



Government of Karnataka

*Details of the class-wise learning concepts which are skipped for
the academic year 2020-21, in view of the Covid-19 situation
(Academic calendar for 120 Teaching periods)*

Class : 6 to 10

Subject : Science

Medium : English

TEACHERS' MANUAL

KARNATAKA TEXT BOOK SOCIETY (R.)

**100 Feet Rind Road, Banashankari 3rd Stage,
Bengaluru – 560 085.**

Foreword

The following points are taken into consideration while identifying the learning concepts in the CBSE Science textbooks from class 6 to 10 which are to be skipped for the year 2020-2021, consequent to the reduction in the number of school working days and periods available for teaching due to Covid-19.

- The probable situations have been envisaged while deciding the number of available teaching periods of Science from class 6 to 10 - schools reopening on August 1st and September 1st 2020.
- Accordingly, available teaching periods have been reduced to 140 and 120 respectively.
- Without any reduction in the syllabus, it is proposed to skip such concepts which have been learnt in the previous classes or will be learnt in the higher classes.
- Classwise learning concepts and the number of activities which are to be skipped or given .
- It is proposed to give some activities as home assignments that are to be carried out using easily available resources under proper guidance of teachers/parents.
- Care has been taken to see that no part of the syllabus is skipped.
- The state syllabus science textbooks are also taken into consideration in the reduction of learning concepts as the students of class 9 and 10 in the academic year 2020 -21 had studied state syllabus science in some classes from 6 to 8.
- Science syllabus emphasizes on spiral approach. In this view, care has been taken to see that there is continuity in learning of concepts and to check learning gaps in higher classes.

-Resource Team

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Note to the Teachers

Based on the available schooling days / teaching periods in the academic year 2020-21, some learning concepts are skipped in CBSE science text books of class 6 to 10. It has been done in 2 scenarios – 140 and 120 schooling days. While adapting any scenario, teachers should understand the following factors.

- The learning concepts in science of class 6 to 10 are widened in a spiral form.
- Classwise learning concepts and the number of activities which are to be skipped are given.
- Teachers should take care to check learning gaps while skipping the learning concepts / activities.
- Continuous learning is possible as the learning concepts which are repeated and reinforced in higher classes are skipped.
- Some of the skipped activities can be given as home assignments. Teacher has to give guidance to the students to carry out these activities under the supervision of the parents.
- Teacher has to take precautionary measures to avoid any danger to the students while performing the activities that are given as home assignments by using available resources.
- The skipped learning concepts should not be considered for the assessment.
- The teacher has to work as a facilitator to help the students to learn maximum learning concepts in the limited schooling days available in the academic year 2020-21.

- Resource Team

Class : VI SUBJECT: SCIENCE
Academic Calendar: 1stSEPTEMBER 2020 TO MARCH 31st2021 -120 periods

Sl. No	Chapter Wise Learning Concepts	Available Periods From June	Reduced Periods	Available Periods	Learning Points To Be Skipped and Justification
1	1. Food: Where does it come from?	9	0	9	-
2	2. Components of food 2.1 What do different food items contain? 2.2 What do various nutrients do for our body? 2.3 Balanced diet 2.4 Deficiency diseases	10	2	8	Concept 2.4 - it will be studied in chapter13 (Why do we fall ill?) of Class IX.
3	3. Fibre to fabric 3.1 Variety in fabrics 3.2 Fibre 3.3 Some plant fibres 3.4 Spinning cotton yarn 3.5 Yarn to fabric 3.6 History of clothing material	8	3	5	Activities1,2,3,4,5- given as home assignments with guidance to carryout using available resources.
4	4. Sorting Materials into groups 4.1 Objects around us 4.2 Properties of Materials	10	4	6	Activities 1,2,3,4,5 -Given as home assignment. - Concept 4.2. - It will be studied in Chapter 10 (Gravitation) of Class IX. 10.5.2 (Buoyancy)
5	5. Separation of substances 5.1 Methods of separation	10	5	5	Concepts along with related activities - Sedimentation, Decantation and Filtration, Evaporation, Use of more than one method of separation, Can water dissolve any amount of substance?

