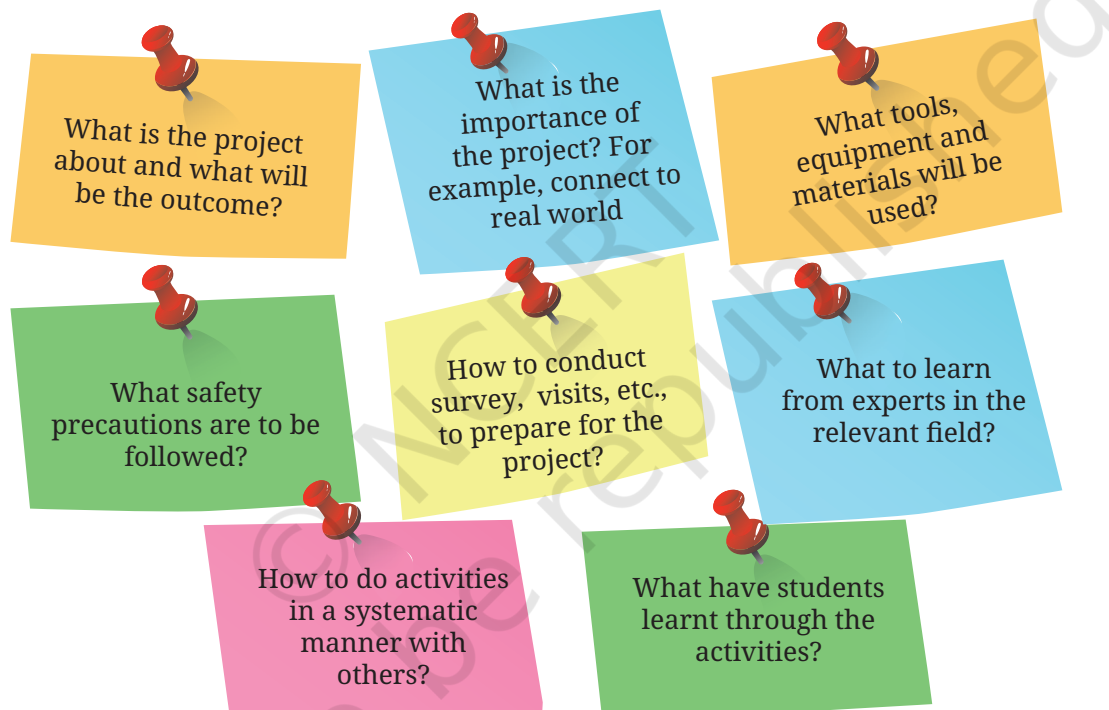


ANNEXURE 1

Project Template

Developing effective projects in schools require careful planning, clear objectives, and engaging activities that align with educational goals.

The diagram given below summarises the key questions that need to be addressed while developing the project.



Name and brief introduction of the project

Choose a title that is descriptive and engaging, and gives a clear idea of the broad purpose of the project.

1. Explain why the project is important.
2. Highlight its relevance to the students' lives, education, or the community.
3. Discuss the benefits of the project.
4. Describe how the project relates to real-world scenarios, tasks or problems.
5. Explain the practical implications and potential impact of the project.



What will I be able to do?

Achievable and measurable objectives aligned with the curricular goal, competencies and grade-wise learning outcomes have to be defined for each project. Activities must be designed for the fulfilment of these objectives.

Define two or three simple objectives in words that students can understand. These objectives indicate what students will be able to do at the end of the project. Students must be able to respond to the following questions:

1. What will you be able to do by the end of the project?
2. What will you learn?



What will I need?

Ensure that the required resources are accessible and locally available, and help students identify what is required for the project.

Students must be able to:

1. Provide a brief overview of the tools, equipment, materials, and other resources needed for the project.



How do I keep myself and others safe?

This section should include all the safety precautions to be taken during the project, including Internet safety measures. Students should also wear appropriate clothing, such as long sleeves, pants, and sturdy shoes, while doing activities in the field.

Safety precautions related to tools, materials, equipment, and internet use must be explained and demonstrated. Students must be able to respond to the following questions:

1. How will you ensure your safety and that of others during the project?
2. What will you do to ensure no one is physically or emotionally hurt?
3. How will you ensure the safety of plants and animals, if relevant?
4. How will you maintain confidentiality (that is, you will not share information about anyone without checking with them first)?
5. What will you do to keep yourself safe on the Internet?



What do I need to know before I start?

Prepare students to begin work by recalling prior knowledge, introducing concepts through activities that require them to work with tools and materials, exploring the environment and basic skills related to the project, and so on. Clearly define roles and responsibilities for all participants, and ensure everyone understands their tasks and how they contribute to the project.

Students must be able to respond to the following questions:

1. Is there anything you need to learn before starting your project?
2. Do you need to meet an expert who can teach you how to do the activities related to the project?
3. Is there anything in your locality that you need to find out about?
4. Do you need to conduct a survey, take up field visits, or something similar before you start?



