



Tamil Nadu Curriculum Framework 2025
Proposed Draft Syllabus, Pedagogical Approaches and Assessment Strategies
Classes 1 & 2 - Environmental Science

Introduction: The Tamil Nadu State Education Policy 2025 emphasizes activity-based, play-based, and experiential learning in Environmental Science at the primary level, where children explore personal hygiene, health, the living and non-living world, and develop sensory awareness. This curriculum is designed to evoke interest, a sense of wonder and curiosity in the world around. It fosters cognitive skills and abilities to help students understand themselves and the world around them. It introduces the processes of scientific enquiry in student's thinking and doing. It builds awareness of, sensitivity to and care of the natural world and all life, and nurtures students to apply their learning in everyday living to make age-appropriate, informed decisions and responsible choices. It builds an appreciation that scientific learning and technology can enrich life and contribute to the well-being of all. It encourages them to become self-directed learners and work collaboratively with peers. It fosters an awareness of and an appreciation and respect for the social and cultural diversity in a pluralistic society.

CLASS 1		CLASS 2	
Content	Learning Outcome	Content	Learning Outcome
CG-1: Children learn to express themselves and collaborate with their peers.			
MYSELF About me	Introduces self-name, languages spoken and understood, things one enjoys doing, likes & dislikes in contexts of food, clothing, games	WITH MY CLASSMATES - Song about friends - Group movement activity - Social habits of waiting for one's turn, listening, sharing, maintaining a queue without pushing or crowding	- Comfort with classmates - Names all classmates, class teacher - Shares about a friend - Participates in group activities following instructions to sort themselves based on criteria e.g., tallest to shortest, in groups of three... - Talks about feelings experienced in different situations of group activity

			- Expresses feelings through facial expressions - Draws emojis and recognizes facial expressions
CG-2: Children build awareness of parts of the body and motor coordination through different movements.			
MY BODY - Names of body parts - Movements of the body - Song on body parts - Paired and single parts - Names of fingers-(finger rhymes)	- Explores and expresses what he/ she can do with the body spontaneously (I can-play, talk, draw, etc.) - Participates joyfully in micro and macro movements of body following instructions (e.g. run, twist, pick, crush, smile, blink, jump) - Names parts of the body - Identifies paired and unpaired parts - Names fingers and has fine motor coordination (e.g., Separates grains using fingers)	MY BODY - Right and Left palm, feet - Top-bottom, right-left, center, front and back with reference to the body	- Identifies R and L palms and feet - Understands top, bottom, right, left, center, front, back with reference to the body - Follows instructions and moves accordingly (e.g., raise your right hand and touch the top of your head, raise your left leg and move it to the left) - Gives instructions to peers for movements and actions (e.g., Rani, Ravi says)
CG-3: Children enhance their sensorial awareness and discrimination skills through different activities.			
MY SENSES - The 5 senses and organs involved - Vocabulary to describe objects with the five senses	- Builds sensorial awareness of the world around - Compares and classifies objects based on sensorial criteria (visual, tactile, sound, smell, taste) through	MY SENSES Reiterates learning of sense and senses organs from class 1	- Builds sensorial awareness of the world around - Compares and classifies objects based on sensorial criteria (visual, tactile, sound, smell, taste) through activities and games - advance level

	activities and games - basic level Describes objects with appropriate vocabulary		Describes objects with appropriate vocabulary
CG-4: Children learn and practice self-care and safety routines and norms.			
SELF CARE ROUTINES - Simple routines of body care - Steps of hand washing - Oral care - Hair & Nail care - Bath and washroom routines - Eating, Sneezing and coughing etiquettes - Use of colour coded dustbins (Two types: Green and Blue)	- Knows and Practices simple body care and cleanliness routines - Uses dustbins	SAFETY - Safety at home, school and community - Road Safety - School & classroom safety norms - Usage and care of tools (toothbrush, spoons, scissors, knife, nail clipper) - Touch rules, keeping safe from abuse and reporting it, identifying their safe person	- Names a safe person in school and home to whom they will report. - Understands and practices safety rules at home, school and in the community
CG-5: Children understand family roles and responsibilities and participate in family activities.			
MY FAMILY - Members in the family - Activities that happen at home (cooking, cleaning, playing) - Supportive behaviors with elderly people	- Names the relationship with family members (compares the vernacular and English names) - Shares with peers the names of members in the family, - Represents family members using stick figures - Talks about what they like doing with family members	MY FAMILY - Example of a family tree - Roles and responsibilities of family members - Celebrations of festivals/happy events at home - Supportive behaviors with elderly people	- Understands family relationships by drawing a family tree - Illustrates members' pictorially using shapes - Understands that roles and responsibilities are not stereotypical and are held together - Describes happy events at home (e.g. festivals, birthdays, outings) - Makes decoration with paper and

