HORIZONTAL AND VERTICAL PLANNER 2023 – 2024

Grade Level: Primary 4

Duration	21 st Aug- 28 th Sept.	9 th Oct-17 th Nov.	20 th Nov. – 12 th Jan.	15 th Jan. –8 th Mar.	11 th Mar.– 30 th Apr.	6 th May. – 14 th June
Transdisciplinary		PA Makerspace		PSPE	VA	Mandarin
Transdisciplinary Theme	Who We Are An inquiry into the nature of the self; beliefs and values; personal, physical, mental, social, and spiritual health; human relationships including families, friends, communities, and cultures; rights and responsibilities; what it means to be human	Where we are in place and time An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations, and migrations of humankind; the relationships between and the interconnectedness of individuals and civilizations, from local and global perspectives	How we organize ourselves An inquiry into the interconnectedness of human-made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment.	How the world works An inquiry into the natural world and its laws; the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.	Sharing the planet An inquiry into rights and responsibilities in the struggle to share finite resources with other people and with other living things; communities and the relationships within and between them; access to equal opportunities; peace and conflict resolution	How we express ourselves An inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic
Central Idea:	Rights & Responsibilities Children worldwide have rights and responsibilities that should be protected.	Light and Sound Light and sound help us experience our world.	Digital citizenship Digital citizenship helps us use technology responsibly and safely.	Energy Energy can be transformed, changed, and used in various ways.	Needs & Characteristics of Plants & Animals Plants and animals have specific adaptations to help them survive in their environment.	Writing We can express our feelings, beliefs, and values through writing.

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Key Concepts:	Causation – Why is it like it is? Connection – How is it linked to other things? Function – How does it work?	Responsibility – What are our obligations? Connection – How is it linked to other things? Perspective – What are the points of view?	Form – What is it like? Responsibility- What are our obligations? Function – How does it work?	Form – What is it like? Change – How is it transforming? Responsibility – What are our obligations?	Causation – Why is it like it is? Change – How is it transforming? Responsibility – What are our obligations?	Form – What is it like? Function – How does it work? Connection – How is it linked to other things?
Related Concepts:	Rights, Responsibilities, Equality	Properties Manipulation Waves	Digital Media, Social Media Expression, Impression	Transformation, Sustainability, Properties	Characteristics, Needs, Living things	Voice, Text Structure, Conventions
Lines of Inquiry:	1. Challenges and opportunities children face (local and global) 2. Rights and responsibilities of children. 3. How we protect children.	Properties of light and sound How light and sound works Using light and sound to help others.	1.What is digital citizenship. 2. Responsible use of social media 3. Using media forms and techniques.	Different energy sources. (Renewable and non-renewable) Uses of energy. Sustainable energy practices.	Characteristics of plants and animals. How animals and plants adapt to suit their environment. What can be done to help plants and animals survive.	Structural features of texts. Purposes of different texts. Sharing our experiences through writing.
Discipline focus:	SS Lang Math	Science Math Lang Man	Media Lit SS Math	Si PSPE MS Lang	Scie Lang Math VA	Lang SS Mandarin
Teacher questions & Provocations	What are the challenges you face? What are the challenges that other children from Xi'an face? What are the risks and challenges that children from around the world face?	What is light and sound? What are the properties of light and sound? How does light and sound work? How can light and sound help others?	What is media? What are the different forms of media? How do advertisements influence people?	How do we use energy? What are the ways energy could be saved? How does the way we use energy impact us and our planet?	What are the basic needs of plants and animals? How are these needs met? How might plants/animals adapt/change in order to survive?	Why did the author choose this type of story? What are some details the author uses to develop and support the story? How is the story structured (beginning, middle, end)? What patterns