What do I have to do?

Students need to take up various activities required for the completion of the project. Frame questions that will help them to think about what is to be done, and subsequently, record data or information related to the project.

Students must be able to do the following:

1. Follow the project plan and execute tasks according to the timelines.
2. Observe others to learn practical skills and techniques, such as proper tool usage, effective planting methods, and maintenance practices.
3. Monitor progress regularly and adjust as necessary.
4. Keep records of all activities and challenges faced during the activities.
5. Document what they have learnt, their successes and challenges for future reference.

As they complete each activity, students can be asked the following:

1. The materials you used and how you used them.
2. The tools you used and how you used them.
3. The process you followed, such as the selection of materials/tools, sequence of tasks, and how you completed each one.
4. If you collected information/data/objects, describe them and explain why they are useful.
5. If you made something, include a photograph or a sketch.
6. If you grew a plant, record its growth.
7. What safety precautions did you take while doing the activities?
8. Did you use any AI tool? If yes, which ones did you use and how did you use them?
9. Did you share the outcome of your project with others outside the school? Describe your plan and how you executed it.
10. Did you do something to keep the environment clean or to recycle waste? Record the details.



What did I learn from others?

Learning from others is a crucial aspect of any project. Therefore, students should reflect on what they have learnt from others. It can help improve their soft skills, deepen their understanding, and enhance the project's overall success.

Engaging with others enables students to communicate effectively, share ideas, and collaborate on tasks. Diverse perspectives and ideas are introduced, which help students learn from the viewpoints of others. This can help them approach problems in new ways, and enhance their creativity and problem-solving skills. Listening to others, such as workers in the world of work, experts, professionals, and the like provides valuable insights that can help improve learner's practices.

Students must be able to identify what they learnt during field trips, online and offline interactions with experts, from family and friends, community members, and other sources. They must be able to respond to the following questions:

1. What did you learn from field trips, interactions, video lectures, or experts?
2. What did you learn from your friends? Did you help them with something?
3. What did you learn from family members, siblings, and community elders?
4. What did you learn from people in the community?



What did I do and how long did it take?

In order to develop the capacity for time-based planning, students must record the entire process followed, the sequence of activities, and the time taken for each activity. This can be done as they proceed or at the end of the project. Students must be able to respond or think back on what they did and how long it took them to plan and execute the activities.



What else can I do?

Students need to think of other setting, in which they can apply their learning from the projects, especially outside the school. For example, students can participate in workshops, coding classes, and exhibitions or fairs. They can

also apply their learnings from the projects at home, and in various other places. They can celebrate cultural heritage months, international days, or multicultural festivals, and organise cultural events, culinary events, skill exhibitions, etc. They can integrate subjects through interdisciplinary projects, like historical re-enactments, science and art collaborations, or literary functions through performances.

Students must be able to respond to the following questions:

1. What else can you do to apply your learning from the project?
2. Do you see any scope to expand the current project? How?



Think and Answer

Students must reflect on what they have learned from their recent experiences. A set of questions must be designed to assess learning of key aspects of the project and related concepts across curricular areas.

Some of the questions that can be asked include the following:

1. What did you enjoy doing?
2. What were the challenges you faced?
3. Question(s) related to the project itself.
4. What are some examples of jobs related to the activities you just did?
What other jobs are related to the project?



Planning

Since planning is an important part of all work, all projects contain components of planning. However, to ensure students are able to detail out the steps required in planning, the planning section can be used as it is given in the Activity Book. In case the school plans an alternative approach to meet this outcome, it must be ensured that students are able to respond to the following questions:

1. What is the final event you are planning?
2. When and where will it be held?
3. Who will be the invitees?
4. What will the final event involve?
5. What are the steps required to ensure the final event goes as per the plan, and when do they have to be fulfilled?
6. What are the resources involved and who will be responsible for each step?

ANNEXURE 2

Curricular Goals and Learning Outcomes for Grade 7

The table below details the Competencies (C) for the Middle Stage and Learning Outcomes defined for Grade 7 for the attainment of each Curricular Goal (CG).

Competency	Learning Outcomes
CG-1 Develop in-depth basic skills and allied knowledge of work and their associated materials/procedures	
C-1.1 Perform procedures competently through required tools/equipment	LO 1—Select tools appropriate for specific task LO 2—Use tools correctly to complete given task
C-1.2 Approach tasks in a planned and a systematic manner	LO 3—Demonstrate appropriate stepwise process for completing the given task LO 4—Develop time-based plan for completion of task
C-1.3 Maintain and handle materials/equipment for the required activity	LO 5—Describe the steps necessary to keep materials and equipment ready for use LO 6—Follow the safety protocol while handling tools/materials
CG-2 Understand the place and usefulness of vocational skills and vocations in the world of work	
C-2.1 Describe the contribution of vocation in the world of work	LO 7—Describe the importance of vocation in the world around them
C-2.2 Apply skills and knowledge learned in the area	LO 8—Explain how prior knowledge and skills have been used to complete the task