	- Supports elderly people at home and in the community - Talks respectfully and politely with them and listens and responds when they talk - Helps them in simple ways (fetching objects, opening a door)		draws simple design following the steps given Offers appropriate help to elderly in daily situations without being prompted
CG-6: Children familiarize themselves with the school environment, routines and community.			
MY SCHOOL - Pictorial story of the first day in school - Places and people at school	- Listens to the story and shares responses - Builds familiarity with the school premises and people - Knows the layout of the school premises - Understands the usage of the different spaces in school and classroom - Identifies the people in the school and their roles including the class teacher and other helpers	MY SCHOOL - A time table of a week and day in school - Line diagram of a compound and building - Marking on a grid drawing - Follows schools norms	- Understands the timings of school and the routine of the day and follows it - Represents the layout of the school with a simple diagram - Represents the seating arrangement in the classroom using a grid diagram - Comes to school on time and regularly - Follows school norms, maintains queue and appropriate space between people recognizes and greets the role holders, caregivers and teachers in school
CG-7: Children explore, categorize and creatively use common objects around them.			
THINGS AROUND ME - Objects around me - Line diagrams of objects in the house and school - Simple toy making	- Names objects seen in the house and classroom and correlates them with their use - Illustrates with line diagrams the things seen in the	THINGS AROUND ME - Line and shapes diagrams of objects in the house and school - Simple toy making	- Illustrates with line diagrams and shapes the things seen in the classroom and school - Categorises things on different criteria –usage/ materials used/

People who work with materials and their tools/ materials/ objects made	classroom and house - Categorises the objects based on use (by making a table with illustrations) - Makes a few simple toys with everyday materials (paper, drinking straws, ice-cream sticks) - Matches professionals (Tailor, Farmer, Driver, Cook, Nurse, Doctor...) with their tools and materials - Learns how to organize, use and care for objects in the classroom, school and house	- Different designs of objects having the same use (e.g. Different kinds of water containers) - An example of one object being used for many purposes- (e.g. rope) - Pictures of objects like S shaped hooks, hangers	shapes/ sizes/ colours - Makes a few simple toys with everyday materials (paper, drinking straws, ice cream sticks...) - Gives examples of different designs of objects having the same use - Given one object like a piece of cloth, demonstrates all that it can be used for - When shown pictures of objects like S shaped hooks and hangers, shares what they can be used for
CG-8: Children explore different materials around them and differentiate between living and non-living things.			
MATERIALS Different kinds of materials -clay, wood, metal, plastic, cloth	- Touches different type of materials and describes them - Observes different objects around them and identifies what materials they are made up of - Understands that they can be made of a variety of materials - Given a row of pictures, picks the odd one - Given 2 rows of pictures	LIVING & NON-LIVING THINGS - Characteristics of living things - Non -living things like soil, air and water support life - All characteristics are necessary to categorize objects as living and non-living	- Differentiates the characteristics of living and non-living things (breathes, grows, eats, moves, produces young ones - Non-living things do not have these characteristics. - Observes a variety of living and non-living things around them Categorises objects as living and non-living based on the criteria - Illustrates a few living and non-living things using line diagrams - Understands the concept that non-