						do you notice in the story?
Approaches to Learning (ATLs)	Social Skills SS1.1.5 Be respectful to others. SS1.1.7 Learn cooperatively in a group: being courteous, sharing, taking turns. Communication Skills C1.1.6 Listen actively and respectfully while others speak.	Research Skills R1.2.4 Gather information from a variety of primary and secondary sources. R1.3.3 Sort and categorize information: arrange information into understandable forms such as narratives, explanatory and procedural writing, tables, timelines,graphs and diagrams. Communication Skills C2.1.2 Read critically and for comprehension.	Self-Management Skills SM2.3.2 Use strategies to prevent and eliminate bullying. SM2.3.4 Manage anger and resolve conflict. Communication Skills C1.2.2 Understand the ways in which images and language interact to convey ideas.	Thinking Skills T3.7 Combine knowledge, conceptual understandings and skills to create products or solutions. Social Skills SS1.1.9 Build consensus and negotiate effectively. SS1.1.12 Take on a variety of roles in group learning.	Research Skills R1.2.6 Record observations by drawing, note taking, charting, tallying, writing statements, annotating images. R1.4.4 Draw conclusions from relationships and patterns that emerge from data. Thinking Skills T3.6 Transfer conceptual understandings across transdisciplinary themes and subjects.	Communication Skills C2.2.1 Use appropriate forms of writing for different purposes and audiences. C2.2.5 Organize information logically. Thinking Skills T2.2.7 Consider multiple alternatives, including those that might be unlikely or impossible.
Learner Profile Attributes	Caring, Open minded	Thinker, Risk takers	Communicator, Reflective	Principled, Balanced	Inquirer, Knowledgeable	Communicator, Reflective
Language	ORAL COMMUNICATION READING	ORAL COMMUNICATION	ORAL COMMUNICATION	ORAL COMMUNICATION	ORAL COMMUNICATION	ORAL COMMUNICATION
	1.1 read a variety of literary texts, graphic texts, and informational texts. 1.2 identify a variety of purposes for reading and choose reading materials	1. Listening to Understand 1.1 identify purposes for listening in a variety of situations, formal and informal, and set personal	2.1 identify a variety of purposes for speaking.2.3 communicate orally in a clear, coherent manner, presenting ideas, opinions, and	2.4 choose a variety of appropriate words and phrases, including descriptive words and some technical vocabulary, and a few elements of style, to communicate their	READING 1.3 identify a variety of reading comprehension strategies and use them appropriately before, during, and	READING 2. Understanding Form and Style 2.1 identify and describe the characteristics of a variety of text forms,

appropriate for those purposes. 3.1 automatically	goals related to listening tasks. 1.2 demonstrate an	information in a logical sequence. Media Literacy	meaning accurately and engage the interest of their audience.	after reading to understand texts. 1.4 demonstrate	with a focus on literary texts such as a fable or adventure story, graphic texts
read and understand most high-frequency words, many regularly used	understanding of appropriate listening behaviour by using active listening strategies in	Understanding Media Texts	2.7 use a variety of appropriate visual aids to support or enhance oral	understanding of a variety of texts by identifying important ideas and some supporting details.	such as a comic book, and informational texts such as a nature magazine.
words, and words of personal interest or significance, in a variety of reading contexts.	order to contribute meaningfully and work constructively in groups.	1.1 identify the purpose and intended audience of some media texts.	presentations. READING	WRITING 2.7 make revisions to improve the	WRITING
3.2 predict the meaning of and rapidly solve unfamiliar words	1.3 identify a variety of listening comprehension strategies and use them appropriately	1.3 express personal opinions about ideas presented in media texts.	2.2 recognize a few organizational patterns in texts of different types and explain how the patterns help	content, clarity, and interest of their written work, using several types of strategies.	1.1 identify the topic, purpose, audience, and form for writing. 1.2 generate ideas about a potential topic, using a variety
using different types of cues, including: • semantic (meaning) cues; • syntactic (language structure) cues; •	before, during, and after listening in order to understand and clarify the meaning of oral texts.	1.4 describe how different audiences might respond to specific media texts.	readers understand the texts. 2.3 identify a variety of text features and explain how they	2.8 produce revised, draft pieces of writing to meet identified criteria based on the expectations related	of strategies and resources. 1.3 gather information to support ideas for writing in a variety of
graphophonic (phonological and graphic) cues.	1.4 demonstrate an understanding of the information and ideas in a variety of	2. Understanding Media Forms, Conventions, and Techniques	help readers understand texts. 2.4 identify some elements of style,	to content, organization, style, and use of conventions.	ways and/or from a variety of sources. 1.4 sort ideas and information for their writing in a variety of
3.5 use parts of speech appropriately to communicate their meaning clearly,	oral texts by identifying important information or ideas and some supporting details.	2.1 identify elements and characteristics of some media forms.	including voice, word choice, and different types of sentences, and explain how they help readers understand texts.		ways. 2.1 write short texts using a variety of forms,
with a focus on the use of: proper nouns for titles; the	READING	2.2 identify the conventions and techniques used in some familiar media	WRITING		2.4 vary sentence structures and

possessive pronouns my, mine, your, yours, his, her, hers, its; action verbs in the present and simple past tenses; adjectives and adverbs; question words.

WRITING

- 1.5 identify and order main ideas and supporting details into units that could be used to develop a short, simple paragraph, using graphic organizers and organizational patterns.
- 1.6 determine whether the ideas and information they have gathered are relevant and adequate for the purpose, and gather new material if necessary.