C-2.3 Evaluate and quantify the associated products and materials	LO 9—Identify criteria for evaluating quality of products LO 10—Identify criteria for evaluating quantity of products
CG-3 Develop essential values while working across areas	
C-3.1 Develop the following values while engaging in work: • Attention to detail • Persistence and focus • Curiosity and creativity • Empathy and sensitivity • Collaboration and teamwork • Willingness to do physical work	LO 11—Keenly observe the usage of tools and materials during the demonstration and ask relevant questions LO 12—Demonstrate care and respect towards people doing physical labour, irrespective of gender LO 13—Plan tasks with peers and helps others during difficulties at work LO 14—Re-work/redo the task for improved efficiency LO 15—Ask questions about the functioning of tools and machines, and gives suggestions for alternative use LO 16—Willingness to do physical work while enjoying working with tools and materials
CG-4 Develop basic skills and allied knowledge to run and contribute to a home	
C-4.1 Apply the acquired vocational skills and knowledge in home setting	LO 17—Identify where skills and knowledge are relevant at home

ANNEXURE 3

Additional Projects

Work with Life Forms

Hydroponics – Growing Plants in Water

Related vocational area(s)—Urban agriculture

Subject Teacher most suitable for this project: Science

Activity	Required periods: 52
<i>What will I be able to do?</i>	4
Create and maintain a hydroponic system	
<i>What will I need?</i>	
Pen/Pencil, notebook, seeds: <i>methi</i> , any pulses, tomato or green chilli (<i>mirchi</i>), box (small), seedling tray, large bottle, bubbler, air tube, net pots, growing media, nutrients for hydroponics	
<i>How do I keep myself and others safe?</i>	
Safe handling of tools, protective clothing, gloves	15
<i>What will I need to know before I start?</i>	
Learn about the types of hydroponics Discuss nutrients essential for plant growth Interact with experts/watch online videos	
<i>What do I have to do?</i>	22
Build the system using bottles and containers Maintain the system and record plant growth Regularly monitor and document the health of plants Check on quantity and quality of produce	
<i>What did I learn from others and how did I use it?</i>	
Incorporating inputs from observation, interaction, discussion and feedback	
<i>What did I do and how long did it take?</i>	1
As per the project template	
<i>Think and Answer</i>	2
As per the project template	

What else can I do?	5
Explore home-based applications of hydroponics	

Make your own Terrarium

Related vocational area(s)—Gardening, nursery

Subject Teacher most suitable for this project: Science

Activity	Required periods: 30
What will I be able to do?	4
Plant a terrarium	
What will I need?	
Glass containers or jars with lids, pebbles or small rocks, activated charcoal, soil, small plants (succulents, small ferns), moss, small decorations (optional), coloured markers or labels, magnifying glasses for closer observation (optional) Tools — Scissors, pencil, long spoon	
How do I keep myself and others safe?	8
Safe handling of tools, maintaining cleanliness	
What will I need to know before I start?	11
Ecosystems, terrarium types (open/closed/bioactive), role of components (drainage, soil, plants, insects, etc.), and historical significance	
What do I have to do?	3
Build the terrarium, including gathering materials, creating drainage, planting, observing and recording changes in the terrarium	
What did I learn from others and how did I use it?	1
Incorporating inputs from observation, interaction, discussion and feedback	
What did I do and how long did it take?	1
As per the project template	
Think and Answer	2
As per the project template	
What else can I do?	2
Explore the application of terrarium-making skills at home, such as creating gifts or making terrarium at home	

Identification of Plant Diseases and Pests using Artificial Intelligence (AI)

Related vocational area(s)—Artificial Intelligence

Subject Teacher most suitable for this project: Science

Activity	Required periods: 55
<i>What will I be able to do?</i>	6
Identify plant diseases and pests using AI	
<i>What will I need?</i>	
Pen, notebook Tools — Computer/PC, Internet, Free AI platform — Google's Teachable Machine	
<i>How do I keep myself and others safe?</i>	12
Learn safety protocols while handling equipment and collecting data Follow ethical guidelines for data usage	
<i>What will I need to know before I start?</i>	
Basics of AI, machine learning Understanding of pest/disease characteristics	
<i>What do I have to do?</i>	20
Collect plant images Sort and label data Split data into categories Train the data using AI tools, like Google Teachable Machine Test and refine the model Use the model for pest/disease detection	
<i>What did I learn from others and how did I use it?</i>	
Incorporating inputs from observation, interaction, discussion and feedback	
<i>What did I do and how long did it take?</i>	2
As per the project template	
<i>Think and Answer</i>	2
As per the project template	
<i>What else can I do?</i>	5
Explore how to deal with plant diseases and pests using organic methods	

