

CLASS – VIII
LESSON PLAN
CHAPTER 9- REPRODUCTION IN ANIMALS

Unit	Biology (Chapter 9 Reproduction in animals)
Class Transaction	Total: 14 periods (approx. 40 min each)
Pre-requisite for the course	This lesson requires the knowledge of 1. Various life processes
Assessment of qualifying knowledge	1. Written test 2. Lab activity 3. Group Discussion 4. HW notebook
Objective	Students will be able to: understand the importance of reproduction
Dimensions of learning	D1, 2, 3, 4
Learning Outcomes	<u>KNOWLEDGE-</u> <i>Students will know and understand</i> Students will be able to • Importance of reproduction • Types of reproduction • Define the term embryo, zygote, fertilization • Male and female reproductive organs • Process of fertilization • The concept of test tube baby • Development of embryo • Different asexual mode of reproduction <u>SKILLS AND COMPETENCIES-</u> <i>Students would be able to</i> • Differentiate between oviparous and viviparous organisms • Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of reproduction
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- Direct questions to the students Group learning- The class will be divided in the group of 5 students. <i>Circle the Sage-</i> The question will be asked by the teacher and the students who knows the answer will stand at the various corners of the room. (Communication, Collaboration) Differentiation- The students in a group of 5 and questions will be put up(Character, Citizenship) Questioning- <i>Multiple level question-</i> Teacher will prepare a list of

	question and will ask these questions during discussions. (Critical thinking, Communication) <i>Brain Storming</i>-The class would start with a discussion on what the students have already learnt in the previous classes and hence what is it that they would learn now. They would also be told the significance of the topic that they would be studying. <i>Introduction of the topic</i>- PPT and Digital Content would be shared <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table, compare-contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book 1. CBSE Exemplar
Closure	1. Define fertilization. 2. Distinguish between sexual and asexual reproduction. 3. What would happen if the egg does not get fertilized? 4. Compare internal and external fertilization. 5. Testes and ovaries are endocrine as well as reproductive organs. Justify. 6. Construct a model of hydra showing budding.
Self Study, Home Work, Assignments	Independent Practice: Students would do the questions in their H.W notebooks as mentioned in the monthly planner by which we can assess their critical thinking and creativity HW notebooks to be marked as per the given plan: <i>Assessment Parameters:</i> The total marks for the activity is 5 marks On time submission.....1 mark Presentation/ Neatness(creativity).....1 mark Content(critical thinking and creativity).....3 marks It is also advised that the students come to the class with proper background knowledge of the topic under discussion. They can refer to the resources stated above.
Assessments	4 UNIT TESTS (25, 25, 25, 25).....100 Marks

	HALF YEARLY EXAMINATION.....80 Marks ANNUAL BOARD EXAMINATION.....80 Marks INTERNAL ASSESSMENTS.....20 Marks PERIODIC TEST By administering pen paper test we assess creativity and critical thinking. By administering pen paper test we assess creativity and critical thinking. Subject Enrichment 10 Marks With the help of subject enrichment activities we assess communication ,collaboration, character building and citizenship Note Book Submission 05 Marks
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For gifted students:</i> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes
Marks	The weightage would be given by CBSE.

Topic	DAY 1 Importance of reproduction and type of reproduction
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various life processes and reproduction in plants.
Assessment of qualifying knowledge	Facilitator asks the students related to reproduction in plants
Objective	Students will be able to understand the importance of reproduction and types of reproduction
Dimensions of	D1, 2

learning	
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The importance of reproduction <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Differentiate between sexual and asexual reproduction Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of reproduction
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For gifted students:</i> • Encouragement for referring other resources

	<i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes
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Topic	DAY 2 Male and female reproductive organs
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various life processes and reproduction in plants.
Assessment of qualifying knowledge	Facilitator asks the students related to reproduction in plants
Objective	Students will be able to understand the importance of reproduction and types of reproduction
Dimensions of learning	D1, 2
Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> • The various organs of male and female reproductive system. <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> • Identify the different organs Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of reproduction
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast

	matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For gifted students:</i> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 3 Fertilization
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various life processes and reproduction in plants.
Assessment of qualifying knowledge	Facilitator asks the students related to reproduction in plants
Objective	Students will be able to understand the process of fertilization
Dimensions of learning	D1, 2

Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> - The process of fertilization <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> - Differentiate between internal and external fertilization Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of reproduction
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For gifted students:</i> Encouragement for referring other resources <i>For weak students:</i>

	• Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes
Topic	DAY 4 Test tube baby
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various life processes and reproduction in plants.
Assessment of qualifying knowledge	Facilitator asks the students related to reproduction in plants
Objective	Students will be able to understand the process of fertilization and importance of test tube baby
Dimensions of learning	D1, 2
Learning Outcomes	KNOWLEDGE- Students will know and understand • The process of fertilization and importance of test tube baby SKILLS AND COMPETENCIES- Students would be able to • Identify the problems related to fertilization Attitudes and beliefs- Students will be able to Appreciate the importance of reproduction
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- Direct questions will be asked to the students. Guided practice followed by Independent Practice- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare-contrast matrix), silent/ loud reading,

	collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: For gifted students: • Encouragement for referring other resources For weak students: • Buddy help to be provided • Provide grade-up classes For differently abled students: • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes

Topic	DAY 5 Development of embryo, Oviparous and viviparous organisms
Class Transaction	40 min each)
Pre-requisite for the course	This topic requires Basic knowledge of various life processes and reproduction in plants.
Assessment of qualifying knowledge	Facilitator asks the students related to reproduction in plants
Objective	Students will be able to understand the process of development of embryo and difference between oviparous and viviparous animals
Dimensions of learning	D1, 2

Learning Outcomes	<u>KNOWLEDGE</u>- <i>Students will know and understand</i> - The development of embryo <u>SKILLS AND COMPETENCIES</u>- <i>Students would be able to</i> - Differentiate between oviparous and viviparous animals Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of reproduction
Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice</i>- NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups: <i>For gifted students:</i> Encouragement for referring other resources <i>For weak students:</i>

	• Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes
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Topic	DAY 6 Types of asexual reproduction	
Class Transaction	40 min each)	
Pre-requisite for the course	This topic requires Basic knowledge of various life processes and reproduction in plants.	
Assessment of qualifying knowledge	Facilitator asks the students related to reproduction in plants	
Objective	Students will be able to understand the process of development of embryo and difference between oviparous and viviparous animals	
Dimensions of learning	D 3, 4	
Learning Outcomes	<u>KNOWLEDGE</u> - <i>Students will know and understand</i> • The process of asexual reproduction	
	<u>SKILLS AND COMPETENCIES</u> - <i>Students would be able to</i> • Differentiate between sexual and asexual reproduction	
	Topic	DAY 5 Development of embryo, Oviparous and viviparous organisms
	Class Transaction	40 min each)
	Pre-requisite for the course	This topic requires Basic knowledge of various life processes and reproduction in plants.
	Assessment of qualifying knowledge	Facilitator asks the students related to reproduction in plants
	Objective	Students will be able to understand the process of development of embryo and difference between oviparous and viviparous animals
	Learning Outcomes	<u>KNOWLEDGE</u> - <i>Students will know and understand</i> • The development of embryo

		<u>SKILLS AND COMPETENCIES-</u> <i>Students would be able to</i> Differentiate between oviparous and viviparous animals Attitudes and beliefs- <i>Students will be able to Appreciate the importance of reproduction</i>
	Transaction Methodology (The teacher can use the mentioned techniques, wherever applicable, and can use any other too.)	Transaction would proceed in the following manner- Active learning- Direct questions will be asked to the students. <i>Guided practice followed by Independent Practice-</i> NCERT questions to be discussed in the classroom. Techniques to be used: Quiz Daily Practice Problem MCQ Peer Assessment Student -teacher interaction, Wipro- G.O.s(web chart, flow chart and differentiation table,compare- contrast matrix), silent/ loud reading, collaborative learning, Research work/surveys
	Resources	Text Book: NCERT text book for Science. Reference Book CBSE Exemplar
	Closure	Involving students in summarizing by asking them to prepare questions based on the topic.
	Self Study, Home Work, Assignments	Independent Practice: Questions from NCERT
	Assessments	Assessment of skit presented by various groups on the basis of content, communication, collaboration, time management and message given by each group to sensitize others.
	Addressing Classroom Diversity	Due to various social backgrounds and multiple intelligences, the classroom might be a diverse arena. The following techniques can be used for various groups:

	<i>For gifted students</i> • Encouragement for referring other resources <i>For weak students:</i> • Buddy help to be provided • Provide grade-up classes <i>For differently abled students:</i> • Ignore spelling mistakes. • Call parents at regular intervals • Provide grade-up classes
	Attitudes and beliefs- <i>Students will be able to</i> Appreciate the importance of reproduction
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