FORMAT FOR DESIGNING KPIs:

Annual pedagogical plan (APP) Term 1

CLASS VII SCIENCE

Chapters:- Ch1 Nutrition in plants , Ch2 Nutrition in animals , Ch3 Structure of matter ,

Ch5 Heats and its effects , Ch 6 Flow of heat , Ch14 Motion and time ,Ch 19 Our forests.

What are the problems?	Compilation of problems	Categorization of Problems (Subjective &Behavioral)
Students face problems in : • Interpretation of various scientific terms such as - types of nutrition, flow of heat- conduction, convection &radiation, types of motion, frequency, oscillation decomposers, atomicity, valency. Ch- 2,3,6,14 • In drawing the diagrams 0f human digestive system, amoeba, rumination thermometers ,sea breeze & land breeze, simple pendulum . Ch- 1,2,5,6,14 • Calculation of speed , velocity and measuring time & temperature and conversion of units.Ch-5,14 • In learning and remembering the new/difficult scientific concepts of balancing of	Students find problems in: • Relating and remembering the concept with daily life and interpreting various scientific terms.(Understanding) • Drawing diagrams, and in identifying the specimen, colour, odour etc. (Knowledge) • Analysis of graph and Understanding the language of question paper and time management during exam. (Analyse) • Deriving chemical formula using concept of valency and applying the learned concepts to daily life application.(Application)	**Subjective Problems**: • Students are not able to understand the new scientific concept. • Students are unable to relate concept with day-to-day life activities • Deriving formula, analyse graphs and applying concepts. • Inter conversion of units and solving problems. • Comprehending problems while solving the numerical. **BehavioralProblems:** • Lack of practice of diagrams. • Lack of focus/attention while making observation in laboratory. • Lack of scientific approach. • Lack of interest and concentration in the topic, it takes more time to understand the topic.

chemical equation. Chemical formula, conversion of temperature scale, Ch-3,5 • Comprehending the language of question paper and Time management during the examination. • Differentiate between speed and velocity. Uniform & non uniform, compound &mixtures, autotrophic& heterotrophic nutrition, conductors & insulators. Ch- 1,3,5,14 • Identification of common elements & their symbols, atomicity, chemical equation, temperature scale. Ch-3 • Analysis of graph or pictorial questions.Ch-14 • Applying concepts to day-to-day life.		

SHEET 2-

Format For Designing KPI,

CLASS VII SCIENCE

KPI NAME	KPI DEF. NO	KPI DEFn.	WHERE ARE WE NOW? (scale & description)	KPI GOAL	KPI LIMIT	WHAT WE NEED TO DO?	HOW WILL IT BE ACHIEVED?	KPI MEASUREMENT	REVIEW	KPI REPORTING	KPI ACHIEVEMENT	KPI IMPROVEMENT
Understanding of scientific concept in class VII students .	1	To develop understanding of complex scientific concepts based on nutrition and its types, structure of matter ,temperature and its measurement, flow of heat, motion and its types.	Appr. 55% students are able to understand the scientific concepts .	65 %	±3	To enable the students to- 1.Understand some steps of nutrition in animals and the process of rumination condition for stability and formation of ions. 2.Explain the elements, compounds, mixture, atomicity.	1.Classroom discussion and explanation on nutrition and its types, effects of heat ,measurement of time. 2 .Video demonstration on working of stomata, crop rotation and soil replenishment, human digestive system ,rumination, clocks	• By assignments, pen paper test. • By evaluating their worksheets. • By drawing a concept map explaining nutrition	After completion of chapter.	At the end of term 1		

						3. Compare the different modes of transfer of heat. (Explaining-U) 4.Explain working of stomata and the concept of crop rotation. 5.Comparison between compound & mixture. 6.Explain the construction and working of different types of scientific equipment such as thermometer, thermo flask and simple pendulum.	and watches. 3. Worksheets including higher order thinking skillsquestions based on the listed complex concepts can be given to the students and discussed in the class. 4. Through various classroom activities like to show fungus on bread , to make the simple pendulum & measure time period.	in humans. • Assessment activities like -labelling of different organs and writing their function. • By taking regular follow up				
Analytical & observation skill.	2	Inculcation of analytical and observation skill in students while identification of specimen and observe effects of heat and chemical reactions in	Appr.50% of students are able to analysis and observe .	60 %	±2	1. Developing the habit of practicing diagramsof stomata, human digestive system and thermos flask. 2. Helping the students to memorize some common elements & their symbols and chemical	1. Students will be motivated to do more and more practice of drawing the diagrams given in their notebook 2. By animated video and Demonstration and show chart of human digestive system and food chain. 3. By conducting an	• By assignments, pen paper test • By conducting class test after finishing the chapter. • By evaluativ	After completion of chapter.	At the end of the term 1.		

		daily life activities.				formulae. 3. Helping the students to identify and differentiate compounds & mixtures, uniform & non uniform motion. 4. Peer learning can be developed.	activityto show the plants need chlorophyll for photosynthesis. 4. By Conducting competition/quiz by dividing the class in group of 4/5. 5. By taking regular follow up of practicing diagrams, concept map.	e their practice sheets.				
Applicat ion skill.	3	To motivated the students towards applications of scientific concepts in real world situations, measuremen t of physical quantities and solving numerical questions with accuracy related to	Appr. 45% of the students are able to apply the learned concepts to day to day life.	55 %	±3	1. Implement smart techniques for maintaining the temperature of the house without using coolers and heaters 2.Convert one system of unit into another. 3. Plot graph on the basis of the given data with the usage of suitable scale. 4.Correlate the	1. Performance of the activities conducted by the students using the scientific concepts to develop application skills such as model making of arrangement of atoms and molecules, and demonstrate the expansion and contraction of substances due to heat.	• By assignme nts, pen paper test • By conductin g class test after finishing the chapter. • By evaluativ e their practice sheet and	After complet ion of chapter.	At the end of term 1.		

		calculation of speed, distance, time, and time period..				modes of transfer of heat to the usage of different clothes in different parts of the world (Polar, temperature, tropical, etc.). 5.. Develop a concept map/ mind map of various topics.	2. To encourage them to practice the uses of thermometers to measure the temperature 3. By Conducting competition/quiz by dividing the class in group of 4/5.	Performance of the activities by the students. • By taking regular follow up.				