earth c. the moon d. the solar system
3. **Which surface provide greatest friction.**
   a. Glass b. marble c. tiles d. grass
4. **Air resistance works when :**
   a. Air speeds the object b. air slows the objects c. air twists the object
   d. Air moves the object.
5. **The arm of a lever is attached to a/an _____.**
   a. Machine b. load d. fulcrum d. effort
6. **Inclined planes are used to move objects:**
   a. Up and down stairs c. from a rough to a smoother level
   b. from lower to a higher level d. none of the above
7. **Which of the following is a wedge?**
   a. Knife b. wheelbarrow c. saw d. chisel
8. **Mark the statements that are not correct about a screw.**
   a. it is used to hold objects in plane b. it is used to cut objects
   c. It is used to lift objects d. It is a type of plane
9. **Which one of the following is an example of a wheel and axle?**
   a. a cricket bat b. a skateboard c. a pair of scissors d. an axe
10. **Inclined planes are useful for:**
    **a**. fixing an object b. easing the movement of the physically handicapped
    c. cutting cakes d. Growing crops

## Unit 9: Electricity and Magnetism

**Tick ( ) the correct option.**

1. **When does an electric current occur?**
   a. When electrons move between the molecules in opposite direction
   b. When electrons move between the atoms in the same direction
   c. When electrons move between molecules in different directions
   d. When electrons move between atoms in different directions

2. **Current travels along:**
    a. Strings
    b. Ropes
    c. Wires
    d. Poles
3. **Static electricity is produced when two objects rub together and electrons jump from one object to the other due to :**
    a. Current
    b. Resistance
    c. Friction
    **d.** Gravity
4. **Which of the following do not use electricity?**
    a. A car
    b. A candle
    c. A toaster
    d. A television
5. **Magnetism involves:**
    a. Forces
    b. Attraction
    c. Repulsion
    d. A,b and c
6. **The magnetic field is a /an _____ area around a magnet.**
    a. Wet
    b. Invisible
    c. Visible
    **d.** Colourful
7. **Magnetic fields are strongest around:**
    a. The entire magnet
    b. The center of a magnet
    c. A magnetic object
    d. The poles of a magnet
8. **The magnetic field becomes _____ when electricity is passed through a magnet.**
    a. Shorter
    b. Thinner
    c. Larger
    **d.** Weaker

9. **An advantage of electromagnetism is that :**
   a. magnetism is produced only when needed
   b. magnetism is produced all the time
   c. magnetism is produced in a large quantity
   d. magnetism is produced with strong currents.
10. **Which of the following do not use electromagnets?**
   a. Hair dryer
   b. Microwave
   c. Television
   d. Saucepan

## Unit 10: The Solar System

1. **A sphere is a solid _____:**
   a. Rectangle b. circle c. Triangle d. oval
2. **The revolving movement of the earth measures a _____**
   a. Day b. month c. year d. none of these
3. **The earth is continuously spinning on its: _____.**
   a. Axis b. Poles c. orbits d. all of these
4. **We get our _____ because of the way the earth tilts.**
   a. Weather b. seasons c. Rain d. storm
5. **During their _____ the earth' s poles get no sunlight.**
   a. Summer b. autumn c. winter d. spring
6. **Space is a _____:**
   a. Nebulae b. galaxy c. vacuum d. none of these
7. **A nebula is a cloud of dust and _____.**
   a. Solid b. liquid c. gas d. all of these
8. **Most of nebulae contain a lot of _____:**
   a. Hydrogen b. oxygen c. Carbon d. iron
9. **Our earth exists in a galaxy known as _____.**
   a. Black hole b. Milky Way c. ozone d. none of these
10. **There are _____ types of galaxies.**
   a. One b. two c. three d. four

**(Unit- 5 to 10)**

**Class: IV (P, D, S)** **Subjects: G-Science**

**Question Answers**

## Unit : 5 Environment

**Give short answers.**

**1. What is a habitat?**
**Ans : A habitat is a place where living things (plant or animal) lives.**

**2. What do all living things need to survive?**

**Ans : All living things need.**
**Food, water, shelter and a safe environment for young.**

**3. What is meant by diversity?**
**Ans : Diversity means differences .The more differences in a habitat the more types of animals and plants can live in it.**

**4. Why do humans visit other habitat?**
**Ans : Humans visit other habitats like river ,streams ,oceans to find food.**

**5. What is meant by conservation?**
**Ans: Conservation means to protect and manage the earth's natural resources for future generations.**

**6. What are natural resources?**
**Ans: Natural resources are things that are created naturally, without human help.**

**7. Into how many groups natural resources are divided?**
**Ans: Natural resources are divided into two groups.**
**1. Renewable 2. Non- renewable**

## Long Questions

**Q8. Select any three natural resources and explain how they are used?**

**Ans : some natural resources are explained below.**

1. **Water : Humans use water for**
   **Drinking, washing, transport.**
2. **Minerals: Humans use minerals for :**
   **Building, growing plants, energy resources, decoration.**
3. **Trees and plants: Humans use trees and plants for :**
   **Building , food , medicines , clothing ,decoration**

