

KIDS WORLD SCHOOL
SESSION - 2024 -25
ANNUAL CURRICULUM PLANNER
SUBJECT - BIOLOGY
CLASS - IX

MONTH	NAME OF THE LESSON	METHODOLOGY	LEARNING OBJECTIVES		LEARNING OUTCOMES	MODE OF ASSESSMENT + ACTIVITIES
			KNOWLEDGE / CONTENT BASED	APPLICATION BASED		
April/ June/ July Date- 04/04/2024 to 31/07/2024	Ch.5 The Fundamental Unit of life	Introduction Explanation Discussion Experimentation Demonstration Videos	Students will be able to: 1) Know about cell and structural organization of cell. 2) Understand the role and importance of different organelles Present. 3) Analyze the function of cell membrane and cell wall with reference to their importance in vital role of life. 4) Explore their critical thinking by studying the permeability concepts	1) Identify the process of Diffusion and osmosis with real life examples like salt on salad and Burning of agarbatti or opening of perfume or fragrance of cooked food.. 2) Interpret swelling of raisin in desserts is due to imbibitions.. 3) Evaluate that if salt is added into vegetables during cooking its release water due to process of exosmosis.. 4) Analyze the concept of hypertonic solution is	1. Learner learnt and understood about cell and structural organization of cell. Skills like observational and experimental were developed in the students and values like division of labor and team work (as all the organelles divide the work among themselves), leadership (as nucleus work as controlling unit), obedience (as all organelles obey the command of controlling	ASSESSMENT FOR LEARNING Activity- To prepare stained temporary mounts of onion peel and to record observation and draw their labelled diagrams. Activity- To prepare stained temporary mounts of human cheek cells and to record observation and

		<p>5) Evaluate different types of tonicity depending on concentration of solute and solvent.</p> <p>6) Justify the concept of osmosis and inhibitions with real life examples.</p> <p>7) To make them learned and understand about cell and structural organization of cell.</p> <p>8) To enhance the ability to comprehend the role and importance of different organelles present in the cell.</p> <p>9) To enhance the ability to understand the mechanism of different organelles with reference to their importance in vital role of life</p> <p>10) To make them understand about the flexibility of cell membrane and its significance with example of virus which they will correlate with the recent pandemic cause by virus as</p>	<p>responsible for shrinkage of finger when we wash clothes for longer period of time.</p> <p>5) Measure the consequences of swelling of different substances due to difference in concentration like swelling of gram or kidney beans in kitchen.</p> <p>6) Recognize that if substance is boiled and then kept in different concentrated solution it will not show any difference as cell are dead example boil potato does not show any change with tonicity.</p> <p>7) Relate importance of saline solution while giving injection to human.</p> <p>8) To emphasized on development of skills like observational and</p>	<p>unit) were inculcated among the students.</p> <p>3. Students were able to identified that cuts and wound heals due to the process of cell division</p> <p>4. They were sensitized that genetic disorder cannot be cured.</p> <p>5. They were able to analyze that formation of one organelle lead the formation of other organelle which inculcated the value of coordination, obedience etc.</p> <p>6. Students ability were enhanced to understand the mechanism of different organelles with reference to their importance in vital role of life</p>	<p>draw their labelled diagrams.</p> <p>ASSESSMENT OF LEARNING</p> <ul style="list-style-type: none"> ◆ Notes ◆ Question-Answers ◆ MCQ's ◆ Diagrams ◆ Assertion and Reasoning Questions ◆ Case study Questions ◆ Worksheets
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			<p>viruses lack cell membrane and therefore does not show any characteristics of life</p>	<p>experimental and inculcating values like</p> <p>division of labor and team work (as all the organelles divide the work among themselves),</p> <p>leadership(as nucleus work as controlling unit),</p> <p>obedience (as all organelles obey the command of controlling unit)</p> <p>9) Students will be able to identify that cuts and wound heals due to the process of cell division</p> <p>10) They will be sensitized and will be able to apply their knowledge that genetic disorder cannot be cured.</p> <p>11) They will be analyzing that formation of one organelle facilitates the formation of other organelle which</p>		
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				will inculcate the value of coordination.		
Aug/Sep Date 01/08/2024 To 30/09/2024	Ch.6 Tissues	Introduction Explanation Discussion Experimentation Demonstration Videos	<p>1) To make them learn and understand about tissues and structural organization of different tissues</p> <p>2) To enhance the ability to analyses the role and importance of different tissues present in plants and animals.</p> <p>3) To make them share their opinion on simple and complex tissues.</p> <p>4)To evaluates different function of tissues depending on their location and structure.</p>	<p>1) To emphasized on development of skills like observational, diagrammatically and experimental and inculcating values like Creativity (while drawing the diagram),</p> <p>2) Awareness (about location of different tissues of plant and animal)</p> <p>3) Responsibility(function of one tissue leads to the formation of other tissue), Coordination(collectively all the tissues works together in body to accomplish the work), Division oflabor(works are divided among different tissues in the body to avoid overloading)</p>	<p>1. Learner learnt and understood about tissues and structural organization of different tissues</p> <p>2) Students ability were enhanced to analysed the role and importance of different tissues present in plants and animals.</p> <p>3) They were able to share their opinion on simple and complex tissues.</p> <p>4)They were able to evaluate different function of tissues depending on their location and structure.</p> <p>5) Division of labor(works are divided among different tissues in the body to avoid overloading) were enhanced in the students.</p>	<p>ASSESSMENT FOR LEARNING</p> <p>Activity- To observe permanent slides of different permanent tissues like parenchyma, collenchyma, striped, unstriped, nerve tissue from prepared slides and draw their labeled diagrams.</p> <p>ASSESSMENT OF LEARNING</p> <ul style="list-style-type: none"> ◆ Notes ◆ Question-Answers ◆ MCQ's ◆ Diagrams ◆ Assertion and Reasoning Questions ◆ Case study Questions

