

# Alternative Academic Calendar for 13-16 Weeks

**Secondary** 

(Classes IX - X)

2020-21



State Council of Educational Research and Training, Telangana, Hyderabad.

# Index

Class IX	
Telugu – First Language	5
Telugu – Second Language	6
Hindi – Fist Language	7
Hindi – Second Language	8
Urdu Language – First Language	9
English	10-14
Mathematics	15-16
Physical Science	17-18
Bio Science	19-23
Social Studies	24-25
Class X	
Telugu – First Language	29
Telugu – Second Language	30
Hindi – Fist Language	31
Hindi – Second Language	32
Urdu Language – First Language	33
English	34-38
Mathematics	39-40

41-44

45-47

48-51

Physical Science

Bio Science

**Social Studies** 

CLASS – IX Telugu – First Language

ર્ઝ	ామర్థ్యాలు – అభ్యసన ఫలితాలు		వనరు	ಲು		వ్యూహాలు / క	కృత్యాలు
•	పాఠం ఆధారంగా పట్టికలో	•	ఎస్.సి.ఇ	ు.ఆర్.టి.	పడ	సమూడవ వారం	
	వివరాలను నమోదు		పెబ్సైట్		•	"రంగాచార్యతో	ముఖాముఖి"
	చేయగలగడం.	•	9వ	<b>ತ</b> ರಗತಿ		పార్యాంశ బోధన.	
•	ఇంటర్ప్యూకు సంబంధించ <u>ి</u> న		తెలుగు			్పాలగవ వారం	
	విషయాన్ని చదివి అర్థం		ప్రథమభ	ాష		"రంగాచార్యతో	ముఖాముఖి"
	చేసుకొని ప్రశ్నలకు జవాబులు		పార్యపు			ా పారంలోని అభ్యా	
	రాయగలగడం.	_			సర	పోసవ వారం	
•	దాశరథి రంగాచార్య సాహిత్య	15-60	కృత్యపల్ర	ζω			33387338°
	సేవ గురించి సొంతమాటల్లో					"రంగాచార్యతో	
	ರాಯಗಲಗడಂ.					పాఠానికి చెందిన	న కృత్యపత్రాల
•	ఇంటర్స్సూ ప్రశ్నావళిని				0000000000	సాధన.	
	ತಯಾರುವೆಯಗಲಗಡಂ,				పడ	పోరవ వార <u>ం</u>	
	వార్తాపత్రికకు లేఖను రాయగలగడం.				•	"కుంరమ్ భీం'	" ఉపవాచకం
_						పార్యాంశ బోధన.	
	అర్థాలు, ప్రకృతి – వికృతులను గుర్తించగలగడం.						
•	విగ్రహవాక్యాలకు సమాస						
N665	పదాలు రాయగలగడం, కర్తరి,						
	కర్మణి వాక్యాలను అర్థం						
	చేసుకొని గుర్తించగలగడం.						

CLASS – IX Telugu – Second Language

సామర్థ్యాలు – అభ్యసన ఫలితాలు	వనరులు	వ్యూహాలు / కృత్యాలు
-0	ఎస్.సి.ఇ.ఆర్.టి.     పెబ్సెట్     9వ తరగతి     తెలుగు     ద్వితీయభాష     పాఠ్యపుస్తకం     కృత్యపత్రాలు	<ul> <li>పదమూడవ వారం</li> <li>"హాస్యప్రవృత్తి" పార్యాంశ బోధన.</li> <li>పద్నాలగవ వారం</li> <li>"హాస్యప్రవృత్తి" పాఠంలోని అభ్యాసాలసాధన.</li> <li>పదిహీనవ వారం</li> <li>"హాస్యప్రవృత్తి" పాఠానికి చెందిన కృత్యపత్రాల సాధన.</li> <li>పదహారవ వారం</li> <li>సామర్థ్యాల గురించి పునశ్చరణ.</li> </ul>

# Hindi – First Language

सीखने की संप्राप्तियाँ	स्त्रोत/संसाधन	प्रस्तावित गतिविधियाँ (बच्चे इन गतिविधियों को अभिभावक /शिक्षक की मदद से करेंगे)
<ul> <li>उन्मुखीकरण चित्र के बारे में वातचीत करेंगे।</li> <li>अभिनययुक्त पठन पाठन करेंगे।</li> <li>देखी, सुनी, पढ़ी गई बातों को अपनी भाषा में व्यक्त करेंगे।</li> <li>चित्र पठन को स्वरूपिपूर्वक देखेंगे, सुनेंगे अपनी प्रतिक्रिया देंगे।</li> <li>चित्र और संदर्भानुसार पाठ पढ़ेंगे।</li> <li>कविता और पाठ के पठन अंशों को पढ़कर उससे संबंधित उत्तर देंगे।</li> <li>(पाठ्यांश) कवितांश के मुख्य शब्दों की पहचान करेंगे।</li> <li>पाठ से संबंधित सृजनात्मक अभिव्यक्ति को विभिन्न तरीकों में लिखेंगे।</li> <li>व्याकरण संबंधी प्रश्नों के उत्तर देंगे।</li> <li>कात विषयों के बारे अपने शब्दों में लिखेंगे।</li> <li>कविता का सस्वर वाचन तथा मौन वाचन करेंगे।</li> <li>सीखे गये शब्दों का संदर्भीचित प्रयोग करेंगे।</li> <li>भाषिक तत्वों के (शब्द-भेद और उनके भेद, लिंग, वचन, मुहावरे, उपसर्ग, प्रत्यय) आदि के अर्थ समझेंगे। प्रयोग करेंगे।</li> <li>कविता गायन, कविता लेखन आदि गतिविधियों में रुचि लेंगे।</li> </ul>	SCERT कक्षा - 9 की पाठ्यपुस्तक 'साँवले सपनों की याद, एक कुत्ता और एक मैना, खुशबू रचते हैं हाथ, व्हासा की ओर' पाठ के वर्कशीटों का उपयोग करें।	सप्ताह - 13  'साँबले सपनों की याद' पाठ के वर्कशीटों का अभ्यास करें।  सप्ताह - 14  'एक कुत्ता और एक मैना' पाठ के वर्कशीटों का अभ्यास करें।  सप्ताह - 15  'खुशबू रचते हैं हाथ' पाठ के वर्कशीटों का अभ्यास करें।  सप्ताह - 16  'ॡासा की ओर' पाठ के वर्कशीटों का अभ्यास करें।  अभ्यास करें।

# Hindi – Second Language

सीखने की संप्राप्तियाँ	स्त्रोत/संसाधन	प्रस्तावित गतिविधियाँ
		(बच्चे इन गतिविधियों को अभिभावक
		/शिक्षक की मदद से करेंगे)
<ul> <li>उन्मुखीकरण चित्र के बारे में बातचीत करेंगे।</li> <li>अभिनययुक्त पठन पाठन करेंगे।</li> <li>देखी, सुनी, पढ़ी गई बातों को अपनी भाषा में व्यक्त करेंगे।</li> <li>चित्र पठन को स्वरूपिपूवर्क देखेंगे, सुनेंगे अपनी प्रतिक्रिया देंगे।</li> <li>चित्र और संदर्भानुसार पाठ पढ़ेंगे।</li> <li>कविता और पाठ के पठन अंशों को पढ़कर उससे संबंधित उत्तर देंगे।</li> <li>(पाठ्यांश) कवितांश के मुख्य शब्दों की पहचान करेंगे।</li> <li>पाठ से संबंधित सृजनात्मक अभिव्यक्ति को विभिन्न तरीकों में लिखेंगे।</li> <li>व्याकरण संबंधी प्रश्नों के उत्तर देंगे।</li> <li>ज्ञात विषयों के बारे अपने शब्दों में लिखेंगे।</li> <li>कविता का सस्वर वाचन तथा मौन वाचन करेंगे।</li> <li>सीखे गये शब्दों का संदर्भोचित प्रयोग करेंगे।</li> <li>भाषिक तत्वों के (शब्द-भेद और उनके भेद, लिंग, वचन, मुहावरे, उपसर्ग, प्रत्यय) आदि के अर्थ समझेंगे। प्रयोग करेंगे।</li> <li>कविता गायन, कविता लेखन आदि गतिविधियों में रुचि लेंगे।</li> </ul>	SCERT वेबसाइट SCERT कक्षा - 9 की पाठ्यपुस्तक 'मेरा जीवन, यक्ष प्रश्न, रमज़ान, अमर वाणी' पाठ के वर्कशीटों का उपयोग करें।	सप्ताह - 13  'मेरा जीवन' पाठ के वर्कशीटों का अभ्यास करें। सप्ताह - 14  'यक्ष प्रश्न' पाठ के वर्कशीटों का अभ्यास करें। सप्ताह - 15  'रमज़ान' पाठ के वर्कशीटों का अभ्यास करें। सप्ताह - 16  'अमर वाणी' पाठ के वर्कशीटों का अभ्यास करें। अभ्यास करें।