	pairs objects that go together c. Given pictures with parts of objects joins them to make a whole object ▪ Makes similar games as a,b,c, above and shares it with friends ▪ Makes things with simple available materials		living elements (air, water, fire) support life
CG-9: Children explore plants in their surroundings through observation, description, comparison and develop an ethic of care for them.			
PLANTS ▪ Parts of a plant ▪ Commonly found flowers ▪ Flowers decorations ▪ Riddles using flowers ▪ Care for plants	▪ Shares observations about plants they have observed in their environment – (trees, flowers, plants with vegetables, fruits, etc.) ▪ Observes the plants around them and names orally the parts of plants and trees—roots, stem, leaves, bark, branches, fruits, flowers, petals ▪ Names plants around them (vernacular names may be used) ▪ Describes a few plants in the environment using the vocabulary learnt (texture shape, size, colours, - of	PLANTS ▪ Line diagrams of a few commonly found plants—trees, grasses, shrubs, creepers, climbers with labels ▪ Vocabulary to describe plants and leaves ▪ Uses of some plants ▪ Leaf whistle, leaf rubbing, leaf decoration, patterns using leaves ▪	▪ Observes trees, plants, grasses, around them ▪ Names plants around them (e.g., trees, shrubs, creepers, climbers, tall, hairy, etc) (vernacular names may be used) ▪ Describes them using appropriate vocabulary (texture, shape, size, colours of stem/ trunk, and leaves) ▪ Illustrates a few of them ▪ Knows uses of some commonly found plants ▪ Compares two/more leaves and states differences and similarities...draws them ▪ Sorts leaves according to size, shape, colour, texture, smells ▪ Finds out and names a few leaves that

	stem/ trunk, leaves, petals) ▪ Compares two / more plants (e.g., Locally available plants) and observes similarities and differences ▪ Makes line diagrams of a few plants ▪ Names orally flowers that they see around them e.g., rose, jasmine, marigold.... (vernacular names may be used) ▪ Describes a flower observed (vernacular may be used) -its size, colour, smell if any, arrangement of petals) ▪ Categorises a few flowers based on colour, size and smells ▪ Shares how they use flowers (e.g. decoration...) ▪ Does not harm them or pluck them unnecessarily ▪ Makes a small design in the classroom using locally available flowers ▪ Takes care of plants and trees and does not cause damage to trees		are eaten, used for other purposes ▪ Makes a leaf whistle ▪ Makes leaf rubbings ▪ Uses leaves to create designs ▪ Takes care of plants and trees and does not cause damage to trees
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CG-10: Children identify different components of food--vegetables, fruits grains and animal products.			
FOOD - My favourite food - Fruits and vegetables - Vegetable and fruit drawing with outlines - Vocabulary to describe fruits and vegetables - Ripe and raw fruits - Healthy eating habits	- Shares about their favourite food - Names and orally describes with appropriate vocabulary, (vernacular may be used) fruits and vegetables available in their locality - Draws and colours them - Categorises and arranges them, based on different criteria—texture, colour, size, heavy/ light taste, smells, if they grow as creepers/ vines etc...) - Understands and responds to riddles orally - Creates images and patterns using vegetable prints - Differentiates between ripe and raw fruit - Names some dishes made with fruits and vegetables - Knows steps to make drinking water safe - Understands and practices healthy eating habits (timely eating, cleanliness, not wasting food, chewing food, drinking water)	FOOD - Path of food: Plants → farm → Shop/ market → Plate - Food grains animal products, sprouts (with labels in English and the vernacular) - Reiterate healthy eating habits	- Traces path of food from plant to plate - Identifies and names the food grains (with labels in English and the vernacular) and animal products that are commonly used - Finds out the different dishes that can be made from millets, rice, eggs, fish and discusses it - Sprouts a pulse following the steps