Observing and taking care of domestic animals

Related vocational area(s)—Animal husbandry, veterinary services

Subject Teacher most suitable for this project: Science

Activity	Required periods: 48
<i>What will I be able to do?</i>	5
Understand needs of domestic animals and take care of them	
<i>What will I need?</i>	
Pen, notebook	
<i>How do I keep myself and others safe?</i>	
Discussing safety precautions for self and animals Preparing a list of do's and don'ts for handling animals	10
<i>What will I need to know before I start?</i>	
Research animal behaviour, habitats and social structures. Brainstorm observation methods and aspects of behaviour to observe	24
<i>What do I have to do?</i>	
Conduct field observations and record behaviours Prepare feed and watering schedule Make a schedule for cleaning, feed requirements, daily exercise schedule Participate in activities under guidance of animal owner Analyse data and identify patterns or trends	
<i>What did I learn from others and how did I use it?</i>	
Incorporating inputs from observation, interaction, discussion and feedback	
<i>What did I do and how long did it take?</i>	1
As per the project template	
<i>Think and Answer</i>	1
As per the project template	
<i>What else can I do?</i>	4
Find out about animal rights	

Medicinal Plants, Herbs and Spices

Related vocational area(s)—Pharmaceuticals, Botany
Subject Teacher most suitable for this project: Science

Activity	Required periods: 50
What will I be able to do?	6
Grow and know about the medicinal plants, herbs and spices	
What will I need?	
Pen, notebook, pots, saplings, water, gardening tools	
How do I keep myself and others safe?	
Follow safety protocols when handling seeds, soil, and plants Learn about potential risks of incorrect plant use and how to avoid them Use gardening tools carefully to prevent injuries	12
What will I need to know before I start?	
Research the cultural significance and therapeutic properties of locally available medicinal plants Make a list of plants for further study Explore key resources (books, websites, experts) for gathering information	
What do I have to do?	20
Visit botanical gardens and pharmacies Plant and care for medicinal plants Collect data on traditional uses of plants, their uses in medicine and limitations Prepare simple recipe (<i>kadha</i> , tablets, tea etc.) using <i>tulsi</i> , turmeric, ginger, lemon grass, etc., and taste with friends Conduct surveys and interact with experts to validate information	
What did I learn from others and how did I use it?	
Incorporating inputs from observation, interaction, discussion and feedback	
What did I do and how long did it take?	1
As per the project template	
Think and Answer	2
As per the project template	
What else can I do?	5
Explore other uses for medicinal plants (e.g., masks, balms)	

Work with Machines and Materials

Making Bamboo Products

Related vocational area(s)—Sustainable agriculture and handicrafts

Subject Teacher most suitable for this project: Art/Home Science

Activity	Required periods: 52
What will I be able to do?	6
Design and create products from bamboo	
What will I need?	
Bamboo, knife, carving tools and sandpaper	
How do I keep myself and others safe?	12
Proper handling of materials, demonstrating safely using sharp tools	
What will I need to know before I start?	
Understand the properties of bamboo and techniques for working with it Practice using tools on sample bamboo pieces Discuss the stepwise process for making bamboo products	
What do I have to do?	20
Create multiple bamboo products, such as pen stand, fencing, ladder, bench, stool Refine techniques (polishing, varnishing, painting) for better quality and quantity	
What did I learn from others and how did I use it?	5
Incorporating inputs from observation, interaction, discussion and feedback	
What did I do and how long did it take?	1
As per the project template	
Think and Answer	1
As per the project template	
What else can I do?	5
What else can I do? Create small bamboo utensils or decorative items for home use	

Make your own Robot

Related vocational area(s)—Robotics

Subject Teacher most suitable for this project: Science, Atal Tinkering Labs (ATL) in-charge

Activity	Required periods: 55
<i>What will I be able to do?</i>	6
Develop skills in robotics, Arduino programming, sensor-based robotics and building robot prototypes	
<i>What will I need?</i>	
Arduino, LED, motor, breadboard, jumper wires, battery, adapter, soldering material, flux, Arduino cable, ultrasonic sensor, motion sensor, IR sensor, Wi-Fi-module, motor drivers, chassis, wheels, Bluetooth module Tools — Multimeter, soldering gun, wire stripper, cutter, computer/PC, Scratch online platform	
<i>How do I keep myself and others safe?</i>	17
Understand safety protocols for handling equipment, maintaining materials, and working responsibly in a collaborative environment	
<i>What will I need to know before I start?</i>	20
Learn the basics of robotics, Arduino programming, types of robots, main components (sensors, actuators, power sources) and tools usage	
<i>What do I have to do?</i>	5
Execute tasks, such as building a hydraulic hand, Arduino-based robot and sensor-based robots Compare task times and improve designs iteratively	
<i>What did I learn from others and how did I use it?</i>	1
Incorporating inputs from observation, interaction, discussion and feedback	
<i>What did I do and how long did it take?</i>	1
As per the project template	
<i>Think and Answer</i>	5
As per the project template	
<i>What else can I do?</i>	5
Explore advanced robotics (e.g., Bluetooth/Wi-Fi-controlled robots) and opportunities to apply robotics skills at home	