CLASS – IX Urdu First Language

ہفتہ وارسر گرمیاں	ماخذ		آموزشی ماحصل
(Week-wise activites)	(Sources)		Learning Outcomes
تير هوان هفته الله الله الله الله الله الله الله الل	SCERT web site جماعت نهم کی اُردو کی درسی کتاب(زبان	合	طلبانظم کی تعریف کرسکیں گے اور اس کی اقسام کو بیان کرسکیں گے۔ این مصرعوں کا مطلب اپنے الفاظ میں بیان کرسکیں گے۔
چودهوانهفته پتن: "دوفرلانگ لمی سرئن" کی تدریس این دوفرلانگ می سرئن کی تدریس پندرهوان هفته	اول) مشغلاتی پرپیچ	☆	متن کے کلیدی نکات کی نشاند ہی کر تکیں گے۔ ان دیکھامتن پڑھ کرسوالوں کے جواب کھیں گے۔
سبق: '' دوفرلانگ لبی سڑک' کے مشغلوں کی مثق <b>سو الهواں هفته سو الهواں هفته</b> اللہ اللہ اللہ اللہ اللہ اللہ اللہ الل			ہے اپنے دوست کوخط لکھنے کے قابل بن سکیں گے۔  اضداداور مرکب الفاظ کی شاخت کرسکیں گے۔  صنعت '' کنابی'' کی تعریف کرسکیں گے اور مثالیں دینے قابل ہوں گے۔
			<ul> <li>اپنے وطن کے بارے میں بیان کرتے ہوئے</li> <li>دوست کوخط لکھیں گے۔</li> <li>قومی بجبتی کے فروغ پر ایک مضمون لکھیں گے۔</li> <li>کسی کے اچھے کام کی تعریف کرتے ہوئے</li> <li>توصفی مضمون لکھیں گے۔</li> <li>توصفی مضمون لکھیں گے۔</li> </ul>

# English

Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
reports using appropriate vocabulary and grammar on a	Telangana SCERT official website- www.scert.telangana.go v.in or http://scert.telangana.gov.i n Use textbook and	Teacher may give additional questions wherever possible and needed.
given theme;	worksheets	WEEK 13
• writes discourses		Writing:
given at the end of the text under writing part /letters both formal and		Speech Script  Based on the reading of the text/story learner may now do the short answer comprehension questions
informal, invitations, advertisements, notices, slogans,		Long answer questions article writing, essay writing, letter writing, biography sketch, story writing and so on.
messages and emails according to the		Follow the instructions given in the worksheets.
need.		Process Approach to Writing
		<b>Process approach</b> to writing emphasizes the steps a writer goes through when creating a well-written text. The stages include:
		<b>Brainstorming:</b> writing down many ideas that may come to an individual's mind or through discussions, pair work, group work
		Outlining: organizing the ideas into a logical sequence
		<b>Drafting:</b> The writer concentrates on the content of the message (rather than the form).
		<b>Revision &amp; Editing:</b> in response to the writer's second thoughts or feedback provided by peers or teacher, the draft is revised and edited.

Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
	Proof-reading: with an emphasis on form. Correct the language and appropriateness of its use.  Final draft: Write the final draft now
Telangana SCERT official website- www.scert.telangana. gov.in or http://scert.telangana.go v.in/  Use textbook and worksheets Theme: Freedom A: A Long Walk to Freedom B: Where the Mind is Without Fear (Poem) C: An Icon of Civil Rights	WEEK 14  Competency/Skill- Listening & Speaking  • The teachers inform the learners about the website and the particular lesson to be learnt.  • Learners may be given special instructions  — what is expected of them. Say, for example, listen to the audio text and then read the same text on their own.  Learners may be provided with some Audio/Video/You tube links to visit regarding the Oral Discourses for their better performance in the classroom oral activities.  Do the oral discourses like debates/discussions/speeches/narratio n, etc., given after the face sheet in the text.
	Follow the instructions given in the worksheets.
Telangana SCERT official website- www.scert.telangana. gov.in or http://scert.telangana.go v.in Use textbook and worksheets of  Reading  Having listened to the story/ text/poem,	Competency/Skill-Reading  Learners may be provided with some Audio/Video/You tube links to visit regarding the text given for Reading.  The teachers may divide the reading text into chunks/segments and ask the learners to do the following activities as per the needs of the learner/curriculum:  Read the given part/chunk of the text at your own pace.
	Telangana SCERT official website- www.scert.telangana. gov.in or http://scert.telangana.go v.in/  Use textbook and worksheets Theme: Freedom A: A Long Walk to Freedom B: Where the Mind is Without Fear (Poem) C: An Icon of Civil Rights  Telangana SCERT official website- www.scert.telangana. gov.in or http://scert.telangana.go v.in Use textbook and worksheets of Reading Having listened to the

1	Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
	interprets layers of meaning.	on their own.  Learners read the text in chunks (the text may be divided into four or five sections).  The text is followed by comprehension check.	<ul> <li>Attempt and answer the reading comprehension questions given at the end of text.</li> <li>Create a sub-text by summarizing the text.</li> <li>Write or tell the whole story/text in your language to parents or siblings.</li> <li>Make a visual description of the story.</li> <li>While reading activity</li> <li>As they read the text/stories on their own, learners will have to attempt to answer the question given in the middle of the text or learners are using text from state or other textbooks, they should attempt to answer the questions</li> </ul>
•	chunks for meaning in contexts. understands and elicits meanings of the words in different	Telangana SCERT official website- www.scert.telangana.go v.in or http://scert.telangana.gov.i  Use textbook and worksheets	for comprehension given at the end of the text.  WEEK 15  Post Reading activity Reading comprehension  Revisit/reread the text and answer the comprehension questions given at the end of the text.  Follow the instructions given in the worksheets.  Competency/Skill- Vocabulary & Grammar  Teachers may ask learners to  Find the new words and categorize into groups and make a word web or mind map of the words.  Create a dictionary of words you come across in the text.  Find the meaning of words and write them down in their note books.

Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
		<ul> <li>Try to make sentences using the words.</li> <li>Vocabulary</li> <li>Post Reading activity Vocabulary learning</li> <li>Let learners consult the dictionary online or off line to find the meaning of words/phrases that they find it new in the passage they read.</li> <li>Follow the instructions given in the worksheets.</li> </ul>
<ul> <li>uses grammar items in context such as reporting verbs, passive and tense, time and tense, etc.</li> <li>writes short answers/paragraphs, reports using appropriate vocabulary and grammar on a given theme;</li> <li>writes discourses given at the end of the text under writing part /letters both formal and informal, invitations, advertisements, notices, slogans, messages and emails according to the need.</li> </ul>	Grammar: Notices the grammar items in the text from the given exercises under the grammar part of the textbook.  Telangana SCERT official website-www.scert.telangana.gov.in or http://scert.telangana.go v.in Use textbook and worksheets	Grammar Usage: Teachers may ask the learners to do the grammar exercises given at the end of the text, after discussing and analyzing in groups.  Teacher may give additional questions wherever possible and needed.

Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
• writes discourses		WEEK 16
given at the end of the text under		Writing:
writing part /letters		Construction of an Essay
both formal and informal, invitations,		Based on the reading of the text/story learner may now do the short answer comprehension questions
advertisements, notices, slogans, messages and emails according to the		Long answer questions article writing, essay writing, letter writing, biography sketch, story writing and so on.
need.		Follow the instructions given in the worksheets.
		<b>Process Approach to Writing</b>
		<b>Process approach</b> to writing emphasizes the steps a writer goes through when creating a well-written text. The stages include:
		<b>Brainstorming:</b> writing down many ideas that may come to an individual's mind or through discussions, pair work, group work
		Outlining: organizing the ideas into a logical sequence
		<b>Drafting:</b> The writer concentrates on the content of the message (rather than the form).
		<b>Revision &amp; Editing:</b> in response to the writer's second thoughts or feedback provided by peers or teacher, the draft is revised and edited.
		<b>Proof-reading</b> : with an emphasis on form. Correct the language and appropriateness of its use.
		Final draft: Write the final draft now

#### **Mathematics**

			Week-wise activities
	Learning Outcomes	Sources/Resources	(to be guided by parents
			with the help of Teachers)
<ol> <li>3.</li> </ol>	Week-13: arners Understand how to collect and present the data. Prepare ungrouped frequency distribution tables using tally marks. Prepare grouped frequency distribution table with inclusive/exclusive classes. Calculate measures of central tendency (mean, median and mode) for raw data and ungrouped data. Understand deviation in values of central tendency.	Go through  chapter 9 ( Statistics) Work sheets prepared by concerned subject teachers  State text book scerttelangana.gov.in Measures of central tendency(mean, median and mode) of ungrouped data <a href="https://diksha.gov.in/play/collection/do31286066298686668813422?contentType=TextBook">https://diksha.gov.in/play/collection/do3128606629868668813422?contentType=TextBook</a>	<ul> <li>The teacher asks them to collect the data of modes of transport, month of birth etc of their friends and prepare ungrouped frequency distribution table.</li> <li>S/he sends some data and asks them to prepare grouped frequency distribution table.</li> <li>S/he sends some ungrouped data and raw data and asks them to calculate measures of central tendency</li> <li>Students have to solve text book exercises and also problems from work sheets related to the above specified concepts.</li> </ul>
Le	Week-14:	Go through	The teacher may give them
	Can describe what is congruency.	<ul><li>chapter 7 (Triangles )</li><li>Work sheets prepared by</li></ul>	some geometrical figures and asks them to tell
2.	Give examples for congruent figures from	concerned subject teachers	whether they are congruent figures or not?  • The teacher sends some
3.	daily life. Understand what are SAS and ASA criterions for congruency of triangles?	<ul> <li>State text book</li> <li>scerttelangana.gov.in</li> <li><a href="https://diksha.gov.in/play/content/do">https://diksha.gov.in/play/content/do</a> 3129605558</li> <li>72804864141?contentTyp</li> </ul>	examples for congruent figures and encourages them to give few more examples.  • The teacher may give some problems on SAS and ASA
4.	Explain how to prove properties of an isosceles triangle using above criterions for congruency.	e=Resource https://diksha.gov.in/play/content/do_3129605813 600583681171?contentTy pe=Resource	congruency, Isosceles triangle properties and asks to solve them.  • Students have to solve text book exercises and also problems from work sheets related to the above specified concepts.

Learning Outcomes	Sources/Resources	Week-wise activities (to be guided by parents with the help of Teachers)
	<ul> <li>https://diksha.gov.in/play /content/do 3129605840 894689281172?contentTy pe=Resource</li> </ul>	
Week-15: Learners 1. Understand what are the other criterions for congruency of triangles? (ie, SSS and RHS congruency) 2. Compare two sides and their opposite angles and try to establish a relation between them. 3. Can tell the conditions to be satisfied to claim that given triangles are congruent. 4. Solve problems on SSS and RHS congruency and also on inequalities of triangles.	Go through  chapter 7 (Triangles) Work sheets prepared by concerned subject teachers  State text book scerttelangana.gov.in https://diksha.gov.in/play/content/do 3129605781 851504641157?contentType=Resource https://diksha.gov.in/play/content/do 3129612270 667366401214?contentType=Resource https://diksha.gov.in/play/content/do 3130378374 02300416194?contentType=PracticeResource	<ul> <li>The teacher may give some activities to students to make them understand SSS and RHS congruency.</li> <li>She may give some activities to make them understand inequalities of triangles.</li> <li>She may give some problems on SSS and RHS congruency and also on inequalities of triangles.</li> <li>Students have to solve text book exercises and also problems from work sheets related to the above specified concepts</li> </ul>
Week-16: Learners  1. Can classify the quadrilaterals based on their properties.  2. Explain the properties of a parallelogram.  3. Understand the properties of other quadrilaterals.  4. Can use midpoint theorem and its converse for solving problems.	Go through  chapter 8 (Quadrilaterals) Work sheets prepared by concerned subject teachers  State text book scerttelangana.gov.in https://diksha.gov.in/play/content/do 3129613394 725437441222?contentTy pe=ExplanationResource	<ul> <li>The teacher sends some quadrilateral figures and asks them to classify them.</li> <li>The teacher may encourage students to tell the properties of different quadrilaterals in their own words.</li> <li>She may engage students by sending some activities (using dot sheet) to make them understand mid-point theorem and its converse.</li> <li>Students have to solve text book exercises and also problems from work sheets related to the above specified concepts.</li> </ul>

# **Physical Science**

<b>Learning Outcomes</b>	Source /Resources	Week wise suggestive activities
	WEEK – 13	
CHAPT	ER-9: WHAT IS INSIDE TH	HE ATOM
<ul> <li>The learner</li> <li>Can explain about the fundamental particles in the atom and their arrangement, based on Dalton, Thomson's proposals</li> <li>Can explain the</li> </ul>	Links SCERT/State govt.Text book of class IX Chapter:WHAT IS INSIDE THE ATOM Video links have been provided in the worksheets	<ul> <li>The learner</li> <li>Can explain about the fundamental particles in the atom and their arrangement, based on Dalton, Thomson's proposals</li> <li>Can explain the</li> </ul>
existance of nucleus based on Rutherford's experiment.  Can explain Rutherford's model of atom and its defects.	http://diksha.gov.in https://www.youtube.com/watch? v=kHaR2rsFNhg https://www.youtube.com/watc h?v=fm2C0ovz-3M https://www.youtube.com/watc h?v=lVSF2lP4oBA	<ul> <li>existance of nucleus based on Rutherford's experiment.</li> <li>Can explain Rutherford's model of atom and its defects.</li> </ul>
Chanta	<b>WEEK-14</b> c − 9: WHAT IS INSIDE TH	IE ATOM
<ul> <li>The learner</li> <li>Can explain Bohr's model of atom and can write electronic configuration.</li> <li>Can explain Valency, atomic number, mass number and isotopes of elements.</li> </ul>	Links: SCERT/State Govt text books of class IX Chapter: What is inside the atom. Video links have been provided in the work sheets http://diksha.gov.in https://www.youtube.com/watch?v=fm2C0ovz-3M https://www.youtube.com/watch?v=IVSF2IP4oBA	After studying this chapter, The learner  Can explain Bohr's model of atom and can write electronic configuration.  Can explain Valency, atomic number, mass number and isotopes of elements.  Can prepare models based on different atomic models.
	WEEK – 15	
The learner  • Can explain the work scientifically with daily	Chapter – 10: Work and Ene Links SCERT/State Govt text books of class IX	After studying this chapter, the learner  • Can explain the work
life examples and can draw a formula to calculate the work done.	Chapter: Work and Energy Video links have been provided in the	scientifically with daily life examples and can draw a formula to

		Week wise suggestive
<b>Learning Outcomes</b>	Source /Resources	activities
<ul> <li>Can explain the energy with examples and establish relation between work and energy.</li> <li>Can differentiate between Potential energy and Kinetic energy.</li> <li>Can give daily life examples for PE and KE.</li> <li>Can calculate the energy in a system.</li> </ul>	worksheets. http://diksha.gov.in https://www.youtube.com/watch? v=dt0XVCZeQAM https://www.youtube.com/watc h?v=VtE0d_Ycwp0 https://www.youtube.com/watc h?v=IqV5L66EP2E https://www.youtube.com/watc h?v=Giek094C_14	calculate the work done.  Can explain the energy with examples and establish relation between work and energy.  Can differentiate between Potential energy and Kinetic energy.  Can perform some activities to understand PE and KE.  Can give daily life examples for PE and KE.  Can calculate the energy
	WEEK 16	in a system.
	WEEK – 16	
The learner	Chapter – 10: Work and Ene Links	
<ul> <li>Can explain mechanical energy.</li> <li>Can conduct experiments to understand mechanical energy.</li> <li>Can explain about different sources of energy.</li> <li>Can give examples for renewable energy sources.</li> <li>Can effectively use renewable energy sources and do some projects on the usage of renewable energy sources.</li> </ul>	SCERT/State Govt text books of class IX Chapter: Work and Energy Video links have been provided in the worksheets. http://diksha.gov.in https://www.youtube.com/watch? v=dt0XVCZeQAM https://www.youtube.com/watc h?v=VtE0d_Ycwp0 https://www.youtube.com/watc h?v=IqV5L66EP2E https://www.youtube.com/watc h?v=Giek094C_14	<ul> <li>After studying this chapter, the learner</li> <li>Can explain mechanical energy.</li> <li>Can conduct experiments to understand mechanical energy.</li> <li>Can explain about different sources of energy.</li> <li>Can give examples for renewable energy sources.</li> <li>Can effectively use renewable energy sources and do some projects on the usage of renewable energy sources.</li> </ul>