					These concepts will be studied Chapter-1 (Matter in our surroundings) and Chapter -2 (Is matter around us pure?) of class IX
6	6. Changes around us 6.1 Can All changes always be reversed? 6.2 Could there be other ways to bring a change?	8	4	4	Activities 1.2.3.4.5.6. - given as home assignment.
7	7. Getting to know plants 7.1 herbs, shrubs and trees 7.2 stem 7.3 leaf 7.4 root 7.5 flower	14	6	8	Concept 7.5 and related activities - it will be studied in Chapter-1 (Nutrition in plants)of Class-VII.
8	8. Body movements 8.1 Human body and its movements 8.2 “Gait of Animals”	12	2	10	Activities 7 and 8 are suggested to be given as home assignment
9	9. The Living organisms- Characteristics and Habitats 9.1 Organisms and the surroundings where they live 9.2 Habitat and adaptation 9.3 A journey through different habitats 9.4 Characteristics of organisms	14	4	10	Concepts 9.3 and 9.4 - it will be studied in the chapter-6 (Conservation of plants and animals) of class VIII.
10	10. Motion and Measurement of Distances 10.1 Story of Transport 10.2 How wide is this desk? 10.3 Some Measurements 10.4 Standard units of measurements 10.5 Correct measurement of Length 10.6 Measuring the length of a curved line 10.7 Moving things around us 10.8 Types of Motion	14	7	7	Concepts 10.7 and 10.8 These will be studied in chapter 13 (Motion and time) of class VII.

11	11. Light, Shadows and Reflections 11.1 Transparent, Opaque and Translucent Objects. 11.2 What exactly are shadows? 11.3 A Pinhole Camera 11.4 Mirrors and Reflections	15	7	8	Concept 11.4 This will be studied in chapter - 16 (Light) of class VIII.
12	12 Electricity and Circuits 12.1 Electric Cell 12.2 A bulb connected to an electric cell 12.3 An Electric Circuit 12.4 Electric Switch 12.5 Electric Conductors and Insulators	14	7	7	The activities related to the concepts 12.4 and 12.5 –given as home assignment.
13	13 Fun with Magnets 13.1 Magnetic and Nonmagnetic materials 13.2 Poles of Magnet 13.3 Finding Directions 13.4 Make your own magnet 13.5 Attraction and Repulsion between magnets	14	4	10	Activities 1,2,3,4 and 5 - given as home assignment.
14	14. Water 14.1 How much water do we use? 14.2 Where do we get water from? 14.3 Water cycle 14.4 Back to the oceans 14.5 What is if it rains heavily 14.6 What happens if it does not rain for a long period? 14.7 How can we conserve water? 14.8 Rainwater harvesting	10	5	5	Activity -1 - given as home assignment Concept : 14.2 and 14.3 - These were already studied in class - V lesson -7 (Water) and will be studied in Chapter 1 (Matter in our surroundings) and Chapter 14 (Natural resources) of class IX .
15	15. Air around us	9	0	9	-
16	16.Garbage in, Garbage out	9	0	9	-
	Total	180	60	120	

Class : VII : Subject : Science**Academic Calendar: 1st SEPTEMBER 2020 TO MARCH 31st 2021 -120 periods**

Sl. No.	Chapter Wise Learning Concepts	Available Periods From June	Reduced Periods	Available Periods	Learning Points To Be Skipped and Justification
1	1 Nutrition in plants 1.1 Mode of nutrition in plants 1.2 Photosynthesis: food making process in plants 1.3 Other modes of nutrition in plants 1.4 Saprotrophs 1.5 How nutrients are replenished in the soil	10	5	5	Concepts 1.2 and 1.3 - These will be studied in the Chapter-6 (Life processes) of Class X.
2	2 Nutrition in animals 2.1 Different ways of taking food 2.2 Digestion in humans 2.3 Digestion in grass-eating animals 2.4 Feeding and digestion in amoeba	10	5	5	Concepts 2.2, 2.3 and 2.4 - these will be studied in the Chapter-6 (Life processes) of Class X.
3	3 Fibre to Fabric 3.1 Wool 3.2 Silk	10	3	7	Activity 3.2, 3.3, 3.6, 3.7 -given as home assignment with suitable changes.
4	4 Heat 4.1 Hot and Cold 4.2 Measuring Temperature 4.3 Laboratory Thermometer 4.4 Transfer of Heat 4.5 Kinds of clothes we wear in Summer and Winter	10	4	6	Activities 4.3, 4.4 and 4.5. - given as home assignment Concept 4.5 – given as home assignment for self learning
5	5 Acids Bases and Salts 5.1 Acids and Bases 5.2 Natural indicators around us 5.3 Neutralisation 5.4 Neutralisation in everyday life	8	8	0	Entire chapter is skipped This will be studied in chapter-2 (Acids bases and salts) of class X.