3.3 read appropriate texts at a sufficient rate and with sufficient expression to convey the sense of the text readily to the reader and an audience.

WRITING

3.8 produce pieces of published work to meet identified criteria based on the expectations related to content, organization, style, use of conventions, and use of presentation strategies.

forms and explain how they help convey meaning.

- 3. Creating Media Texts
- 3.1 identify the topic, purpose, and audience for media texts they plan to create.
- 3.2 identify an appropriate form to suit the specific purpose and audience for a media text they plan to create.
- 3.3 identify conventions and techniques appropriate to the form chosen for a media text they plan to create.
- 3.4 produce media texts for specific purposes and audiences, using a few simple media forms and appropriate conventions and techniques.

- 2.2 establish a personal voice in their writing, with a focus on using concrete words and images to convey their attitude or feeling towards the subject or audience.
- 2.3 use words and phrases that will help convey their meaning as specifically as possible.

maintain continuity by using joining words to combine simple sentences and using words that indicate time and sequence to link sentences.

3.4 use punctuation to help communicate their intended meaning, with a focus on the use of: quotation marks to indicate direct speech; commas to mark grammatical boundaries within sentences; capital letters and final punctuation to mark the beginning and end of sentences.

Language - Yearlong					
Mathematics - Reported	Fractions and	Data Collection and	Geometry	Patterns	Measurement
·	operations (SA)	Organization (SA)	-		
			E1.1 sort, construct,	C1.1 identify and	E2.1 use appropriate
	B1.6 use drawings to	D1.1 sort sets of	and identify cubes,	describe repeating	units of length to
	represent, solve, and	data about people or	prisms, pyramids,	elements and	estimate, measure,
	compare the results	things according to	cylinders, and cones	operations in a	and compare the
	of fair-share	two and three	by comparing their	variety of patterns,	perimeters of
	problems that	attributes, using	faces, edges,	including patterns	polygons and curved
	involve sharing up to	tables and logic	vertices, and angles	found in real-life	shapes, and
	20	diagrams,		contexts	construct polygons
	items among 2, 3, 4,	Including Venn,	E1.2 compose and		with a given
	5, 6,	Carroll, and tree	decompose various	C1.2 create and	perimeter
	8, and 10 sharers,	diagrams, as	structures, and	translate patterns	
	including problems	appropriate	identify the two-	that have repeating	E2.2 explain the
	that		dimensional shapes	elements,	relationships
	result in whole	D1.2 collect data	and three-	movements, or	between millimetres,
	numbers,	through	dimensional objects	operations using	centimetres, metres,
	mixed numbers, and	observations,	that these structures	various	and kilometres as
	fractional amounts	experiments, and	contain	representations,	metric units of
		interviews to answer		including shapes,	length, and use
	B1.7 represent and	questions of interest	E1.3 identify	numbers, and tables	benchmarks for
	solve	that focus on	congruent lengths,	of values	these units to
	fair-share problems	qualitative	angles, and faces of		estimate lengths
	that	and quantitative	three-dimensional	C1.3 determine	
	focus on determining	data, and organize	objects by mentally	pattern rules and use	E2.3 use non-
	and	the data using	and physically	them to extend	standard units
	using equivalent	frequency tables	matching them, and	patterns, make and	appropriately to
	fractions,	5 () (1)	determine if the	justify predictions,	estimate, measure,
	including problems	Data Visualization	objects are	and identify missing	and compare
	that		congruent	elements in patterns	capacity, and explain
	involve halves,	D1.3 display sets of		that have repeating	the effect that
	fourths,	data,	Measurement	elements,	overfilling or
	and eighths; thirds	using many-to-one	(Area)	movements, or	underfilling, and
	and	correspondence, in	F0.7 (b.)	operations	gaps between units,
	sixths; and fifths and	pictographs and bar	E2.7 compare the	04.4	have on accuracy
	tenths	graphs with proper	areas of two-	C1.4 create and	F0.4 commons
		sources, titles, and	dimensional shapes	describe patterns to	E2.4 compare,
		labels, and	by matching,	illustrate	estimate, and
		appropriate scales	covering,		measure the mass of
				<u> </u>	various objects,