# **Biological Science**

LEARNING OUTCOMES	SOURCE/RESOURCE	WEEK WISE SUGGESTIVE ACTIVITIES
<ul> <li>Explains About methods of crop rotation and mixed crops.</li> <li>Appreciates the role of farmers in organic farming.</li> <li>Explains about the Vermicompost.</li> <li>Draws the labelled diagram of root nodule in legume plants.</li> <li>Compare the chemical fertilizers with organic manure.</li> <li>Explains About the weeds and their effects on yield.</li> <li>Identifies the Insects and birds helping in pollination.</li> <li>Explains about GreenManuecrops</li> </ul>	Telangana state SCERT Text Books, https://scert.telangana.gov.i n/pdf/publication/eboo ks2019/9% 20biosci %20em% 202020-21.pdf  NCERT text books https://ncert.nic.in/textbook .php?iesc1=0-15  QR Codes You tube1.https://www.youtu be.com/watch?v=rphD5X CZdIg. 2.https://www.youtube.co m/watch?v=r OQYtwnDQk 3.https://www.youtube.co m/watch?v=wOCldfNEis Q 4.https://www.youtube.com /watch?v=gVIw5I-QEbk 5.https://www.youtube.com /watch?v=qsN1gd4EqSw	Week: 13- Challenges in Improving Agricultural Production.  The learner can be asked to conduct experiments to know the transpiration in plants. Activity: To know the arrangement of the experiment about transpiration in plants. Take a polythene bag. Cover the bag on leaves and tie it. Keep it 4-5 hours. You observe it. After some time you did find the water in the polythene bag. By this you will be able to see how much water a plant releases into the air. Do this experiment during day time and night time separately. Note the differences in your note book  Task: Draw the labelled diagram of root nodule in legume plants.  Project: Observe some water irrigation methods in your surroundings and fill in a table prepared by your own. After reading the text book, worksheets and after watching videos, reflect on the following.  Evaluation: Make a block diagram of irrigation of water from major water resources in your village.

LEARNING OUTCOMES	SOURCE/RESOURCE	WEEK WISE SUGGESTIVE ACTIVITIES
LEARNING OUTCOMES	SOURCE/RESOURCE	Suggest some ways through which our country could increase the production of rice to meet atleast global limits  • What are the essential measures that a farmer needs to take before sowing the seeds of a crop?  Week: 14. Challenges in Improving Agricultural Production  • The learner can be asked to conducts an activity that to make a list of the major weeds in their area.  • Activity: Make a list of the major weeds in your area. Find out which weeds grow with which crops. If possible, collect these weeds and make display. Find out what farmers do to get rid of these weeds.  Task:  • Draw the diagrams of Insects and birds helping in pollination.  • Project:  • Collect the information about Natural pest controlling methods in your area, and fill in a table prepared by your own.  After reading the text books, worksheets and after watching videos, reflect on the following.  Evaluation:  • Natural pest controlling
		methods are useful to Bio diversity. Comment it?

I FARNING OUTCOMES SOURCE	WEEK WISE SUGGESTIVE
LEARNING OUTCOMES SOURCE	
The Learner  • Explains About the different ecosystems • Appreciates the Animals which develops the adaptations for their survival. • Explains about the adaptations in aquatic organisms. • Draws the labelled diagram of Zones in Lake Ecosystem and Types of Organisms present • Compare desert plants with mesophytes. • Explains About the Adaptations in Aquatic ecosystems • Identifies the organisms found in lake  Text Books https://scert. n/pdf/public ks2019/9%2 %20em%20  NCERT text https://ncert php?iesc1=  QR Codes Youtube:  https://www./watch?v=Kurdings/www./watch?v=Kurdings/www./watch?v=Kurdings/www./watch?v=M	FRESOURCE  SUGGESTIVE ACTIVITIES  If insects that pollinate crops are killed, what effect will this have on crop production?  If we don't use these chemicals, how can we get a good crop? How can we increase production?  State SCERT  Week: 15- Adaptations in Different Ecosystems  The learner can be asked to conduct experiments to know the transpiration in plants.  Activity: Collect an aquatic plant (Eg. Hydrilla, Vallisneria etc.) either

LEARNING OUTCOMES	SOURCE/RESOURCE	WEEK WISE SUGGESTIVE ACTIVITIES
		After reading the text book, worksheets and after watching videos, reflect on the following.
		<b>Evaluation:</b>
		• What is a habitat?
		• In what way flexible stem
		is useful to the aquatic
		plants?
		What do you understand
		by adaptations in
		organisms and why do
		they adapt?
		• With the help of two
		examples, explain how
		these organisms have
		adapted themselves in the
		ecosystem?
		Week: 16 Adaptations in
		<b>Different Ecosystems</b>
		<ul> <li>The learner can be asked to conducts an activity that to know some of the animals that reside in and around lake or pond.</li> <li>Activity: Collect some of the animals that reside in and around lake or pond. Make a list of those animals and the characteristics of their body.</li> </ul>
		Task:
		Draw the diagrams of Zones in Lake Ecosystem and Types of Organisms present

LEARNING OUTCOMES	SOURCE/RESOURCE	WEEK WISE SUGGESTIVE ACTIVITIES
		Project:  • Collect the information about desert plants growing in your area, and fill in a table prepared by your own.  After reading the text books, worksheets and after watching videos, reflect on the following.  Evaluation:
		<ul><li>Why cranes have long legs and long beaks?</li><li>Why polar bear has thick fur over its body</li></ul>

# **Social Studies**

Learning Outcomes Sources		Week – wise suggestive Activities (to be guided by parents with the help of teachers)				
	Week 13					
The Learner	1. SCERT Text Books	Read the given worksheets				
1. Understands the	2. Atlas	carefully and do the following activities				
importance of Industries	3. Globe					
2. Differentiates the types	4. Lessons telecast	• Differentiate the all industries in a tabular				
of Industries.	through	form.				
3. Explains different	Doordarshan yadagiri and	Make a flow chart about the textile industry.				
minerals. 4. Discusses about	T – Sat channels	• Make a poster of minerals and its				
problems emerging from		importance				
industries.		• Identify cotton textiles, MICA, Coal fields in				
5. Discusses about Impact		map of India.				
of Industrialisation		Make table with types of industries and with its				
Policies		raw materials.				
	Week 14					
1. Defines the what is	1. SCERT Text Books	• Differentiate the service				
service activity	2. Atlas	sector industries among the all industries.				
2. Explains about changes	3. Globe	• List out the Service				
in technology and	4. Lessons telecast	sector jobs.				
exports of service sector.	through	• Collect the information				
3. Describes about	Doordarshan yadagiri and	about service sector job charts from the persons				
outsourcing.	Doordarshan yadagiri and	doing jobs in that sector				
4. Explains about Stress in	T – Sat channels	nearby you.				
jobs in Information		• Describe the table in page no 100				
Technology		• Locate the software				
		technology parks in map of India.				

<b>Learning Outcomes</b>	Sources	Week – wise suggestive Activities (to be guided by parents with the help of teachers)	
	Week 15		
<ol> <li>Explains how forests were used before british rule</li> <li>Explains how forests in danger and the need to plant new trees</li> <li>Describes the Adivasi Revolts</li> <li>Discusses about the Indian Industry during the First World War</li> <li>Discusses about work Conditions in industries</li> <li>Describes the Labourers' Struggles</li> </ol>		<ul> <li>Make a poster of forest.</li> <li>List the forest acts in India.</li> <li>List the uses of forests in our time.</li> <li>Make a pamphlet on Forest protection.</li> <li>Locate the places where the adivasi revolts took place.</li> <li>What type of industries were established during world war 1?</li> <li>Give some suggestions to improve labourers' conditions in industries.</li> </ul>	
	Week 16	conditions in mediatics.	
1. Explains the importance		List out non democratic	
of Democracy.  2. Describes the struggle of Libya to achieve	3. Globe	<ul> <li>countries in the World.</li> <li>Make pamphlet on the importance of</li> </ul>	
democracy.  3. Describes the struggle of Myanmar to achieve	T _ Sat channels	<ul><li>democracy.</li><li>Make two slogans on democracy.</li></ul>	
democracy.  4. Explains The March of Democracy.		<ul> <li>Make a poster on the importance of democracy</li> <li>Locate the Libya and Myanmar in world map.</li> </ul>	