6	6 Physical and Chemical Changes 6.1 Physical Changes 6.2 Chemical Changes 6.3 Rusting of iron 6.4 Crystallisation.	8	3	5	Activities 6.1, 6.2, 6.3, 6.4, 6.8, are given as home assignment. Concept 6.4 as it will be studied in Chapter-2 (Is matter around is pure?) of Class IX.
7	7. Weather climate and adaptations of Animals to Climate 7.1 Weather 7.2 Climate 7.3 Climate and Adaptation	10	3	7	Activities 7.1 and 7.2 and Fig 7.3 - given as home assignment.
8	8. Winds, Storms and Cyclones 8.1 Air exerts pressure 8.2 High speed winds are accompanied by reduced Air Pressure 8.3 Air expands on heating 8.4 Wind currents are generated due to uneven heating of the Earth 8.5 Thunderstorms and Cyclones 8.6 Destruction caused by Cyclones 8.7 Effective safety measures 8.8 Advanced Technology has helped	10	4	6	Activities - 8.1, 8.2, 8.3, 8.4 8.5 and 8.6 - given as Home Assignment.
9	9 Soil 9.1 Soil teeming with life 9.2 Soil profile. 9.3 Soil types 9.4 Properties of soil 9.5 Moisture in soil 9.6 Absorption of water by soil 9.7 Soil and crops	7	3	4	Concepts 9.5, 9.6 and 9.7 - these will be studied in Chapter 1 (Crop production and management) of Class VIII.
10	10 Respiration in organisms 10.1 Why do we respire? 10.2 Breathing 10.3 How do we breath? 10.4 What do we breath out?	12	3	9	Concepts 10.5, 10.6 and 10.7 - these will be studied in Chapter-6 (Life processes) of Class X.

	10.5 Breathing in other animals 10.6 Breathing under water 10.7 Do plants also Respire?				
11	11 Transportation in animals and plants 11.1 circulatory system 11.2 excretion in animals 11.3 transport of substances in plants	8	4	4	Concepts 11.2 and 11.3 - these will be studied in Chapter-6 (Life processes) of Class X.
12	12 Reproduction in plants 12.1 Mode of reproduction 12.2 Sexual reproduction 12.3 Fruits and seed formation 12.4 Seed dispersal	12	4	8	Concepts 12.2, 12.3, and 12.4 - these will be studied in Chapter-8 (How do organisms reproduce) of Class X.
13	13 Motion and Time 13.1 Slow or Fast 13.2 Speed 13.3 Measurement of Time 13.4 Measuring Speed 13.5 Distance Time Graph	12	4	8	Along with 13.2 and 13.3 activities, Numerical (Table 13.4) and 13.5 - These will be studied in chapter 8 (Motion) of class IX.
14	14 Electric Current and its effects	14	0	14	-
15	15 Light 15.1 Light travels along a straight line 15.2 Reflection of Light 15.3 Right or Left 15.4 Playing with Spherical Mirrors 15.5 Images formed by Lenses 15.6 Sunlight - White or Coloured ?	12	5	7	Concepts 15.4 15.5 and 15.6 - These will be studied in chapter (Light - Reflection and Refraction) of class VIII and X.
16	16 Water: A precious resource 16.1 How much water is available 16.2 Forms of water 16.3 Groundwater as an important source of water 16.4 Depletion of water table 16.5 Distribution of water 16.6 Water management 16.7 What role you can play	10	2	8	Activities 16.1, 16.2, 16.3 - given as home assignment.