CG-11: Children observe animals around them and appreciate their diversity and characteristics.			
ANIMALS - Animals in the immediate environment - Homes and young ones of some of them - Picture story of an animal in the immediate environment - Care of pet animals	- Observes the animals in the immediate environment (e.g., cats, dogs, cows, butterflies, crow, hen) - Names them and discusses how these animals obtain food, about their movements, homes and their young ones - Observes and groups the animals based on the number of legs they have - Learns to draw 3-4 of them using different modalities (stick figures, line diagrams, using shapes, grids...) - Reads the picture story - Understands and practices an ethical care with animals (feeding them, keeping them clean, not harming them, and taking them to pet clinics when they are sick)	ANIMALS - Animals in the immediate environment - Learns the vocabulary to orally describe the body parts of animals observed in their immediate environment - Leaf Zoo - Groups of animals	- Observes and describes in class, few animals in the immediate environment with appropriate vocabulary (e.g., goats, bees, spiders, ants, parrot, pigeon, duck, fish) - Matches, compares, categorises the animals based on simple criteria like size, movement, body structures like legs, horns, wings, tails, feathers - Learns to draw 5-6 of them using different modalities (stick figures, line diagrams, using shapes, grids...) - Makes 3-4 animal shapes using leaves and speaks about the animals they have made - Appreciates the diversity of the animal kingdom (Animals that live in water – e.g., fishes, Animals that live in land and water- e.g., frogs, Small creatures around us- e.g., earthworms, ants, butterflies, Animals that fly in the air –e.g., birds, Animals that live with man, domestic and farm animals---cats, dogs, cows Animals in the wild---wild animals---e.g., tiger, lion)

CG-12: Children explore different modes of transport around them.			
TRANSPORT ▪ Different kinds of road transport ▪ Step wise drawing of vehicles- cycle, auto, car, bus, truck	▪ Shares about vehicles observed and travelled in ▪ Observes the picture and names the vehicles in it ▪ Draws them ▪ Categorises them based on number of wheels they have	TRANSPORT ▪ Modes of transport ▪ Different kinds of trains	▪ Draws, names and makes cards with labels of different vehicles ▪ Categorises them based on where they travel (air, water, land) and draws them ▪ Uses the cards made to play different games with them (-match, group-based on criteria like wheels, where they move, memory games) ▪ Knows about different kinds of trains ▪ Compares animal movement and human movement with moving in a vehicle—states similarities and differences
CG-13: Children observe and describe different changes around them.			
		CHANGES AROUND US ▪ Day and Night Sky – night animals and flowers that bloom at night ▪ Stages of growth of human- from infant to old people ▪ Stages of growth of a plant ▪ Changes over the years in how people travel	▪ Observes changes seen every day in the sky during day and night ▪ Discusses the differing activities of family members and other people around them during the day and night ▪ Draws and colours the night sky ▪ Knows about night animals and how they live in the dark and about some flowers that bloom at night ▪ Sequences pictures of the growth of humans (babies to adults) and talks about their observations ▪ Shares changes that are happening in

			their bodies (movement, teeth, growing taller, stronger etc.) as compared to when they were in class1 - Sequences growth of a plant - Understands changes over the years in the way people travel (bullock/ horse cart-→ to airplanes & fast trains) - Speaks about any other changes that they have observed
CG-14: Children experiment with water.			
		ACTIVITIES WITH WATER - Some simple experiments - Dropping different objects in water—twigs, pebbles, feather, cotton, coins - Mixing small pebbles, mud, salt, sugar in water, colours - Lifting objects after adding water (sponge, container of sand and a mug) - Wetting a piece of cloth and drying it in the sun - Estimating and verifying how many capfuls of water are needed to fill a small vessel, how many tumblers are needed to fill a mug with water	Does different activities in a sequential manner and shares observations

CG-15: Children identify different people in the community around them and understand their contribution to society.			
PEOPLE AND PLACES - Composite picture of a market place - People who help us - Role play of people who help us with transport	- Shares their experiences of visit to a market -Discusses what was bought and from whom and the sights and sounds and people there - Matches people with their professions – one who brings milk, cooks, teaches, drives... - Matches professionals and their tools/ materials used (farmers, fruit/vegetable sellers, provision shop keepers, milk vendors, cooks...) - Imitates different helpers who are involved in transporting us from place to place (drivers, conductors, vehicle mechanic, drivers)	PEOPLE AND PLACES - Composite picture of a locality Labels of different people who work - A composite picture of a festival scene with dancers, musicians	- Observes the picture and matches the labels with the people who work in the different places Shown-Teacher, Bank Staff, Postman/woman, Doctor, Nurse, ... - Discusses how they help us - Observes the festival scene and names different kinds of artists involved- actor, singer, dancer, sculptor, painter... - Colours and decorates the artists in the line diagrams given - Finds out Who helps pet animals when they are sick Who all keep us safe? Who brings us news? Who works in the garden?
CG-16: Children perform different movements and work with patterns to bring focus and for sensory-motor integration.			
MOVEMENT and PATTERNS Classes can begin with simple movements for coordination and alertness and can end with pattern drawing. A compilation of simple movements (with illustrations where possible) and age- appropriate patterns to be given. These two activities bring focus and are useful for sensory-motor integration, which is very vital for development in this age group.			