 $\begin{aligned} & CLASS-X \\ & Telugu-First\ Language \end{aligned}$ 

సామర్థ్యాలు – అభ్యసన ఫలితాలు	వనరులు	ప్యూపోలు / కృత్యాలు
• అపరిచీత పేరాను చదివి	• ఎస్.సి.ఇ.ఆర్.టి.	పదమూడవ వారం
ప్రశ్నిలకు జవాబులను	పెబ్సైట్	• "భాగ్యోదయం" పాల్యాంశ బోధన.
గుర్తించగలగడం.	<ul><li>10カ</li></ul>	పద్పాలగవ వారం
• భాగ్యరెడ్డి వర్మ ఆది	తెలుగు	• "భాగ్యోదయం" పాఠంలోని
హిందువుల కోసం చేసిన	ప్రథమభాష	అభ్యాసాలసాధన.
కృషిని వివరించి రాయగలగడం.	పాఠ్యపుస్తకం	పదిహేనవ వారం
• సమాజం కోసం పాటుపడిన	• కృత్యపత్రాలు	• "భాగ్యోదయం" పాఠానికి చెందిన
వారి గురించి అభినందన		కృత్యపత్రాల సాధన.
వ్యాసం రాయగలగడం.		పదహారవ వారం
• పర్యాయపదాలు,		• రామాయణం ఉపవాచకంలోని
పదబంధాలను వివరించి		"బాలకాండం, అయోధ్యాకాండం"
రాయగలగడం.		పార్యాంశ బోధన.
• రూపకాలంకారాన్ని అర్థం		
చేసుకోవడం, గుర్తించగలగడం,		
ప్రత్యక పరోక కథనాలను		
అర్ధం చేసుకొని రాయగలగడం.		

CLASS – X Telugu – Second Language

र्क	చుర్ధ్యాలు – అభ్యసన ఫలితాలు		పనరులు	ప్యూహాలు / కృత్యాలు
•	శతకపద్యాలను ధారాళంగా	•	ఎస్.సి.ఇ.ఆర్.టి.	పదమూడవ వారం
	చదివి, వాటి భావాలను		పెబ్స్టేట్	• "శతకపద్యాలు" పార్యాంశ బోధన.
	సొంతమాటల్లో చెప్పగలగడం,	•	10ವ	పద్పాలగవ వారం
	అపరిచిత పద్య గద్యాలను		తెలుగు	• "శతకపద్యాలు" పాఠంలోని
	చదివి ప్రశ్నలకు జవాబులు		ద్వితీయభాష	లభ్యాసాలసాధన.
	గుర్తించగలగడం.		_	పదిహేనవ వారం
•	శతకపద్యాల ద్వారా		పార్యపుస్తకం	
	తెలుసుకున్న మంచి	•	కృత్యపత్రాలు	• "శతకపద్యాలు" పాఠానికి చెందిన
	విషయాలను సొంతమాటల్లో			కృత్యపత్రాల సాధన.
	రాయగలగడం.			పదహారవ వారం
•	వోస్టర్ తయారుచేయగలగడం.			• "మబ్దూం మొహియుద్దీన్"
•	పదాలకు అర్థాలు,			ఉపవాచకం పార్యాంశ బోధన.
	పర్యాయపదాలు, వ్యుత్పత్తి			
	అర్థాలు రాయగలగడం.			
•	సమాసం గురించి తెలుసుకొని			
	ద్విగుసమాసానికి			
	ఉదాహరణలు రాయగలగడం.			

# Hindi – First Language

सीखने की संप्राप्तियाँ	स्त्रोत/संसाधन	प्रस्तावित गतिविधियाँ (बच्चे इन गतिविधियों को अभिभावक /शिक्षक की मदद से करेंगे)
<ul> <li>छात्र सुनी और पढ़ी गयी बातों पर विचार विमर्श करेंगे और मौखिक एवं लिखित रूप से अपनी प्रतिक्रिया तथा अभिव्यक्ति देंगे।</li> <li>विषय के प्रति जागरुक बनेंगे तथा उसके महत्व को समझेंगे।</li> <li>पाठों की विधाओं एवं उद्देश्यों से परिचित होंगे।</li> <li>संबंधित अंशों की अपने शब्दों में लिखित या मौखिक रूप से भावाभिव्यक्ति करेंगे।</li> <li>पाठ के व्याकरणांशों द्वारा अपनी भाषा को सुंदर एवं सुटुढ़ बनायेंगे।</li> <li>कहानी, कविता, आत्मकथा, संवाद लेखन, साक्षात्कार में सक्षम बनेंगे।</li> <li>पाठों के भाव अपने शब्दों में लिखेंगे।</li> <li>सृजन के द्वारा अपनी काल्पनि कता को मूर्तरूप प्रदान करेंगे।</li> </ul>	SCERT वेबसाइट SCERT कक्षा - 10 की पाठ्यपुस्तक 'अन्वेषण, बच्चों से न छीने उनका हक़, बाट की पहचान, सफ़लता की चुनौतियाँ' पाठ के वर्कशीटों का उपयोग करें।	सप्ताह - 13  'अन्येषण' पाठ के वर्कशीटों का अभ्यास करें। सप्ताह - 14  'बच्चों से न छीने उनका हक्र' पाठ के वर्कशीटों का अभ्यास करें। सप्ताह - 15  'बाट की पहचान' पाठ के वर्कशीटों का अभ्यास करें। सप्ताह - 16  'सफ़लता की चुनौतियाँ' पाठ के वर्कशीटों का अभ्यास करें। का अभ्यास करें।

# Hindi – Second Language

CLASS – X Urdu First Language

مفته وأرسم كرميال	ماخذ	آموزشی ماحصل
(Week-wise activites)	(Sources)	Learning Outcomes
بفتروارسر کرمیال  تید هوای هفته  تید هوای هفته  بخد سبق: "خزل" کے مثغلاقی پر چوں کی مثق  چودهوای هفته  پندر هوای هفته  پندر هوای هفته  سبق: "دوسراموسم" کے مثغلوں کی مثق  سبولهوای هفته  سبولهوای هفته  سبولهوای هفته  سبق" دوسراموسم" ہے متعلق مثغلاقی پر چوں کی مثق	(Sources)  SCERT web site  site  جاعت دہم کی اُردو کی  دری کتاب(زبان	Learning Outcomes  ﷺ سبق روانی سے پڑھنا اور قہم حاصل کرنا۔ ﷺ نامعلوم نئر / لظم پڑھ کر قہم حاصل کرنا اور سوالوں  ﷺ حواب لکھنا۔ ﷺ سبق کی بنیاد پر مصعّف / شاعر کی طرز تحریری سے متعلق لکھنا۔ ﷺ خود لکھنا کے تحت سوالوں کے جواب اپنے

# CLASS – X

# English

Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
writes short     answers/paragraphs     , reports using     appropriate     vocabulary and     grammar on a     given theme;	Telangana SCERT official website- www.scert.telangana.gov.in or http://scert.telangana.gov.in Use textbook and worksheets	Teacher may give additional questions wherever possible and needed.
writes discourses		WEEK 13
given at the end of the text under		Writing
writing part		Writing a Review of a Film
/letters both		Writing Opinions
formal and informal,		Preparation of a Script for Skit
invitations, advertisements, notices, slogans,		Based on the reading of the text/story learner may now do the short answer comprehension questions
messages and emails according to the need.		Long answer questions article writing, essay writing, letter writing, biography sketch, story writing and so on.
		Follow the instructions given in the worksheets.
		<b>Process Approach to Writing</b>
		<b>Process approach</b> to writing emphasizes the steps a writer goes through when creating a well-written text. The stages include:
		<b>Brainstorming:</b> writing down many ideas that may come to an individual's mind or through discussions, pair work, group work
		Outlining: organizing the ideas into a logical sequence
		<b>Drafting:</b> The writer concentrates on the content of the message (rather than the form).

Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
		<b>Revision &amp; Editing:</b> in response to the writer's second thoughts or feedback provided by peers or teacher, the draft is revised and edited.
		<b>Proof-reading</b> : with an emphasis on form. Correct the language and appropriateness of its use.
		Final draft: Write the final draft now
The learner		WEEK 14
• listens for information, gist	Telangana SCERT official website-	Competency/Skill- Listening & Speaking
and details and responds accordingly.	www.scert.telangana.gov.in or http://scert.telangana.gov.in/ Theme: Social Issues A: The Storied House (Part-I)	• The teachers inform the learners about the website and the particular lesson to be learnt.
• listens to and discusses literary/non-	B: The Storied House (Part-II) C: Abandoned(Poem) Use textbook and worksheets udio- s in tts to erpret	
literary/ audio- visual inputs in varied contexts to		— what is expected of them. Say, for example, listen to the audio text and then read the same text on their own.
infer, interpret and appreciate.		• Learners may be provided with some Audio/Video/Youtube links to visit regarding the Oral Discourses for their better performance in the classroom oral activities.
		• Do the oral discourses like debates/discussions/speeches/narration s, etc., given after the face sheet in the text.
		Follow the instructions given in the worksheets.
• reads with comprehension the given	Telangana SCERT official website- www.scert.telangana.gov.in or	Competency/Skill-Reading  • Learners may be provided with some Audio/Video/Youtube links to visit
text/materials employing	text/materials employing  http://scert.telangana.gov.in Use textbook and worksheets of	regarding the text given for Reading.  • The teachers may divide the reading
skilling, scanning.	Reading  Heaving listened to the story/	text into chunks/segments and ask the learners to do the following activities as per the needs of the
predicting,	Having listened to the story/ text/poem, learners read the text	learner/curriculum:

	Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
•	reads silently with comprehension,	on their own.  Learners read the text in chunks (the text may be divided into four or five sections).	<ul> <li>Read the given part/chunk of the text at your own pace.</li> <li>Attempt and answer the reading comprehension questions given at the end of text.</li> </ul>
	interprets layers of meaning.	The text is followed by comprehension check.	<ul><li> Create a sub-text by summarizing the text.</li><li> Write or tell the whole story/text in</li></ul>
			your language to parents or siblings.  • Make a visual description of the story.
			While reading activity
			• As they read the text/stories on their own, learners will have to attempt to answer the question given in the middle of the text or learners are using text from state or other textbooks, they should attempt to answer the questions for comprehension given at the end of the text.
	uses words,	Telangana SCERT official	WEEK 15
	phrases, idioms and word chunks	website-	Post - Reading activity
	for meaning in	www.scert.telangana.gov.in or http://scert.telangana.gov.in	Reading comprehension
•	understands and	Use textbook and worksheets	• Revisit/reread the text and answer the comprehension questions given at the end of the text.
	elicits meanings of the words in different contexts,		Follow the instructions given in the worksheets.
	and by using dictionary,		Competency/Skill - Vocabulary & Grammar
	thesaurus and digital facilities.		Teachers may ask learners to
	C		• Find the new words and categorize into groups and make a word web or mind map of the words.
			• Create a dictionary of words you come across in the text.

Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
		• Find the meaning of words and write them down in their note books.
		• Try to make sentences using the words.
		Vocabulary
		Post - Reading activity
		Vocabulary learning
		• Let learners consult the dictionary online or off line to find the meaning of words/phrases that they find it new in the passage they read.
		Follow the instructions given in the worksheets.
• uses grammar	Grammar: Notices the	Grammar Usage :
items in context such as reporting verbs, passive form, time and tense, etc.	grammar items in the text from the given exercises under the grammar part of the textbook.	<ul> <li>Teachers may ask the learners to do the grammar exercises given at the end of the text, after discussing and analyzing in groups.</li> <li>Teacher may give additional questions wherever necessary.</li> </ul>
		WEEK 16
• writes short answers/paragraph	Telangana SCERT official website-	Writing
s, reports using	www.scert.telangana.gov.in	Preparation of an Invitation
appropriate vocabulary and	or	Writing a News Report
grammar on a given theme;  • writes discourses given at the end of	http://scert.telangana.gov.in Use textbook and worksheets	Based on the reading of the text/story learner may now do the short answer comprehension questions
the text under writing part /letters both formal and informal,		• Long answer questions article writing, essay writing, letter writing, biography sketch, story writing and so on.
invitations, advertisements,		Follow the instructions given in the worksheets.
notices, slogans,		<b>Process Approach to Writing</b>
messages and emails according to the need.		Process approach to writing emphasizes the steps a writer goes through when creating a well-written text. The stages include:

Learning Outcomes	Sources/ Resources	Week-wise Suggestive Activities (to be guided by teachers/parents)
		<b>Brainstorming:</b> writing down many ideas that may come to an individual's mind or through discussions, pair work, group work
		Outlining: organizing the ideas into a logical sequence
		<b>Drafting:</b> The writer concentrates on the content of the message (rather than the form).
		<b>Revision &amp; Editing:</b> in response to the writer's second thoughts or feedback provided by peers or teacher, the draft is revised and edited.
		<b>Proof-reading:</b> with an emphasis on form. Correct the language and appropriateness of its use.
		<b>Final draft:</b> Write the final draft now.

## **Mathematics**

Learning Outcomes Week-13:	Sources/Resources	Week-wise activities (to be guided by parents with the help of Teachers)
<ol> <li>Learners</li> <li>Write linear equations when daily life situations are given.</li> <li>Understand the relation between coefficients and nature of system of equations 3. Identify whether given pair of linear equations are consistent or inconsistent or dependent.</li> <li>Draw graphs for pair of linear equations and find solution from graphs.</li> </ol>	Go through  Chapter 4 (Pair of Linear equations in two variables) work sheets prepared by concerned subject teachers  State text book scerttelangana.gov.in	<ul> <li>The teacher may engage students by giving some situations and asking them to write suitable linear equations.</li> <li>S/he may encourage them to establish the relation between coefficients and nature of equations by giving them some activities.</li> <li>S/he asks to find solutions for linear equations by graphical method.</li> <li>Students have to solve problems from text book exercises and also from work-sheets related to the above specified concepts.</li> </ul>
Week-14:  Learners  1. Solve linear equations using algebraic methods  (i) Substitution method  (ii) Elimination method	Go through  Chapter 4 (Pair of Linear equations in two variables) work sheets prepared by concerned subject teachers  State text book scerttelangana.gov.in	<ul> <li>The teacher encourages students to explain procedures for substitution and Elimination methods in their own words.</li> <li>S/he may give some problems and asks them to solve by using algebraic methods.</li> <li>Students have to solve problems from text book exercises and also from work-sheets related to the above specified concepts.</li> </ul>

#### **Week-15:**

#### Learners

- 1. Write quadratic equations when daily life situations are given.
- 2. Solve quadratic equations using algebraic methods
  - (i) factorization method
  - (ii) formula method
- 3. Describe the nature of roots of the given quadratic equation without solving it.

### Go through

- chapter 5 (Quadratic Equations) work sheets prepared by concerned subject teachers
- State text book
- scerttelangana.gov.in
- The teacher may engage students by giving some situations and asking them to write suitable quadratic equations.
- S/he may give some problems and asks them to solve by using algebraic methods.
- S/he may encourage them to explain the nature of roots without actually finding them.
- Students have to solve problems from text book exercises and also from work-sheets related to the above specified concepts.

#### **Week-16:**

#### Learners

- 1. Understand how to find distance between two given points in different situations.
- 2. Solve problems involving section formula, centroid, mid-point, points of trisection etc.
- 3. Describe slope of a line.

## Go through

- chapter 7 (co-ordinate Geometry) work sheets prepared by concerned subject teachers
- State text book
- scerttelangana.gov.in
- Teacher gives some problems and asks them to find the distance between them.
- S/he may motivate students to explain different conditions required to identify the type of given triangles and quadrilaterals.
- S/he may encourage them to explain the relation of section formula with midpoint, centroid and points of trisection. Also s/he may ask to solve problems.
- S/he may ask to explain the slope of a line and find slopes of given lines.
- Students have to solve problems from text book exercises and also from work-sheets related to the above specified concepts.

# **Physical Science**

LEARNING OUTCOMES	SOURCES/ RESOURCES  SCERT / State Text Book	WEEK WISE SUGGESTED ACTIVITIES  (To be guided by the Teacher/Parent
The Learner	<u>WEEK :- 13</u>	<u>WEEK :- 13</u>
<ul> <li>differentiates between different principles of electronic configuration.</li> <li>identifies the errors in filling the electrons as per the rules in the given figure.</li> <li>uses the knowledge of electronic configuration rules</li> <li>gives reason for electron distribution in orbital.</li> <li>states the differences between different types of periodic tables.</li> <li>identifies the errors in electron distribution.</li> <li>states the Dobereiner's Triads.</li> <li>gives examples for Dobereiner's Triads.</li> <li>explains about the Mendeleeff's Periodic</li> </ul>	WEEK:-13  Unit/ Lesson name:- Atomic Structure  Worksheet No :- 63  The Aufbau principle  Worksheet No :- 64  The Pauli exclusion principle, Hund's rule  Unit/ Lesson name:- Classification of Elements-The Periodic Table  Worksheet No :- 65  Dobereiner's Triads  Worksheet No :- 66  Newlands' law of Octaves  Worksheet No :- 67  Mendeleeff's Periodic	WEEK:-13  By referring to the worksheet 63 to 67 the learner can do tasks provided in assessment. The learner explains atomic structure in own words.S/he  • identifies the electronic configuration of elements.  • explains aufbau principle with suitable examples.  • explains Pauli exclusion principle and Hund's Rule with suitable examples  • differentiate between the principles.  • draws figures related to sub energy levels i.e orbitals.  • classify various elements based on their properties.  • explains classification of elements.  • draws figures to describe moilers structure.  • explains the different types of classifications.
Table	Table	<ul> <li>explains the salient features of Mendeleeff's Periodic Table</li> </ul>

#### The Learner

- explains the modern periodic table.
- explains reasons for developing modern periodic table.
- explains the periodic property regarding modern periodic table.
  - differentiates groups, periods.
- explains the properties of metals and non metals.
- explains the arrangement of metals and non metals.
- explains what is valence.
- gives reason for why valence varies in groups and periods.