				<p>4) Students will be able to identify that obesity is due to adipose tissue which stores fat in our body.</p> <p>5) They will be aware and will be able to apply their knowledge that wrong postures while sitting, lying or watching T.V affects different tissues present in the body.</p> <p>6) They will be analyzing that pumping of heart, jumping of frog and writing with hand or movement depends on different voluntary and involuntary muscles.</p> <p>7) They will interpret and will be able to share their opinion on occurrence of sprain is due to over stretched of ligaments, fatigue is due to accumulation of lactic acid in muscles.</p>	<p>6) Students were able to identify that obesity is due to adipose tissue which stores fat in our body beneath the skin..</p> <p>7) They were aware that wrong postures while sitting, lying or watching T.V affects different tissues present in the body.</p> <p>8) They were able to analyze that pumping of heart, jumping of frog and writing with hand or movement depends on different voluntary and involuntary muscles.</p> <p>9) They were able to interpret and were be able to share to their opinion on occurrence of sprain is due to over stretched of ligaments, fatigue is due to accumulation of lactic acid in muscles.</p>	<p>◆ Worksheets</p>
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<p>October</p>	<p>REVISION OF TERM I EXAMINATION AND ACTIVITY</p>	<p>Discussion</p>	<p>Able to remember previous topics.</p>	<p>To learn and recall keywords.</p>	<p>Revision of previous topics.</p>	<p>ASSESSMENT AS LEARNING (Multidisciplinary Activity) (Science+Social Science+Arts) Activity- Cellular Art Gallery- Integrating the Beauty of Cells with Arts.</p>
<p>Nov/ Dec/Jan Date- 11/11/2024 to 15/01/2025</p>	<p>Ch.No.12 Improvement in Food Resources</p>	<p>Introduction Explanation Discussion Experimentation Demonstration Videos</p>	<p>Students will be able to:</p> <p>1) know different types of crops like kharif and rabi and understand about micro and macro nutrients and about manures and fertilizers.</p> <p>2) Analyze different cropping patterns like Mixed, crop rotation, inter, organic farming.</p> <p>3) Share their opinion on improvement of crop variety.</p> <p>4) Explore their critical thinking by studying the importance of plant breeding.</p>	<p>1) To emphasized on development of skills like observational, experimental and inculcating values like Awareness,Responsibility , Concern.</p> <p>2) Students will be able to identify kharif, rabi crop when they will had them in food</p> <p>3) They will be able to apply to Interpret their growing and harvesting seasons by classifying them according to the</p>	<p>1) Learner learnt and understood about importance of animal husbandry.</p> <p>2) Students were able to identify that livestock farming is done for dairy and drought and marine culture not only provides seafood but also for pearl cultivation along with the difference between broilers (consuming) and layers (for eggs production).</p>	<p>ASSESSMENT OF LEARNING</p> <ul style="list-style-type: none"> ◆ Notes ◆ Question-Answers ◆ MCQ's ◆ Diagrams ◆ Assertion and Reasoning Questions ◆ Case study Questions ◆ Worksheets

		<p>5) To make them learn and understand about importance of animal husbandry.</p> <p>6) To enhance the ability to analyses different types of animal livestock management</p> <p>7) To make them share their opinion on improvement of animal variety through breeding.</p> <p>8) To evaluate different types of farming practices like – poultry, fish, beekeeping of different states or places.</p> <p>9) To justify the main aim of improvement of food resources.</p> <p>10) To analyses different revolutions done by government for improvement of food resources.</p>	<p>availability in particular season.</p> <p>4) They will be able to evaluate that deficiency of nutrients affects the physiological processes in plants including reproduction, growth and susceptibility to disease.</p> <p>5) They will be able to construct biological waste into different types of manure.</p> <p>6) They will be able to Appreciate the importance of organic farming.</p> <p>7) They will be able to evaluate consequences of fertilizers over manure.</p> <p>8) To emphasized on development of skills like observational, diagrammatically and experimental and inculcating values like Creativity , Awareness ,</p>	<p>3) Students were able to share their opinion on improvement of animal variety through breeding.</p> <p>4) They were able to evaluate different types of .farming practices like – poultry, fish, bee-keeping of different states or places.</p> <p>5) They were able to explore their critical thinking on the main aim of improvement of food resources and were able to justify different revolutions done by government for improvement of food resources.</p> <p>6) They were able to apply their knowledge to relate quality of honey depends on pasturage (availability of flower for nectar collection).</p> <p>7) They were to analyzing different adulterates</p>	
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				11)They will be able to apply their knowledge to relate role of pasturage (availability of flower for nectar collection) determines the quality of honey.		
January/ February Date- 16/01/2025 to 15/02/2025	REVISION AND TERM II EXAMINATION	Discussion	Able to remember previous topics.	To learn and recall keywords.	Revision of previous topics.	ASSESSMENT AS LEARNING