**Q2. What is the difference between renewable and non renewable resources? Give three examples of each type.**

1. **Renewable resources:**
   **These resources will not run out.**
   **Humans can use them as much as they like.**
   **Examples: wind, sun energy, trees and plants.**
2. **Non renewable resources:**
   **These resources can only be used once.**
   **Once they all are used, there will be no more of them.**
   **Examples: oil, coal, minerals.**

## Chapter 6: Matter and Materials

**Give short answers.**

1. **What are the three states of matter?**
   **Ans : The three states of matter are**
   **Solid, liquid, gas**

2. **Define atom?**
   **Ans : Atoms are tiny particles .All matter is made up of atoms.**

3. **What is an atom made up of?**
   **Ans: An atom has a nucleus .The nucleus has protons and neutrons. outside the nucleus electrons are present.**

4. **Draw a structure of an atom?**
   **Ans : (diagram) page 42**

5. **Define molecule?**
   **Ans : A molecule is made up of two or more atoms.**

6. **How can we change the states of a matter?**
   **Ans: We can do so by changing it temperature.**
   **Ice___heat _____ water _____heat_____steam**

7. **Why does an ice cube melt in your hand?**
   **Ans : This is because of the heat of our hands.**

8. **What are the types of mixtures?**
   **Ans : Mixtures are of two types.**
   **a. Solution b. suspension**

9. **Define suspension with one example?**
   **Ans : A mixture in which the materials separate from each other on standing.**
   **Example: soil in water.**

10. **Define solution with one example?**
    **Ans : A mixture in which the solid material dissolves in the liquid.**
    **They cannot be separated.**
    **Example: sugar in water.**

## Long questions

1. **Discuss and draw how particles packed within solid, liquid and gas are?**
   **Ans: Solid:**
   1. **It has a definite shape.**
   2. **It has a definite mass.**
   3. **It also has a volume.**
   4. **Particles are tightly packed.**
   5. **Example: book, pen, bed.**

   **Liquid:**
   1. **Liquid doesn't have a definite shape.**
   2. **It has a definite mass.**
   3. **It has a definite volume.**
   4. **It takes the shape of the container.**
   5. **Example: water, milk, blood.**

   **Gas:**
   1. **Gas does not have a definite shape.**

2. **It does not have a definite mass.**
3. **It does not have a definite volume.**
4. **Particles are separated with no regular movement.**
5. **Example: oxygen, carbon dioxide, air.**

**Draw diagrams from page 43**

## Chapter: 7 Heat, Light and sound

### Give short answers

1. **How is heat measured?**

**Ans : Heat is measured by a thermometer.**

2. **What three scales are used for measuring temperature?**

**Ans : The three scales are**
**Celsius**
**Fahrenheit**
**Kelvin**

3. **What is the boiling point of water on Celsius and Fahrenheit scales?**

**Ans : Water boils at 100 C and 212 F .**

4. **What is the freezing point of water on Celsius and Fahrenheit scales?**

**Ans : Water freezes at 0C and 32 F.**

5. **Which liquid is used in a thermometer?**

**Ans : Mercury .**

6. **How did two main scales for measuring temperature get their names?**

**Ans : The Celsius scale is named after a scientist called Anders Celsius. The Fahrenheit scale is named after a scientist called Daniel Gabriel Fahrenheit.**

7. **When is Kelvin scale used?**

**Ans: It is used to measure extremely cold and hot temperatures.**

8. **How is a shadow formed?**

**Ans : A shadow is formed when light is blocked by an object.**

9. **Why do opaque objects form a clear shadow?**

**Ans : This is because light cannot pass through them. Example human, chair.**

**10. How is sound measured?**

**Ans : The sound is measured in decibels.**

**11. What is meant by frequency of sound?**

**Ans. Frequency is number of waves produced in a second.**

**12. How is frequency measured?**

**Ans : Frequency is measured in units called Hertz.**

**13. How does an eclipse take place?**

**Ans : when the sun, the moon and the earth come in straight line ,an eclipse takes place.**

**LONG QUESTIONS**

1. **What determines the size and position of shadow?**

   **Ans : The size and position of the shadow change according to the light source .**

   a. **If an object is closer to the light source, the shadow gets bigger.**
   b. **If an object is moved away from the light source, the shadow gets smaller.**

2. **How does a thermometer work? Draw a diagram to explain your answer?**

   **Ans: Inside the glass of the thermometer a liquid mercury is present.**
   **When the liquid is cold, its molecules stay close together and near to the bottom .**
   **When the temperature increases , the moelcules of the liquid move up to the thermometer.**
   **The hotter the temperature ,the higher the liquid travels up the tubes.**

## CHAPTER: 8 FORCE, TOOLS AND MACHINES

## Short questions:

1. **What is force?**
   **Ans : A force is push or pull. It makes things move.**

2. **What is buoyancy?**
   **Ans: It is an upward force that works in water.**

3. **Why do some things sink?**
   **Ans: Some things sink because their weight is more than the total weight of the water.**