## **WEEK:-14**

## Unit/ Lesson name:-

Classification of Elements-The Periodic Table

Worksheet No :- 68

**Modern Periodic Table**- Introduction

Worksheet No :- 69

Groups

Worksheet No: - 70

**Periods** 

Worksheet No: 71

**Metals and non Metals** 

Worksheet No :- 72

Valence

#### **WEEK :- 14**

By referring the Worksheets from 68 to 72 the learner

- can explain the modern periodic table.
- can explain reasons for developing modern periodic table.
- can differentiate groups, periods.
- explains how periods are designed.
- explains s-block, p-block, dblock and f-block elements.
- can explain the properties of metals and non metals.
- can explain the arrangement of metals and non metals.
- explains valence
- writes reason for why valence varies in groups and periods

#### The Learner

- explains about atomic radius and how it is changing in groups and periods.
- identifies the factors affecting the IE and EA.
- uses the knowledge of factors affecting the IE and how it varies I groups and periods.
- finds characteristics of elements.
- gives reason for changing the atomic radius.
- explains the flow of charges in a conductor.
- explains the reason for motion charges in a conductor.
- explains potential difference and how it can be calculated.
- finds the work done by the electric force.

#### **WEEK-15**

Worksheet No: - 73

**Atomic radius** 

Worksheet No :- 74

Ionization Energy & Electron Affinity

**Unit/ Lesson name:-**

**Chemical Bonding** 

(This chapter is in activity and project based syllabus)

Unit/ Lesson name:-

**Electric Current** 

Worksheet No :-

Prepared by the Teacher

Worksheet No :-

Prepared by the Teacher

**Worksheet No:** 

Prepared by the Teacher

#### **WEEK :- 15**

By referring the Worksheets the learner

- can explain about atomic radius and how it is changing in groups and periods.
- identifies the factors affecting the IE and EA.
- uses the knowledge of factors affecting the IE and how it varies I groups and periods.
- finds characteristics of elements.
- gives reason for changing the atomic radius.
- explains the flow of charges in a conductor.
- explains the reason for motion charges in a conductor.
- explains potential difference and how it can be calculated.
- finds the work done by the electric force.

#### The learner

- explains electromotive force.
- explains how battery works.
- does the experiment regarding to Ohm"s Law.
- explains the procedure of Ohm's Law experiment.
- differentiates between Ohmic and Non ohmic conductors.
- draws graphs regarding Ohm's law experiment.
- explains what is electric shock.
- explains about precautions to be taken while handling electric current.
- explains what factors affects the resistance of a material.
- explains how length, area of cross section, material and temperature affects the resistance of the material.

## **WEEK-16**

## Unit/ Lesson name:-

#### **Electric Current**

#### Worksheet No :-

Prepared by the Teacher

### Worksheet No :-

Prepared by the Teacher

## Worksheet No :-

Prepared by the Teacher

## Worksheet No:-

Prepared by the Teacher

## **Worksheet No:**

Prepared by the Teacher

#### **WEEK-16**

By referring the Worksheets the learner

- explains electromotive force in his own words.
- explains how battery works with neat diagrams.
- does the experiment regarding to Ohm"s Law and writes report.
- explains the procedure of Ohm's Law experiment.
- writes the Differences between Ohmic and Non ohmic conductors.
- draws graphs regarding Ohm's law experiment.
- explains what is electric shock in his own words.
- can writes the precautions to be taken while handling electric current.
- explains what factors affects the resistance of a material.
- explains how length, area of cross section, material and temperature affects the resistance of the material by doing activities.

# **Biological Science**

<b>Learning Outcomes</b>	Sources/Resources	Suggested Activities
0		(To be guided by
		teachers/Parent)
The learner	SCERT text books/ NCERT	WEEK - 13
<ul> <li>Explains the term</li> </ul>	text books/ TROER/	Theme: Reproduction
Reproduction.	YOUTUBE links.	The learner is asked to read the
		concept of events of reproduction
<ul> <li>Identifies the</li> </ul>		and to watch the links.
different modes of	https://www.youtube.com/wa	Task-1
reproduction.	tch?v=6Ew6mqwgGR0	Answer the following questions.
		1. Explain different modes of asexual
<ul> <li>Draws the diagrams</li> </ul>	1.44.5.5.//	reproduction.
of male reproductive	https://www.youtube.com/wa	2. What are stolons? Give examples.
system.	tch?v=V4QYi3x-Yhk	3. Write the differences between
		cutting and grafting.
<ul> <li>Conducts an activity</li> </ul>	https://www.youtube.com/wa	Theme-Spore formation
of Rhizopus	tch?v=XBoL2BT0H8A	The learner is asked to do the
observation/bread	ten: v=/xbol2b10110/1	following activity Task-2
mould.		Let us discuss about an activity
	https://www.youtube.com/wa	showing the Rhizopus sporangium
• Differentiates	tch?v=j2TMbZZBWu4	or bread mould. Take a soft bread,
between artificial		leave it in the open air for about an
propagation and		hour, so it is exposed to
natural propagation,		contaminants in the air. Place the
asexual reproduction and sexual	https://www.youtube.com/wa	bread in plastic bag and sprinkle
	tch?v=uN9wXTXgKVg	water then seal the bag, leaving
reproduction.		some air inside. Mould would start
<ul> <li>Explains different</li> </ul>		growing in 2-3 days. Take the
developmental	https://www.youtube.com/wa	formed mould, put it on a slide and
stages of human	tch?v=K2BpsMrQT8g	examine under the microscope.
embryo.		Task – 3
	https://www.romanh.com/rom	Draw a well labeled diagram of
<ul> <li>Draws the diagrams</li> </ul>	https://www.youtube.com/wa	male reproductive system.
of female	tch?v=VN_p20dDrnY	Task-4-Project
reproductive system		Collect the information of
and gametophyte.		vegetative propagation in plants.
	SCERT text books/ NCERT	
	text books/ TROER/	Week – 14
<ul> <li>Differentiates</li> </ul>	YOUTUBE links.	Theme – Female reproductive
between unisexual		system and Sexual reproduction in
and bisexual		plants.
flowers.	https://www.youtube.com/wa	The learner asked to answer the
	tch?v=HP21hIVJhWI	following question.
		Task – 5

- Conducts an activity of observation of pollen grain.
- Appreciates the role of different extra embryonic layers and the colostrum that develop immunity in infants.
- Explains the process of cell division.
- Gives reasons for the consequesnces if cell division is absent.
- Differentiates between Mitosis and Meiosis.
- Appreciates the role of cell division in perpetuation of life.
- Prepares a model of cell division.
- Compares between surgical methods of birth control in men and women.
- Explains the terms Heredity and variations.
- Conducts activities to observe variations among the family members.

https://www.youtube.com/watch?v=FP7ZD\_VbCaM

https://www.youtube.com/watch?v=BHSdzOc6tKA

https://www.youtube.com/watch?v=a8fgm-zEYjQ

https://www.youtube.com/watch?v=HP21hIVJhWI

SCERT text books/ NCERT text books/ TROER/ YOUTUBE links.

https://www.youtube.com/watch?v=7NM-UWFHG18

https://www.youtube.com/watch?v=DwAFZb8juMQ

https://www.youtube.com/wa
tch?v=nMEyeKQClqI

SCERT text books/ NCERT text books/ TROER/ YOUTUBE links.

https://www.youtube.com/watch?v=KyU880oHSxM

https://www.youtube.com/watch?v=uGt5wXJ0UME

https://www.youtube.com/watch?v=ng22Ucr33aw

SCERT tenth class Biology textbook/ NCERT text books/ TROER/ YOUTUBE links.