Weaving on a Loom — Table Mat with a Motif

Related vocational area(s)—Textile art, designing

Subject Teacher most suitable for this project: Art

Activity	Required periods: 34
<i>What will I be able to do?</i>	2
Create a woven hand band/ <i>rakhi</i> /key chain using a self-made cardboard loom	
<i>What will I need?</i>	
Pen/Pencil, notebook, yarn/thick wool (various colours), cardboard pieces, ice-cream sticks, grid paper <i>Tools</i> — Scissors, tape, plastic or blunt-pointed needles	
<i>How do I keep myself and others safe?</i>	10
Handle scissors and other tools carefully to avoid injury Follow proper sitting postures while weaving to prevent strain Maintain a clean and clutter-free workspace to avoid accidents	
<i>What will I need to know before I start?</i>	
Types of yarn and their properties Types of looms and their uses Basic weaving terminology: warp, weft, tension, etc. Historical and cultural significance of weaving in local traditions	
<i>What do I have to do?</i>	10
Visit a museum, visit a shop and interact with a local weaving artisan Make a loom using cardboard and thread it correctly Practice weaving lines, then create a final product following the planned design	
<i>What did I learn from others and how did I use it?</i>	5
Incorporating inputs from observation, interaction, discussion and feedback	
<i>What did I do and how long did it take?</i>	1
As per the project template	
<i>Think and Answer</i>	1
As per the project template	
<i>What else can I do?</i>	5
Explore advanced weaving techniques	

3D Printing – From Sketch to Reality

Related vocational area(s)—Automotive, Medical tools, Electronics

Subject Teacher most suitable for this project: Any subject, Atal Tinkering Lab (ATL) in-charge

Activity	Required periods: 40
What will I be able to do?	6
Create objects using a 3D printer	
What will I need?	
3D printer, computers, modelling software to design products (e.g., open-source software, like Blender, Thingiverse), materials for printing	10
How do I keep myself and others safe?	
Study safety precautions for handling the printer and materials Discuss strategies for waste disposal and equipment care	
What will I need to know before I start?	17
Create rough designs for selected objects using modelling software Conduct a survey or internet search on potential 3D printed objects and gather ideas	
What do I have to do?	
Experiment with small designs in modelling software Print selected objects in group Evaluate printed objects for quality and usability	1
What did I learn from others and how did I use it?	
Incorporating inputs from observation, interaction, discussion and feedback	1
What did I do and how long did it take?	
As per the project template	1
Think and Answer	
As per the project template	2
What else can I do?	
Make 3D-printed objects for your home or school requirements	

School Band from Waste Materials

Related vocational area(s)—Music, entertainment

Subject Teacher most suitable for this project: Any subject

Activity	Required periods: 47
What will I be able to do?	6
Create musical instruments using recycled materials	
What will I need?	
PVC pipes of different diameters, duct tape, glasses and/or different kinds of bottles with varying water levels, cardboard boxes, thin wires, rubber bands, pieces of steel, long wood pieces, wooden metre scale, steel pipes, metal container, cutting and drilling instruments, and any other material the teacher and students can think of, for example, tuning forks; wood, nuts, bolts and screws to create a basic guitar.	
How do I keep myself and others safe?	15
Discuss safety precautions for handling tools and materials, like PVC pipes, glass bottles and sharp tools.	
What will I need to know before I start?	
Learn about musical notes, melodies, and basic composing techniques from a music teacher or online resources Research types of musical instruments and explore ideas for DIY instrument creation Discuss with peers to finalise instruments	
What do I have to do?	17
Identify recyclable materials and gather them Create instruments using the materials, ensuring safety and quality Practice and refine melodies, adjusting for the best sound output Finalise music for presentation at the school assembly or <i>Kaushal Mela</i>	
What did I learn from others and how did I use it?	
Incorporating inputs from observation, interaction, discussion and feedback	
What did I do and how long did it take?	1
As per the project template	
Think and Answer	1
As per the project template	
What else can I do?	3
Discuss other ways to use the instruments at home or in community events You can also make musical instruments using electronics and micro-controllers	

Work in Human Services

Creating a Comic Book

Related vocational area(s)—Media, Publishing

Subject Teacher most suitable for this project: Art/Language

Activity	Required periods: 52
<i>What will I be able to do?</i>	3
Prepare a comic book	
<i>What will I need?</i>	
Stationery, examples of comic strips (printed and digital), graphic novels (Optional: Computer, Canva or similar graphic designer), scanner, printer, binding material	
<i>How do I keep myself and others safe?</i>	12
Safety precautions related to the use of tools; copyright and privacy issues (in case you use photographs or someone else's drawings)	
<i>What will I need to know before I start?</i>	
Visit a bookstore with comics/graphic novels and a printing press; interview the owner(s) Workshop with a graphic artist/exploring online tools or sketching figures Similarities and differences among different examples Discussion on what is required in a 'good' comic book	
<i>What do I have to do?</i>	11 + 8 + 7
Developing ideas A broad idea of the comic book, followed by the development of a detailed story Discussing sensitivity issues (e.g., how a character looks, speaks) Writing the script Decisions on how the characters will be represented Storyboard and preparation of the comic book	
Storyboard; drawing the comic strips, fine-tuning the dialogues For next step, choose one of the following options: • Option 1: If drawn by hand, strips to be pasted on chart papers • Option 2: If printed, then bind using a punching machine and thread Review and incorporate feedback Feedback from peers, making possible changes Exhibition of the comic book Modes for sharing with others; <i>Kaushal Mela</i>	
<i>What did I learn from others and how did I use it?</i>	
Incorporating inputs from observation, interaction, discussion and feedback	3
<i>What did I do and how long did it take?</i>	1
As per the project template	

Think and Answer	1
As per the project template	
What else can I do?	1
Make other comic books depicting family history or family events, etc.	