	16.8 Effects of water scarcity on plants.				
17	17 Forests : Our life time	8	0	8	
18	18 Wastewater story	9	0	9	
	Total	180	60	120	

Class : VIII : Subject : Science**Academic Calendar: 1st SEPTEMBER 2020 TO MARCH 31st2021 -120 periods**

Sl. No.	Chapter Wise Learning Concepts	Available Periods From June	Reduced Periods	Available Periods	Learning Points To Be Skipped and Justification
1	1. Crop production and management	12	0	12	-
2	2. Microorganisms: Friends and Foe	10	0	10	-
3	3 Synthetic fibres and plastics 3.1 What are synthetic fibres? 3.2 Types of synthetic fibres and Plastics 3.3 Characteristics of synthetic fibres and Plastics 3.4 Plastics 3.5 Plastics as materials of choice 3.6 Plastics and the environment	11	2	9	Concept 3.6 It will be studied in Chapter-15 (Our environment) of Class X.
4	4. Materials: Metals and Non-metals	12	12	0	Entire Chapter is skipped. This will be studied in the Chapter-3 (Metals and non-metals) of class X.
5	5. Coal and Petroleum 5.1 Coal 5.2 Petroleum, 5.3 Natural gas 5.4 Some natural resources are limited	8	3	5	Concepts 5.1 and 5.2 are already studied in class 5 and will be studied in the chapter 14 (Sources of energy) of class X
6	6. Conservation of plants and animals	8	0	8	-
7	7. Force and Pressure 7.1 Force - A Push or a Pull 7.2 Forces are due to an Interaction 7.3 Exploring forces 7.4 A force can change the state of motion 7.5 Force can change the shape of an object 7.6 Contact Forces 7.7 Non-contact Forces	12	5	7	Table 7.1 and Activities 7.6 to 7.10 are to be given as home assignment.

	7.8 Pressure 7.9 Pressure exerted by Liquids and Gases 7.10 Atmospheric Pressure				
8	8.Friction 8.1 Force of Friction 8.2 Factors affecting Friction 8.3 Friction : A necessary evil 8.4 Increasing and Reducing Friction 8.5 Wheels reduce Friction 8.6 Fluid Friction	8	3	5	Activities 8.1 to 8.4 to be given as home assignment.
9	9.Sound 9.1 Sound is produced by a Vibrating Body 9.2 Sound produced by Humans 9.3 Sound needs a medium for propagation 9.4 We hear sound through our ears 9.5 Amplitude, Time period and Frequency of a Vibration 9.6 Audible and inaudible sounds 9.7 Noise and Music 9.8 Noise Pollution	12	3	9	Activities 9.1, 9.2, 9.3, 9.4, 9.5 and 9.6 to be given as home assignment.
10	10. Combustion and Flame 10.1 What is Combustion? 10.2 How Do We Control Fire? 10.3 Types of Combustion 10.4 Flame 10.5 Structure of a Flame 10.6 What is a Fuel? 10.7 Fuel Efficiency	12	4	8	Activities 10.1, 10.2 are given as home assignment. Concept 10.1 to 10.4 will be studied in the chapter-18 of class 8 and chapter 4 (Carbon and its compounds) and chapter 15 (Our Environment).
11	11. Cell: Structure and Function	10	10	0	Entire chapter is skipped This will be studied in chapter 5 (Fundamental unit of life) of class IX
12	12. Reproduction in animals 12.1 Modes of reproduction	8	2	6	Concept 12.2 will be studied in chapter 8 (How do organisms reproduce) of Class X

