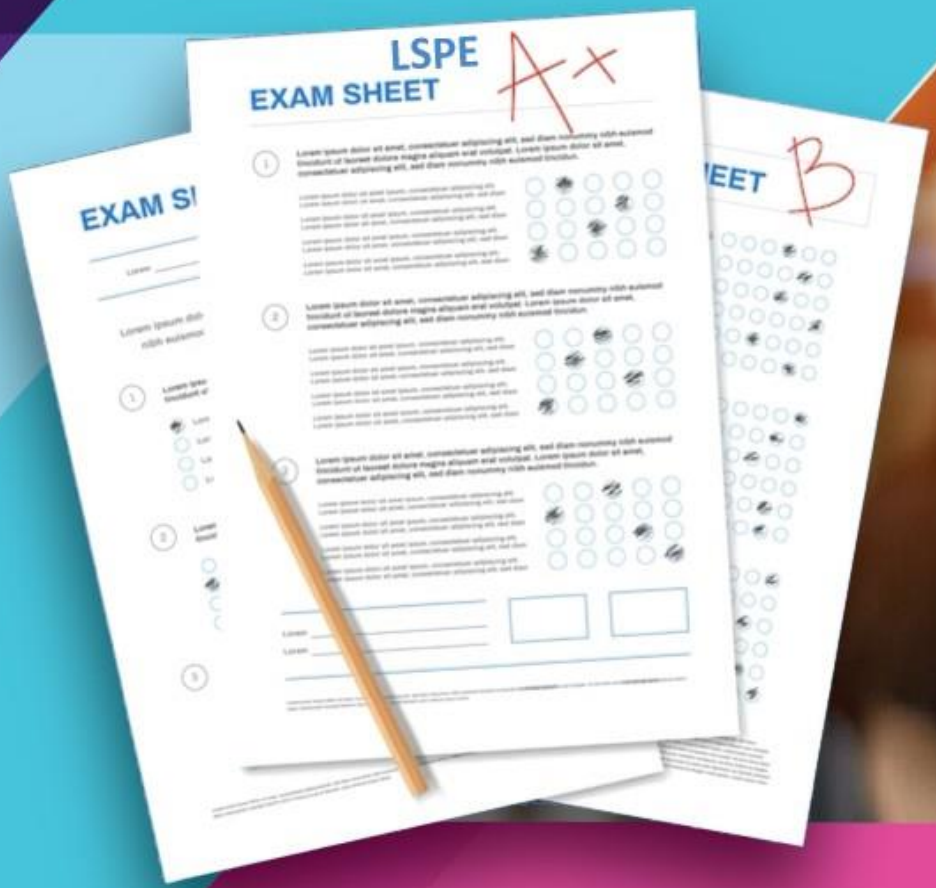
Government of the Republic of Trinidad and Tobago

MINISTRY OF EDUCATION

GUIDELINES FOR THE LOWER SECONDARY PROFICIENCY EXAMINATION (LSPE)



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INTRODUCTION

The Lower Secondary School Proficiency Examination (LSPE) is intended to replace the Primary School Leaving Certificate Examination (PSLCE) from the year 2024 and onwards. It is designed to provide students with a form of certification in key competencies such as Mathematics, English Language, English Comprehension and Composition and General Studies. Whereas the first administration targets Form 2 students at the secondary level for academic year 2023/24 who scored less than 50% at SEA 2022, the LSPE will be opened to all institutions/students who previously sat the PSLCE, inclusive of:

- SERVOL Life Centre
- Adult Education Centre
- Correctional Centre or Facility
- Other ministries

The LSPE draws its content from the Upper Primary School Curriculum (Standards 4/5) and the Lower Secondary NCSE (Forms 1 and 2). For students at the Secondary School level, the LSPE certificate will provide a pathway for students as they progress to the upper secondary school level. The assessment will be administered in June of each year with registration taking place in November/December of the previous year and dissemination of results by September of the year of administration. The items in the LSPE will comprise a mixture of open ended or constructed response (CR) and Multiple-Choice Question (MCQ). The grading scheme will provide the following results: distinction, credit, pass and fail.