Family Budget Navigator

Related vocational area(s)—Finance and Accounting

Subject Teacher most suitable for this project: Any subject

Activity	Required periods: 38
What will I be able to do?	3
Create a family budget spreadsheet in Excel	
What will I need?	
Computer with Excel, Internet, sample data	12
How do I keep myself and others safe?	
Avoid physical strain while working on computers Do not share any personal information or sensitive financial data	
What will I need to know before I start?	14
Basic understanding of Excel including formulae, sorting, cell operations, etc. Understanding of finance-related terminologies, such as income, expenditure, savings, budget, etc.	
What do I have to do?	
Design the budget tracker, and create sheets for income, expenses and summaries Add and test formulae for calculations Fix errors and refine the tracker for accuracy	4
What did I learn from others and how did I use it?	
Incorporating inputs from observation, interaction, discussion and feedback	1
What did I do and how long did it take?	
As per the project template	1
Think and Answer	
As per the project template	3
What else can I do?	
Explore advanced features to create a family budget (e.g., using charts, pivot, Power BI)	

Ancient History Broadcasts

Related vocational area(s)—Journalism and Social Media

Subject Teacher most suitable for this project: Any subject

Activity	Required periods: 50
<i>What will I be able to do?</i>	1 + 2 + 3
Create videos focusing on different aspects of history, such as architecture, culture, daily life, etc.	
<i>What will I need?</i>	
Computer lab, mobile phone with a video recorder, headphones, phone microphone or video recording equipment	
<i>How do I keep myself and others safe?</i>	12
Safety protocols for using equipment (e.g., cameras, lighting). Guidelines for ensuring cultural and historical sensitivity in video content	
<i>What will I need to know before I start?</i>	
Watch sample historical videos and identify elements that make them interesting and relevant Explore features of video editing software Learn how to write effective scripts and plan video backdrops	
<i>What do I have to do?</i>	20
Research historical themes through surveys, local interactions and media Write scripts, create backdrops and rehearse roles Record and edit videos using learned techniques	
<i>What did I learn from others and how did I use it?</i>	5
Incorporating inputs from observation, interaction, discussion and feedback	
<i>What did I do and how long did it take?</i>	1
As per the project template	
<i>Think and Answer</i>	1
As per the project template	
<i>What else can I do?</i>	5
Make videos related to family history	

Podcast – Learning Through Listening

Related vocational area(s)—Social Media

Subject Teacher most suitable for this project: Any subject

Activity	Required periods: 50
<i>What will I be able to do?</i>	1 + 2 + 3
Create a quality podcast	
<i>What will I need?</i>	
Mobile phone, headphones, phone mic and suitable app, or equipment for recording podcasts (computer, mic with stand, pop filters and windscreens, audio interface, headphones, portable digital recorder, mixer, and editing software)	
<i>How do I keep myself and others safe?</i>	
Safety protocols for handling audio recording equipment Ethical considerations: maintaining sensitivity, confidentiality, and responsible content creation	
<i>What will I need to know before I start?</i>	12
Listen to various podcasts and identify what makes them engaging or ineffective Watch tutorials or videos on podcast creation to understand technical aspects, like recording and editing Develop criteria for assessing podcast quality: clarity, engagement, content depth and technical excellence	
<i>What do I have to do?</i>	20
Write scripts and plan formats for podcasts, including discussions or interviews Practice recording techniques in small groups, experiment with voice modulation and sound quality Record and edit podcasts using basic or advanced tools Perform trial runs, review feedback and make necessary changes	
<i>What did I learn from others and how did I use it?</i>	5
Incorporating inputs from observation, interaction, discussion and feedback	
<i>What did I do and how long did it take?</i>	1
As per the project template	
<i>Think and Answer</i>	1
As per the project template	
<i>What else can I do?</i>	5
Extend podcasting skills to create family news or personal audio content	