Skill	Skill Subset
Cognitive Skills	
Observation (environment/ text/ visual representation)	Observe using all senses accurately, larger context & for detail
Questioning	Frame and articulate a Question or sets of Questions, Sequence a set of questions Explore based on a question Finding answers to questions using observations and discussion
Comparing	Observe similarities/ differences/ patterns/trends Compare outer features/abstract qualities
Categorizing	Define a basis / criterion for categorization, Sort/Pair/ Group on the basis of categorization Match, regroup on a fresh basis, represent classes, subclasses, Tabulate, Explain the categorization
Pattern Recognition	Identification of pattern from observations/ experiences/ data
Sequencing	Sequence—earlier from later, distant from near, Sequence steps in a planned activity Make or follow a flow diagram, Make a timeline
Work with Experiments	Follow Instructions and do experiments, Design simple experiments to explore a question
Reading Comprehension	Understand, show proof of comprehension—Narrate/ Describe/Explain to another/ Summarize Spot key words /Unknown words, Apply understanding, Understand science related vocabulary
Communication & Representational Skills	
Drawing Skills	Learn to represent through drawing, Draw from imagination/ Following the dotted lines/ Following instructions/ Within a grid/ Continuing a pattern/Colouring, Form Drawing and <i>Design</i> , for recognizing and continuing a pattern, mirror images, for right and left differentiation, for symmetry
Writing Skills	Describe phenomenon observed, Investigative expression--- Accurate noting down of data/ Reporting observations & results systematically, Small summaries, Journaling reflections/ questions

Speaking Skills	Share what is known ... Describe/ Narrate/ Name Make presentations in groups Participate in discussions
Design Skills	
Make and Use Models	Make observing the pictures and the sequence in the picture/From your imagination /Following instructions/ Using materials in the environment/Design for a particular purpose Use models
Social Skills	
With Peers in a Group	Wait for one's turn, give everyone in the group a chance to participate, Listen attentively Help other members, Share Information, Take turns to present, Designate an anchor by turn
In Class	Follow instructions given by teacher/ Anchor, Follow procedures in experiments and activities Avoid disruptions, Participate in group discussions and activities
In Daily Living	Respect for people and all life, Respect for all professions & cultural backgrounds Applying learning.... Make informed & responsible decisions

Pedagogical Approaches

Primary Environmental Science is built on inquiry-based learning where students observe phenomena and raise questions. The questions guide the design of activities/ investigations/ further observations. Qualitative or quantitative data is gathered. An appropriate form (table, chart, graph, report) is chosen to present the data. Through analysis and association, students identify patterns, explain cause-and-effect relationships, and connect concepts to real-world contexts and their environment. They communicate understanding using multiple representations—oral, written, and visual. Students reflect on what they have learnt, what they would do differently, what they would like to explore further. Collaborative learning through pairs, groups, and whole-class discussions fosters the co-construction of ideas and the sharing of experiences.

Assessment Strategies

Effective assessment strategies in primary Environmental Science include formative techniques, summative evaluations and student-led approaches (peer/self-assessment). Formative Assessment (assessment for learning) includes continuous checks during lessons (questioning, observation), encourages real-time feedback and helps teachers adapt instruction. These methods help teachers track progress, identify misconceptions, and foster inquiry-based learning. Observational Assessment (observations of behaviours during group work or experiments) and use of open-ended questions to probe scientific thinking captures collaboration, cognitive skills, and scientific attitudes. Summative Assessment (end-of-unit/term exercises) provide a snapshot of overall understanding of concept. Peer & Self-Assessment with scaffolding for the young learner, supports reflection, responsibility and metacognition. Combining approaches ensures a more holistic picture of student learning to emerge. Care is taken to see that summative tests are not exclusively focused upon as they can reduce curiosity. The aim of assessment is to provide constructive feedback that guides improvement, not just grades.