- 1. What is the function of amniotic sac.
- 2. Name the four extra embryonic membranes.
- 3. Write the importance of colostrum.
- 4. What are the advantages of sexual reproduction.

#### Task-6

- 1.Draw the diagram of female reproductive system.
- 2. Prepare a flow chart to explain the process of sexual reproduction in plants.

## **Week –15**

# Theme –Cell division and continuation of life.

## Task - 7

The learner asked to answer the following questions.

- 1.Name the different steps of cell cycle.
- 2. Write the differences between Mitosis and Meiosis.
- 3. What would be the consequences if there is no meiosis in organisms that reproduce sexually.

# Theme- Reproductive health. Task – 8

- 1.List out the chemical birth control methods and surgical methods of birth control.
- 2. What are the devices used for birth control.
- 3. Write slogans on female foeticide.

Task – 9-Project
The learner is asked to do a
project on how AIDS is caused, its
symptoms and control measures.

# **Week – 16**

Theme – Heredity Task-10

The learner is asked to answer the

https://www.youtube.com/wa	following questions.
tch?v=3I4aazBYQPE	1. What is heredity?
	2. What are variations?
	Task – 11
https://www.youtube.com/wa	The learner is asked to do the
tch?v=6bWssRDAHW4	following activities.
	Activity-1.
	Compare your traits of eye colour,
https://www.youtube.com/wa	hair colour shape of nose, type of ear
tch?v=jUHokSPkzT8	lobe(attached or free) with the traits
	of your parents in a tabular form.
	Activity – 2
	Observe some of your friends
	characters like shin colour, marking
	of inner side of the thumb, length of
	forehead, colour of eyes and note
	them in a tabular form.
	system.

## **Social Studies**

		Week wise suggested
Learning outcomes	Sources or resources	activities (to be guided by
		the teachers or parents )
• Analyses the major		week 13
changes in politics after	i. Social studies textbook of	<b>Lesson</b> : Emerging Political
emergency.	class 10th published by	Trends 1977 to 2000
<ul> <li>Explains how regional</li> </ul>		read the given worksheets
aspirations leads to	SCERT Telangana	carefully and do the
emergence of Regional	ii. Atlas	following activities
Political Parties.	··· alaba	Prepare list of State  Parties
• Prepares chart on	iii. globe	Parties
Coalition party governments and on	iv. www.scert telangana.gov.	Prepare list of Prime ministers of India with
political parties.	in	their periods.
• Identifies Non – Congress ruling states in	v. lessons telecasted	Discuss with elders on formation of regional
India map.	through DD yadagiri	parties in India.
Comments on Liberal	vi. lessons telecasted	Teacher may ask the students to record the
Economic policies.	through t sat channel	changes took place after
Analyses the changes	through t sut chamier	Telecom Revolution.
after telecom revolution.		• Discuss the role of anti-
Prepares Album of the  Division of the		sikh riots of Delhi in
Prime Ministers of India.		1984 in fuelling
• Comments on Terrorism.		Sikhseparatism and
		extremism.
		Prepare a list of coalition
		governments at centre
		and merits, de – merits
		of coalition politics.
		Read the para under the
		title "Andhra Pradesh"
		from. "In combined
		Andhra Pradesh
		Office of the
		congress party" of page
		258 and comment on it.
		• The teacher may as the
		students to make a list of
		measures to increase
		employment
		opportunities in our
		country
		Answer all the questions
		given under assign
		assessments

Learning outcomes	Sources or resources	Week wise suggested activities (to be guided by the teachers or parents )
<ul> <li>Explains the need of food security in the country.</li> <li>Fills the table related to Per person availability of food grains.</li> <li>Explains the uses of Coarse Cereals.</li> <li>Collects the information on food grains availability in their locality.</li> <li>Explains the role of Public Distribution System in providing food grains to the people.</li> <li>Comments on Malnutrition.</li> <li>Appreciate the role of Food Corporation of India.</li> <li>Identify the need of Buffer stocks.</li> <li>Prepares the list of Minerals and other essential nutrients.</li> <li>Comments on Body Mass Index.</li> <li>Analyses Calorie intake graph given in page no. 138</li> </ul>	<ul> <li>i. Social studies textbook of class 10th published by SCERT Telangana</li> <li>ii. Atlas</li> <li>iii. globe</li> <li>iv. www.scert telangana.gov.</li> <li>in</li> <li>v. lessons telecasted</li> <li>through DD yadagiri</li> <li>vi. lessons telecasted</li> <li>through t sat channel</li> </ul>	<ul> <li>week 14 Lesson: Food Security</li> <li>Discuss with your grand parents on given photograph in page no. 132.</li> <li>With help of your parents prepare a list of food crops grown in your area.</li> <li>Describe the per hectare yield of paddy and wheat by filling the blanks, given in page no. 134.</li> <li>Prepare a list of food grains available in Ration Shop in your location.</li> <li>Prepare a chart on required minerals, nutrients and available source.</li> <li>Teacher may ask the Student to Measure Body Mass index of your family members and analyse it.</li> <li>Prepare poster on 'Don't waste food'.</li> <li>Prepare a table on Breakfast, Lunch, Dinner you took this week and analyse it.</li> <li>Answer all the questions given under assign assessments</li> </ul>
<ul> <li>Prepares list of various Social movements.</li> <li>Differentiates and compares the movements.</li> <li>Prepares pamphlet on Civil Rights.</li> <li>Responds on Environmental</li> </ul>	<ul> <li>i. Social studies textbook of class 10th published by SCERT Telangana</li> <li>ii. Atlas</li> <li>iii. globe</li> </ul>	week 15 Lesson: Social Movements in Our Times Read the given tasks, watches the videos carefully and do the following activities

Learning outcomes	Sources or resources	Week wise suggested activities (to be guided by the teachers or parents )
movements.  Prepares list of various Environmental movements.  Identify the places in India map where the Environmental movements took place.  Comments on Women protests.  Collects photos and information of Bhopal Gas Tragedy.  Writes an essay on social movements.  Prepares pamphlets on protection of Environment.	iv. www.scert telangana.gov.i n v. lessons telecasted through DD Yadagiri vi. lessons telecasted through t sat channel	<ul> <li>Make a table and list the demands of civil rights movement and your possible solutions.</li> <li>The teachers may encourage the students to collect the environmental pollution report of different places in India and analyse it.</li> <li>The teachers are suggested to discuss the impact of globalisation on human lifestyle and effects on environments.</li> <li>The teacher may ask the students to prepare of the Fundamental Rights given in the Constitution of India.</li> <li>Prepare an album by collecting pictures on various Human rights issues and Women protests.</li> <li>Answer all the questions given under assign assessments.</li> </ul>
<ul> <li>Explains the important points of Gentlemen's agreement.</li> <li>Explains Prof.         Jayashankar's reasons for separate Telangana.</li> <li>Collects news and photos of Telangana movement.</li> <li>Draws Telangana outline map.</li> <li>Appreciate role of Telangana artist and poets in Movement.</li> <li>Analyses the role of K.         Chandra ShekarRao'srole in Telangana movement.</li> </ul>	<ul> <li>i. Social studies textbook of class 10th published by SCERT Telangana</li> <li>ii. Atlas</li> <li>iii. globe</li> <li>iv. www.scert telangana.go v.in</li> <li>v. lessons telecasted through DD yadagiri</li> <li>vi. lessons telecasted through t sat channel</li> </ul>	Week 16 Lesson: The Movement for the Formation of Telangana State  • Read the given worksheets and write the answers to the questions  • Teachers my guide the student the distinct features of Telangana under the following themes:  i. Natural Features  ii. Society  iii. Historical background

Learning outcomes Sources or resources activities (to be guided by the teachers or parents )	Learning outcomes
Collects autobiography of Prof. Jayashankar.     Comments on the role of students in Telangana Movement.      Teachers may hold discussion on impact of Gentlemen's agreement on Telangana.     Prepare a list on Forms of Telangana agitation.     Prepare a list on Forms of Grovernemt.      Teachers may hold discussion on impact of Gentlemen's agreement on Telangana.     Prepare a list on Forms of Protest in Telangana agitation.     Interview some people who had participated in the movements during 2009. Find out about their experiences and prepare a report.      Teacher may ask the students to collect biography of Professor Jayashankar (The Telangana ideologist)     Collect the newspaper clippings on the formation of Telangana State.  Answer all the questions given under assign assessments	<ul><li>Prof. Jayashankar.</li><li>Comments on the role of students in Telangana</li></ul>





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