		Data Analysis D1.4 determine the mean and identify the mode(s), if any, for various data sets involving whole numbers, and explain what each of these measures indicates about the data D1.5 analyse different data sets presented in various ways, including in frequency tables and in graphs with different scales, by asking and answering questions about the data and drawing conclusions, the meals of the same sets and in graphs with different scales, by asking and answering questions about the data and drawing conclusions,	measure area, and explain the effect that gaps and overlaps have on accuracy E2.9 use square centimetres (cm2) and square metres (m2) to estimate, measure, and compare the areas of various two-dimensional shapes, including those with	relationships among whole numbers up to 1000 Probability D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions D2.2 make and test predictions about the likelihood that the	using a pan balance and nonstandard units E2.5 use various units of different sizes to measure the same attribute of a given item, and demonstrate that even though using different-sized units produces a different count, the size of the attribute remains the same E2.6 use analog and digital clocks and timers to tell time in hours, minutes, and seconds
		asking and answering questions about the data and	and compare the areas of various two-dimensional shapes, including those with curved sides Variables C2.1 describe how variables are used, and use them in various contexts as appropriate	D2.2 make and test predictions about the	hours, minutes, and
Math Standalone	Number (SA)	another, including distances and halfand quarter-turns Equalities and Inequalities			Properties and Relationships

B1.1 read,		
represent,	C2.2 determine	B2.1 use the
compose, and	whether	properties of
decompose whole	given sets of	operations, and the
numbers up to and	addition, subtraction,	relationships
including 1000,	multiplication, and	between
using a variety of	division expressions	multiplication and
tools and strategies,	are equivalent or not	division, to solve
and describe		problems
various ways they	C2.3 identify and use	and check
are used in	equivalent	calculations
everyday life.	relationships	64.64.64.6
overyddy mei	for whole numbers	B2.2 recall and
B1.2 compare and	up to 1000, in	demonstrate
order whole	various contexts	multiplication facts of
numbers up to and	various contexts	2, 5, and 10, and
		related division facts
including 1000, in		related division facts
various contexts		DO 0
D4.4 (4.4000		B2.6 represent
B1.4 count to 1000,		multiplication of
including by 50s,		numbers up to 10x10
100s, and 200s,		and division up to
using a variety of		100/10, using a
tools and strategies		variety of tools and
		drawings, including
B1.5 use place		arrays
value when		
describing and		B2.7 represent and
representing multi-		solve problems
digit numbers in a		involving
variety of ways,		multiplication and
including with base		division, including
ten materials		problems that
torrinatorialo		involve groups of
B2.4 demonstrate		one half, one fourth,
an understanding of		and one third, using
algorithms for		tools and drawings
		tools and drawings
adding and		DO 0
subtracting whole		B2.8 represent the
numbers by making		connection between
connections to and		the numerator of a

	describing the way other tools and strategies are used to add and subtract B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms F1.1 estimate and calculate the change required for various simple cash transactions involving whole amounts and amounts of less than one				fraction and the repeated addition of the unit fraction with the same denominator using various tools and drawings, and standard fractional notation B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems
Science		Specific expectations: Relating science and technology to society and the environment: 1.1 assess the impacts on personal safety of devices that apply the properties of light and/or sound, and propose ways of using these	1.1 describe their own and their family's uses of energy, identify ways in which these uses are efficient or wasteful, taking different points of view into consideration, suggest ways to reduce personal energy consumption; and explain why it is important for people to make these choices	3.1 describe the basic needs of plants, including air, water, light, warmth, and space 3.2 identify the major parts of plants, and describe how each contributes to the plant's survival within the plant's environment 3.3 describe the changes that different plants	

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	devices to make		undergo in their life
	our daily	1.2 describe how the	cycles
	activities safer	everyday lives of	
	1.2 assess the	different people and	3.4 describe how
	impacts on	other living things	most plants get
	society and the	would be affected if	energy to live directly
	environment of	electrical energy	from the sun, and
	light and/or	were no longer	how plants help
	sound energy	available	other living things to
	produced by		get energy from the
	different	3.4 identify everyday	sun
	technologies,	uses of various	
	taking different	sources of energy	3.6 describe ways in
	perspectives into		which plants and
	account	3.5 demonstrate an	animals depend on
		understanding that	each other
	Developing	humans get the	
	investigation and	energy resources	3.8 identify examples
	communication	they need from the	of environmental
	skills:	world around them	conditions that may
		and that the supply	threaten plant and
		of many of these	animal survival
	2.1 follow	resources is limited	
	established safety	so care needs to be	3.9 identify positive
	procedures for	taken in how we use	and negative
	protecting eyes and	them	impacts that animals
	ears		have on humans
			(society) and the
	2.2 in rectinate the		environment, form
	2.2 investigate the		an opinion about one
	basic properties of		of them, and suggest
	light		ways in which the
			impact can be
			minimized or
	2.3 investigate the		enhanced.
	basic properties of		
	sound		3.10 identify positive
			and negative
	2.4 use technological		impacts that different
	problem-solving		kinds of human
	skills to design,		activity have on
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	build, and test a	animals and where
	device that makes	they live, form an
	use of the properties	opinion about one of
	' '	them, and suggest
	of light or cound	ways in which the
	of light or sound	impact can be
		minimized or
	2.5 use scientific	
	inquiry/research	enhanced
	skills to investigate	
	applications of the	
	properties of light or	
	sound	
	Souria	
	2.6 use appropriate	
	science and	
	technology	
	vocabulary in oral	
	and written	
	communication	
	Understanding	
	basic concepts:	
	3.1 identify a variety	
	of natural light	
	sources and artificial	
	light sources	
	3.2 distinguish	
	between objects that	
	emit their own light	
	and those that reflect	
	light from other	
	sources	
	3.3 describe	
	properties of light,	
	including the	
	following: light	
	ioliowing. light	