	12.2 Sexual reproduction 12.3 Asexual reproduction				
13	13. Reaching the age of Adolescence 13.1 Adolescence and Puberty 13.2 Changes at Puberty Increase in Height 13.3 Secondary Sexual Characters 13.4 Role of Hormones in Initiating Reproductive Function 13.5 Reproductive Phase of Life in Humans 13.6 How is the Sex of the Baby Determined? 13.7 Hormones other than Sex Hormones 13.8 Role of Hormones in Completing the Life History of Insects and Frogs 13.9 Reproductive Health	8	2	6	Concept 13.9 will be studied in chapter 8 (How do organisms reproduce ?) of Class X
14	14. Chemical Effects of electric Current 14.1 Do liquids conduct electricity 14.2 Chemical Effect of electric current 14.3 Electroplating	8	3	5	Activities 14.1, 14.2 and 14.3 - given as home assignment. Concept 14.3 will be discussed in class 10 (Metals and Non -metals).
15	15. Some Natural Phenomena 15.1 Lightning 15.2 Charging by Rubbing 15.3 Types of charges and their Interaction 15.4 Transfer of Charge 15.5 The story of Lightning 15.6 Lightning Safety 15.7 Earthquakes	10	3	7	Activities from 15.1 to 15.5 are given as home assignment.
16	16 Light 16.1 What makes things visible? 16.2 Laws of Reflection 16.3 Regular and diffused reflection 16.4 Reflected Light can be Reflected again 16.5 Multiple Images	12	2	10	Concepts 16.2, 16.7 and 16.8 - given as home assignment, as students will discuss them in class 10 again (Chapter 10 Light - Reflection and Refraction)

	<p>16.6 sunlight-White or coloured 16.7 What is inside our eyes? 16.8 Care of the eyes 16.9 Visually impaired persons can read and write 16.10 What is the Braille System?</p>				
17	<p>17.Stars and The Solar system 17.1 The Moon 17.2 The stars 17.3 Constellations 17.4 The Solar System - Sun, Planets 17.5 Some other members of the Solar System</p>	11	4	7	<p>Activities 17.6 to 17.8 As students will not going to discuss Astrophysics in class 9 and 10.</p>
18	<p>18. Pollution of Air and Water 18.1 Air pollution 18.2 How does Air get polluted? 18.3 Case study-The Tajmahal 18.4 greenhouse effect 18.5 what can be done to reduce air pollution? 18.6 water pollution 18.7 how does water get polluted? 18.8 What is potable water and how is water purified? 18.9 What can be done to reduce water pollution?</p>	8	2	6	<p>Concepts 18.8 and 18.9 These concepts were already studied in chapter 18 (waste water story) of class VII.</p>
	Total	180	60	120	

Class: IX : Subject : Science**Academic Calendar: 1st SEPTEMBER 2020 TO MARCH 31st2021 -120 periods**

Sl. No.	Chapter Wise Learning Concepts	Available Periods From June	Reduced Periods	Available Periods	Learning Points To Be Skipped and Justification
1	1. Matter in our surroundings	12	12	0	Entire Chapter - This chapter is already studied in VIII - States of matter (ch 18) and VII std -unit 6 Properties of solids ,liquids and gases . VI - separation of substances V-Nature of matter.
2	2. Is matter around us pure 2.1 Types of mixture? 2.1.1 types of mixture and 2.2 What is a solution? 2.2.2 What is a suspension? 2.2.3 What is a colloidal solution?	12	2	10	Activity 2.1 , 2.2, 2.3, 2.7 - given as home assignments. Sub topics- 2.1 , 2.1.1 , 2.2 , 2.2.2 , 2.2.3. These are already studied in V-Unit-12 state syllabus (elements compounds and mixtures) VI state Unit 3: (Elements and compounds) unit 5 (separation of substances)
3	3. Atoms and molecules 3.1 Laws of chemical combination 3.2 What is an atom? 3.3 What is a molecule? 3.4 Writing chemical formulae 3.5 Molecular mass and mole concept	12	4	8	Concepts: :3.2,3.2.2, 3.2.3, 3.3, 3.3.1, 3.3.2,3.5.1 3.5.2 as these concepts are already studied in class VIII state curriculum (Ch 3 - Structure of Atom)
4	4. Structure of the atom 4.1 Charged particles in matter, 4.2: The Structure of as Atom 4.3 How are electrons distrubuted in different orbits(shells)?	9	3	6	Skip 4.1 Charged particles in the matter , 4.2, 4.2.1 Thomson's Model, 4.2.2 Rutherford's model of atom - as these concepts are studied in Ch-3 /4