Advertisements — Communicating a Message

Related vocational area—Media and Communication, Marketing

Subject Teacher most suitable for this project: Language/Social Science

Activity	Required periods: 55
<i>What will I be able to do?</i>	1 + 1 + 3
Create advertisements to communicate a message	
<i>What will I need?</i>	
Stationery (colours, chart papers, pencil, eraser, sharpener, white sheets) Tools — Digital photo/motion graphic designer tools, like Canva, Animaker, etc. (Optional: camera/mobile phone)	
<i>How do I keep myself and others safe?</i>	14
Discuss safety protocols for handling tools and equipment Address ethical advertising practices to avoid harm (fake ads, copyright issues)	
<i>What will I need to know before I start?</i>	20
Introduction to advertisements (history, purpose, copywriting, marketing basics) Research themes and understand the audience's needs	
<i>What do I have to do?</i>	
Scriptwriting and creating storyboards Conducting surveys to understand the audience's need Create advertisements without technology (handmade posters, comic strips, jingles, plays) Developing advertisements using technology (animations, video editing, voiceovers) Developing a final advertisement for presentation	
<i>What did I learn from others and how did I use it?</i>	5
Incorporating inputs from observation, interaction, discussion and feedback	
<i>What did I do and how long did it take?</i>	1
As per the project template	
<i>Think and Answer</i>	5
As per the project template	
<i>What else can I do?</i>	5
Extend advertisement development skills based on home needs	

ANNEXURE 4

Time Allocation and Mapping of Learning Outcomes

The tables given ahead indicate Time Allocation and Mapping of Learning Outcomes for the activities included in the projects for Grade 7.

Time Allocation: The time allocated for each activity is a suggestion, and teachers can adjust it based on their class size and complexity of the project.

Cross-curricular Connections: The projects can be drawn from other subjects in the Middle Stage—Language, Mathematics, Science, Social Science, Art Education, and Physical Education and Well-being. This allows for a more holistic learning experience. Connection to other curricular areas is also indicated in the upcoming tables.

Student Reflection: Reflection prompts are included (“What did I learn?”, “What else can I do?”) to encourage students to think critically about their work.

Safety: The tables emphasise safety precautions (LO 6) for activities involving tools or potential hazards.

Open-ended Learning: The “What else can I do?” section (LO 16) encourages students to explore connect to home and extend their learning.

Learning Outcomes: Each project focuses on developing specific skills and knowledge (LO 1–9) along with essential values related to work (LO 10–15).

Please note that LO 10 to LO 15, which refer to the essential values while working across areas, are applicable across all activities.

Project 1: Plant Nursery

Connection with other curricular areas: Science

Activity	Required Periods: 53	Related Learning Outcomes
<i>What will I be able to do?</i>	4	LO 1, LO 7
<i>What will I need?</i>		
<i>How do I keep myself and others safe?</i>		LO 6
<i>What will I need to know before I start?</i>		
<i>Field visit – farm/park/nursery</i>	5	LO 1, LO 3, LO 5, LO 7
<i>What do I have to do?</i>		
<i>Planning nursery layout</i>	4	LO 1, LO 2, LO 3, LO 4, LO 5, LO 6, LO 8, LO 9, LO 10
<i>Developing plant nursery in the school</i>	10	
<i>Germinating seeds</i>	6	
<i>Preparing plants in the nursery</i>	7	
<i>Observing plants grow</i>	5	
<i>Costing and time required</i>	3	
<i>What did I learn from others</i>	3	LO 1, LO 5, LO 7, LO 8
<i>What did I do and how long did it take?</i>	2	LO 4
<i>What else can I do?</i>	2	LO 7, LO 8, LO 9, LO 10, LO 11
<i>Think and Answer</i>	2	LO 17

LO 11, LO 12, LO 13, LO 14, LO 15, LO 16 to be observed throughout the project

Project 2: School Habitat Garden

Connection with other curricular areas: Science

Activity	Required periods: 54	Related Learning Outcomes
<i>What will I be able to do?</i>	4	LO 1, LO 7
<i>What will I need?</i>		
<i>How do I keep myself and others safe?</i>		LO 6
<i>What will I need to know before I start?</i>		
<i>Identifying animals in and around the school</i>	4	LO 1, LO 3, LO 5, LO 7
<i>Interaction with an expert</i>	3	
<i>What do I have to do?</i>		
<i>Identifying natural habitats</i>	4	LO 1, LO 2, LO 3, LO 4, LO 5, LO 6, LO 8, LO 9, LO 10
<i>Identifying the needs of animals</i>	4	
<i>Designing the habitat garden</i>	5	
<i>Creating the habitat garden</i>	7	
<i>Observing occupants of the habitat garden</i>	6	
<i>Maintaining the habitat garden</i>	6	
<i>Sharing what you have done</i>	3	
<i>What did I learn from others?</i>	2	LO 1, LO 5, LO 7, LO 8
<i>What did I do and how long did it take?</i>	2	LO 4
<i>What else can I do?</i>	2	LO 7, LO 8, LO 9, LO 10
<i>Think and Answer</i>	2	LO 17