4. **Why do some things float?**
   **Ans : Objects float because of buoyancy.**

5. **What is gravity?**
   **Ans : Gravity is a force that pulls every thing towards the earth.**

6. **Why is it difficult to walk on a slippery floor?**
   **Ans : This is due to less friction.**
7. **What is a lever?**
   **Ans :A lever is a simple machine that can lift objects with little effort.**

8. **What is inclined plane?**
   **Ans: An inclined plane is a flat surface that joins one level with a higher level.**

9. **What is wedge? Explain with the help of example?**
   **Ans :A wedge is two inclined planes joined together. It is used to split or cut things apart. Examples are chisel and axe.**

10. **What type of simple machine is the door knob?**
    **Ans : A door knob is a wheel and axle.**
    **Knob= wheel rest part= axle**

11. **Have you ever seen a crane lift a heavy load? What simple machine it is based on?**
    **Ans: A crane is a type of pulley.**

## Long questions

**Q1. What is friction? Give two examples from daily life of how friction helps us.**
**Ans : Friction :**
**It is a force which slows down or stops the objects from moving.**
**Examples:**

a. **Friction appears when brake pads on a bike rub against the tyre to slow or stop the bike.**
b. **A cricket ball rolls along grass and slowly stops due to friction.**

**Q2. What is air resistance? Give two examples from daily life where its effect is used?**
**Ans : Air resistance:**
**It is a force which slows down the objects moving through air.**
**Examples:**
a. **It is harder to walk with the wind coming towards us due to air resistance.**
b. **A parachutist falls slowly due to air friction.**

## Chapter: 9 Electricity and Magnetism

**Give short answer.**

1. **How is electricity created?**
   **Ans: It is created by the movement of electrons.**

2. **What is static electricity? How it is produced.**
   **Ans : The electricity that stays at one place. It is produced by rubbing two objects together.**

3. **What is speed of electricity?**
   **Ans: Electricity travels at the speed of light which is 299,792meters per second.**

4. **Which animal produces electricity naturally?**
   **Ans : Electric eel produces electricity naturally.**

5. **What is magnetic field?**
   **Ans : It is an invisible area around a magnet .it also has a magnetic power.**

6. **Where are magnetic fields stronger?**
   **Ans : Around the poles.**

7. **When does the magnetic field of an electromagnet get smaller or larger?**

**Ans : When the electricity is passing ,the magnetic field becomes larger.**
**When the electricity is not passing, the magnetic field becomes smaller.**

8. **What is the main benefit of electromagnets?**
   **Ans : Power is only generated when it is needed.**

9. **Make a list of electrical items in our schools and houses?**
   **Ans : fans , lights , heaters , ACs , fridge ,computers etc**

## Long Question

1. **What are electromagnets? What are their advantages?**
   **Ans : Electromagnets :**
   **These magnets work through a combination of electricity and magnetism.**
   **Advantages:**
   **When the current is passing, the magnet works.**
   **When the current is not passing, the magnet stops working.**
   **Power is only generated when it is needed.**
   **(daigram)**

## Chapter: 10 The Solar System

### Short questions:

**1. What is the shape of earth?**
**Ans: Our earth is sphere in shape.**

2. **In how much time the earth orbits around the sun?**
**Ans : It takes the earth 365 days, 48 minutes and 46 seconds to orbit around the sun.**
3. **What is the axis of the earth?**
**Ans : It is an imaginary line passing through the NORTH and SOUTH poles.**

4. **How do day and night occur?**
**Ans : The spinning movement of the earth gives us night and day.**

5. **Why do people near the equator spin the fastest?**
**Ans : This is because of the earth's shape and its spinning movement.**

6. **What is called a vacuum?**
**Ans : A vacuum is an area that contains no matter.**

7. **Can we see nebulae from earth?**
**Ans: No, because they don't give out light.**

8. **Name the types of galaxies?**
**Ans : Three types of galaxies are**
   a. **Spiral galaxies**
   b. **Elliptical galaxies**
   c. **Irregular galaxies**

**9. In which galaxy does our earth exist?**

**Ans : Our earth exists in galaxy known as the Milky Way.**

## LONG QUESTIONS

**Q1. How are the seasons caused? Explain with the help of a diagram.**

**Ans : When the earth tilts on its axis, some parts of the earth are closer to the sun at certain times of the year, and further away at other times of the year.**

**This is how we get the seasons.**

**(Diagram is included)**

**Q2. Write short notes on**

**A. Space :**

**Space is the area in which planets, stars, moons and other bodies are present. Space is a vacuum. It also has dust and gases.**

**B. Nebulae:**

**A nebula is a cloud of dust in space. Most of them contain a lot of hydrogen gas. Some nebulae are died stars. They don't give their own light.**

**C. Galaxies:**

**These are huge areas of space that contain stars, planets, dust and gas. There are three types of galaxies**

**a. Spiral galaxies b. elliptical galaxies c. irregular galaxies**

**Our earth and solar system are present in a galaxy known as the MILKY WAY.**