travels in a straight path; light can be absorbed, reflected, and refracted 3.4 describe properties of sound, including the following: sound travels; sound can be absorbed or reflected and can be modified 3.5 explain how vibrations cause sound 3.6 describe how different objects and
absorbed, reflected, and refracted 3.4 describe properties of sound, including the following: sound travels; sound can be absorbed or reflected and can be modified 3.5 explain how vibrations cause sound 3.6 describe how
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vibrations cause sound 3.6 describe how
vibrations cause sound 3.6 describe how
3.6 describe how
different objects and
materials interact with light and sound
energy
3.7 distinguish
between sources of light that give off
both light and heat
and those that give off light but little or
no heat
2.0 identify devices
3.8 identify devices that make use of the
properties of light
and sound

Social Studies	Roles,	Roles,	B1.3 demonstrate an	Past and Present
	Relationships and	Responsibilities	understanding of the	Traditions
	Respect	and Identity	importance of	
			sustainability in	A2.1 formulate
	A3.1 describe some	A2.1 formulate	people's	questions to guide
	of their own roles,	questions to guide	interrelationship with	investigations into
	relationships, and	investigations into	their natural	some of the past and
	responsibilities	some aspects of the	environment and of	present traditions
	'	interrelationship	some of the	and celebrations in
	A3.2 identify some	between events,	consequences of	their own family and
	of the significant	people, and/or	sustainable and/or	the communities to
	people, places, and	places in their lives	non-sustainable	which they belong
	things in their life,	and their own roles,	actions	
	including their life in	relationships,		A2.2 gather and
	the community and	responsibilities, and		organize information
	describe their	identity/sense of self		on some of the past
	purpose or the role			and present
	they have	A2.2 gather and		traditions and
		organize information		celebrations within
	A3.3 demonstrate	on significant events,		their family and the
	an understanding of	people, and/or		community to which
	simple chronology	places in their lives		they belong, using
	by identifying and	that contribute or		primary and/or
	organizing	have contributed to		secondary sources
	chronologically	the development of		that they have
	some significant	their roles,		gathered themselves
	events related to	relationships,		or that have been
	their personal	responsibilities, and		provided to them
	experience	identity/sense of self		
	S. (p. S.	using primary and/or		
	A3.4 identify some	secondary sources		
	elements of	that they have located themselves		
	respectful behavior	or that have been		
	that they can	provided to them.		
	practice in their	provided to trieffi.		
	everyday life and/or	A2.4 interpret and		
	that other people	analyze information		
	practice	relevant to their		
	p. 43400	investigations, using		
		a variety of tools		
		a vallety of tools		L

	A3.5 demonstrate an understanding that it is important to treat other people and the environment with respect	A2.5 evaluate evidence and draw conclusions about some aspects of the interrelationship between events, people, and/or places in their lives and their own roles, relationships, responsibilities, and identity/sense of self A2.6 communicate the results of their inquiries, using appropriate vocabulary		
Social-emotional learning skills	Identification and Management of Emotions* A1.1 apply skills that help them identify and manage emotions as they participate in learning experiences, in order to improve their ability to express their own feelings and understand and respond to the feelings of others. Healthy Relationships*	A1.3 apply skills that help them develop habits of mind that support positive motivation and perseverance as they participate in learning experiences, in order to promote a sense of optimism and hope.	Stress Management and Coping* A1.2 apply skills that help them to recognize sources of stress and to cope with challenges, including help- seeking behaviours, as they participate in learning experiences, in order to support the development of personal resilience.	Self-Awareness and Sense of Identity* A1.5 apply skills that help them develop self-awareness and self-confidence as they participate in learning experiences, in order to support the development of a sense of identity and a sense of belonging.

A1.4 apply that help the relationship develop emand community with others participate in learning experiences order to suphealthy relationship sense of be and respect diversity.	nem build ps, in pathy, in pport ps, a elonging,				
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