	4.4 Valency 4.5 Atomic number and atomic mass 4.6 Isotopes				(Ch. 3 - Structure of Atom) (Ch. 4 Atoms and molecules) of class-VIII in state syllabus.
5	5. The fundamental unit of life	12	12	0	Entire chapter is skipped as it was studied in Chapter-5 (Study of cells) of class 8 of state syllabus.
6	6. Tissues	15	0	15	-
7	7. Diversity in living organisms	14	0	14	-
8	8. Motion 8.1 Describing Motion 8.2 Measuring the rate of Motion 8.3 Rate of change of velocity 8.4 Graphical representation of motion 8.5 Equations of motion by Graphical method 8.6 Uniform Circular Motion	12	4	8	The numerical with same concept and concepts on Graphical Representation (8.4 and 8.5) is skipped as students have learnt these concepts already in their 8th std. Here recapitulation has to be done.
9	9. Force and Laws of Motion 9.1 Balanced and unbalanced Forces 9.2 First Law of Motion 9.3 Inertia and Mass 9.4 Second Law of Motion 9.5 Third Law of Motion 9.6 Conservation of Momentum	12	5	7	As the students have already learnt these concepts (Force and laws of motion related) in their class 8. Here recapitulation can be done. No need to skip any sub units.
10	10. Gravitation 10.1 Gravitation - Universal Law of Gravitation-Importance of Law 10.2 Free Fall 10.3 Mass 10.4 Weight - weight of an object on moon 10.5 Thrust and Pressure	12	4	8	Activities 10.1, 10.2 and 10.3 are given as home assignment.

	10.6 Archimedes' Principle 10.7 Relative Density				
11	11.Work and Energy 11.1 Work-Scientific Conception-Work done 11.2 Energy 11.3 Rate of doing work-commercial unit of Energy	14	4	10	Activities 11.5 and 11.7 and some numerical problems based on same idea can be skipped.
12	12.Sound 12.1 Production of Sound 12.2 Propagation of 12.3 Reflection of Sound 12.4 Range of Hearing 12.5 Applications of Ultrasound 12.6 Structure of Human Ear	12	4	8	Activities 12.3 and get the activity 12.5 done as home assignment and some Numerical problems based on same idea can be skipped
13	13. Why do we fall ill 13.1 Health and its Failure 13.2 Disease and Its Causes 13.3 Infectious Diseases	12	4	8	Concepts 13.3.2 and 13.3.3 , these were already learnt in Chapter-7 (The world of microbes) of class 8 in state curriculum.
14	14. Natural resources 14.1The breath of life: Air 14.2 water: A wonder liquid 14.3 Mineral riches in the soil 14.4 Biogeochemical cycles 14.5 ozone layer	10	2	8	Concepts 14.2.1, and 14.5, 14.2.1 As it is learnt in Chapter-1 (Natural resources) of 8 th std. State curriculum, 14.5 will be studied in Chapter-14 (Sources of energy)of Class X
15	15. Improvement in food resources	10	0	10	-
		180	60	120	

Class : X : Subject : Science**Academic Calendar - 1st SEPTEMBER 2020 TO MARCH 31st2021 -120 periods**

Sl. No.	Chapter Wise Learning Concepts	Available Periods From June	Reduced Periods	Available Periods	Learning Points To Be Skipped and Justification
1	1. Chemical Reactions and Equations	10	10	0	Entire chapter is skipped - as it is already learnt in the chapter 8 (chemical reactions) and chapter 9 (Electrolysis) of class VII, and Chapter 11 (chemical reactions and their types) of class VIII
2	2. Acids, Bases and Salts 2.1 Chemical properties of acids and Bases. 2.2 Why do all acids and all bases have in common? 2.3 How strong are acid or base solutions? 2.4 More about salts	12	5	7	Activities: 2.1, 2.3, 2.4, 2.5, 2.6, sub topics: 2.1.1, 2.1.2, 2.1.3, 2.1.4. 2.2.1, 2.3.1, 2.4.3- These were studied in Chapter – 8 (Acids, Bases and Salts) of class VII in the state syllabus and concept on bleaching powder was studied in VIII state in chapter– 12
3	3. Metals and Non-metals : 3.1 Physical properties of metals 3.2 Chemical properties of metals 3.3 Reactions of metal and non-metals 3.4 Occurrence of metals 3.5 Corrosion	10	3	7	Concepts: 3.1, 3.1.1, 3.3.1 3.2.2, 3.2.4, 3.3, 3.3.1 Concepts: 3.1, 3.2, 3.3, 3.4, 3.4, 3.5, 3.6, 3.8, 3.11, 3.12, 3.13. These concepts were Studied in unit 4 (metals and non- metals) of class VI and chapter VII of class VII.
4	4. Carbon And Compounds 4.1 Covalent Bond and Allotropes of carbon 4.2 Versatile nature of carbon 4.3 Chemical properties of carbon compounds 4.4 Ethanol and Ethanoic acid 4.5 Soaps and detergents	15	5	10	4.1 It was already studied in unit 7 (chemical bonding) class VII. 4.4.2 (ii) and (iii) - studied in chapter -8 (Acids, Bases and salts) of Class VII state syllabus.