LO 11, LO 12, LO 13, LO 14, LO 15, LO 16 to be observed throughout the project

Project 3: Tie and Dye

Connection with other curricular areas: Arts, Science

Activity	Required Periods: 54	Related Learning Outcomes
<i>What will I be able to do?</i>	4	LO 1, LO 7
<i>What will I need?</i>		
<i>How do I keep myself and others safe?</i>		LO 6
<i>What will I need to know before I start?</i>		
<i>Visit to a shop</i>	3	LO 1, LO 3, LO 5, LO 7
<i>Visit to a tie and dye workshop</i>	3	
<i>What do I have to do?</i>		
<i>Exploring the art of tie and dye (everything about dyes, fabric and techniques)</i>	20	LO 1, LO 2, LO 3, LO 4, LO 5, LO 6, LO 8, LO 9, LO 10
<i>Making the final product</i>	15	
<i>What did you invest</i>	2	
<i>What did I learn from others?</i>	1	LO 1, LO 5, LO 7, LO 8
<i>What did I do and how long did it take?</i>	2	LO 4
<i>What else can I do?</i>	2	LO 7, LO 8, LO 9, LO 10, LO 11
<i>Think and Answer</i>	2	LO 17

LO 11, LO 12, LO 13, LO 14, LO 15, LO 16 to be observed throughout the project

Project 4: AI Assistant

Connection with other curricular areas: Computer Science

Activity	Required Periods: 55	Related Learning Outcomes
<i>What will I be able to do?</i>	5	LO 1, LO 7
<i>What will I need?</i>		
<i>How do I keep myself and others safe?</i>		LO 6
<i>What will I need to know before I start?</i>		
<i>Understanding who is better at what (Humans vs Machines)</i>	4	LO 1, LO 3, LO 5, LO 7
<i>AI can see, listen and speak</i>	4	
<i>Is AI creative?</i>	4	
<i>What do I have to do?</i>		
<i>Preparing to design own AI assistant</i>	6	LO 1, LO 2, LO 3, LO 4, LO 5, LO 6, LO 8, LO 9, LO 10
<i>Teaching the machine to recognise images</i>	6	
<i>Training for recognition</i>	6	
<i>Testing and improving</i>	5	
<i>Making the AI assistant interactive</i>	5	
<i>Sharing with others</i>	2	
<i>What did I learn from others and how did I use it?</i>	2	LO 1, LO 5, LO 7, LO 8
<i>What did I do and how long did it take?</i>	2	LO 4
<i>What else can I do?</i>	2	LO 7, LO 8, LO 9, LO 10
<i>Think and Answer</i>	2	LO 17

LO 11, LO 12, LO 13, LO 14, LO 15, LO 16 to be observed throughout the project

Project 5: Storytime with Puppets

Connection with other curricular areas: Arts

Activity	Required periods: 55	Related Learning Outcomes
<i>What will I be able to do?</i>	4	LO 1, LO 7
<i>What will I need?</i>		
<i>How do I keep myself and others safe?</i>		LO 6
<i>What will I need to know before I start?</i>		
<i>What makes stories work</i>	4	LO 1, LO 3, LO 5, LO 7
<i>Watching a puppet show</i>	4	
<i>What do I have to do?</i>		
<i>Selecting/Writing a story</i>	4	LO 1, LO 2, LO 3, LO 4, LO 5, LO 6, LO 8, LO 9, LO 10
<i>Writing a script for the puppet show</i>	8	
<i>Character sketch</i>	4	
<i>Making puppets</i>	10	
<i>Show</i>	8	
<i>What did I learn from others and how did I use it?</i>	3	LO 1, LO 5, LO 7, LO 8
<i>What did I do and how long did it take?</i>	2	LO 4
<i>What else can I do?</i>	2	LO 7, LO 8, LO 9, LO 10
<i>Think and Answer</i>	2	LO 17

LO 11, LO 12, LO 13, LO 14, LO 15, LO 16 to be observed throughout the project

Project 6: Family Health Handbook

Connection with other curricular areas: Science

Activity	Required periods: 44	Related Learning Outcomes
<i>What will I be able to do?</i>	4	LO 1, LO 7
<i>What will I need?</i>		
<i>How do I keep myself and others safe?</i>		LO 6
<i>What will I need to know before I start?</i>		
<i>Factors affecting health</i>	5	LO 1, LO 3, LO 5, LO 7
<i>What do I have to do?</i>		
<i>Framing questions about you and your family's health</i>	5	LO 1, LO 2, LO 3, LO 4, LO 5, LO 6, LO 8, LO 9, LO 10
<i>Visit to a PHC/Hospital</i>	3	
<i>Creating a kit</i>	4	
<i>Factors affecting health at different ages</i>	4	
<i>Analysing data from the survey of family members</i>	4	
<i>Analysing data from observations of the environment</i>	4	
<i>Making a plan to improve your family's health</i>	4	
<i>What did I learn from others and how did I use it?</i>	2	LO 1, LO 5, LO 7, LO 8
<i>What did I do and how long did it take?</i>	1	LO 4
<i>What else can I do?</i>	2	LO 7, LO 8, LO 9, LO 10
<i>Think and Answer</i>	2	LO 17

LO 11, LO 12, LO 13, LO 14, LO 15, LO 16 to be observed throughout the project

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