5	5. Periodic classification of elements : 5.1 Making order out of Chaos – 5.2 Making out of chaos Mendeleev’s periodic table 5.3 Making out of chaos Modern periodic table	8	2	6	5.1, 5.2, 5.3, 5.4, 5.5 Activities given as home assignment Concepts: 5.1.1, 5.1.2, As these are not mentioned in the NCERT syllabus.
6	6. Life Processes 6.1 What are life processes? 6.2 Nutrition 6.3 Respiration 6.4 Transportation 6.5 Excretion	14	9	5	Concepts 6.1, 6.2 and 6.3. - were studied in chapter – 19 (Life processes) of class VIII state syllabus.
7	7. Control and coordination	11	0	11	-
8	8. How do organisms Reproduce? 8.1 Do organisms create exact copies of themselves? 8.2 modes of reproduction used by single organisms 8.3 Sexual reproduction	11	3	8	Concept : 8.1 and 8.2, these were studied in chapter - Reproduction -1 part-2 of class VII state syllabus.
9	9. Heredity and evolution	13	0	13	-
10	10.Light-Reflection and Refraction 10.1 Reflection of Light 10.2 Spherical Mirrors 10.3 Refraction of Light	16	3	13	Activities 10.1 to 10.5 Chapter to be completed by getting done activities 10.6 to 10.9 as home assignment.
11	11.The human eye and the Colourful World 11.1 The human eye 11.2 Defects of vision and their correction 11.3 Refraction of light through a prism 11.4 Dispersion of White Light through a glass prism 11.5 Atmospheric Refraction 11.6 Scattering of Light	14	4	10	Dispersion of White Light by a glass prism (students have learnt this in class 8.) to be skipped.

12	12. Electricity 12.1 Electric current and Circuit 12.2 Electric Potential and Potential Difference 12.3 Circuit diagram 12.4 Ohm's Law 12.5 Factors on which the resistance of conductor depends 12.6 Resistance of a system of Resistors 12.7 Heating effect of electric current 12.8 Electric Power	16	4	12	Activities 12.2 and 12.4, and some numerical problems on same concepts can be skipped.
13	13.Magnetic Effects of Electric Current 13.1 Magnetic field and Field lines 13.2 Magnetic field due to a current carrying conductor 13.3 Force of a current 13.4 Electric Motor 13.5 Electromagnetic Induction 13.6 Electric Generator 13.7 Domestic electric circuits	10	3	7	Activities 13.1 to 13.5 are given as home assignment. Concept 13.7. is skipped.
14	14.Sources of Energy 14.1 What is a good source of energy? 14.2 Conventional sources of energy 14.3 Alternative and nonconventional sources of energy 14.4 Environmental consequences 14.5 How long will an energy source last us?	7	3	4	Activities 14.1 to 14.5 are given as home assignment. Concepts 14.4 and 14.5 ,as students have already learnt in class VIII chapter-1 (Natural resources)
15	15. Our Environment	6	6	0	Entire chapter is skipped - as it is already learnt in chapter- 2 (Our Environment) of class 8 in state curriculum
16	16. Sustainable management of Natural resources	7	0	7	-
	Total	180	60	120	