Rationale for the LSPE

- To certify students in basic competencies in view of Covid-19 and learning loss.
- To upgrade the PSLCE.
- To be part of a comprehensive system of school operations' 2022-27 pathway for students.

Methodology

The Lower Secondary Proficiency Examination (LSPE) will be administered in the year 2024.

Target Population

The LSPE will be administered to:

1. Form two students for the Academic Year 2023/24
2. Servol Life Centres
3. Adult Education Centres
4. Correctional Centres or Facilities

Registration Process

Secondary Schools will register Form 2 students for the Academic Year 2023/24 for the assessment. Software will be utilised, and a link will be sent for registration of students.

Advertisements will also be placed on the MOE's Facebook page and website for any other persons who are desirous of sitting the LSPE.

Registration will occur in the months of November and December prior to the year of test administration. The registration form will require the Personal Identification Number (PIN) from the Trinidad and Tobago Birth Paper and the signature of each candidate. There will be no fees associated with writing the LSPE.

The Subject Booklets

There will be four (4) assessments to be conducted over a two (2) day period. This includes English Language, English Comprehension and Composition, Mathematics and General Paper.

1. The English Language test examines grammar conventions, punctuation, vocabulary, and spelling skills.
2. The English Composition and Comprehension test comprises two sections. **Section I** examines three different types of Comprehension (Expository passage, Research Skills and Graphic Representation), while **Section II** assesses narrative (story) or expository writing through letters (friendly and formal), instructions, directions, and simple reports.

3. The Mathematics test focuses on authentic everyday applications and skills, such as Consumer Arithmetic, Measurement, Statistics and Geometry.

4. The General Paper consists of two sections. **Section I** contains multiple-choice items in the areas of Social Studies, Current Affairs, Integrated Science and Agricultural Science. **Section II** comprises constructed response items and examines content from Social Studies, Integrated Science and Agricultural Science.

Grading Scheme

The four subjects will be graded individually based on the percentage score earned, using the following criteria.

Grade	**Percentage Score**
Distinction	100% - 75%
Credit	74% - 55%
Pass	54% - 40%
Fail	39% - 0%

Each candidate is provided with a **Performance Report** indicating the marks earned in each subject booklet written.

A **Lower Secondary Proficiency Certificate** will be awarded to a candidate who earns at least a pass grade in all four subject booklets.

Repeating the Examination

A candidate has the option to rewrite the examination in part or its entirety based on the following conditions:

1. **Repeat examination in part-** Such a candidate has earned a *passing grade in at least two (2) subject areas.* This candidate has up to two (2) years, from the initial writing of the examination, in which to rewrite and pass the subject areas failed to earn a Lower Secondary Proficiency Education Certificate.
2. **Repeat the examination in its entirety-** Such a candidate exists in one of two categories:
   - earned a passing grade in *less than two (2) subject areas; and*
   - wishes to improve the grades earned.

Querying Results

Examination results will be released by August 30th. A candidate has up to one (1) month after the release of the results in which to submit a query of his/her results. This will incur a cost to the candidate per subject area. Forms for queries will be provided and candidates will be required to fill out and re-submit along with a payment receipt to the Ministry of Education, Examinations Department. The scripts will be re-marked, and scores and grades will be adjusted as necessary. Candidates will be informed in writing of the outcome of the query.

Test Administration

The assessments will be administered in the first week of June of each year.

	Subject areas	Time	Duration
Day 1	Mathematics	8:30 a.m. – 10:00 a.m.	1 hour 30 minutes
	General Paper	10:30 a.m. – 12:00 noon	1 hour 30 minutes
Day 2	English Composition	8:30 a.m. – 10:00 a.m.	1 hour 30 minutes
	English Language	10:30 a.m. – 12:00 noon	1 hour 30 minutes

Scoring, Processing and Reporting of the LSPE

The scoring of the assessments will include teachers at Forms 1 and 2 levels in the respective subject areas. Markers will be given the opportunity to apply, and selected personnel will be standardised for the marking exercise. A stipend will be paid to the teachers marking the scripts. The data will then be captured from the scripts by an external agency and delivered to the Ministry of Education. Quality control checks will be conducted to ensure validity of results. The results will then be analysed using different thresholds such as percentages, mean scores, individual items, and strands. This information will then be utilised to generate reports on the LSPE.

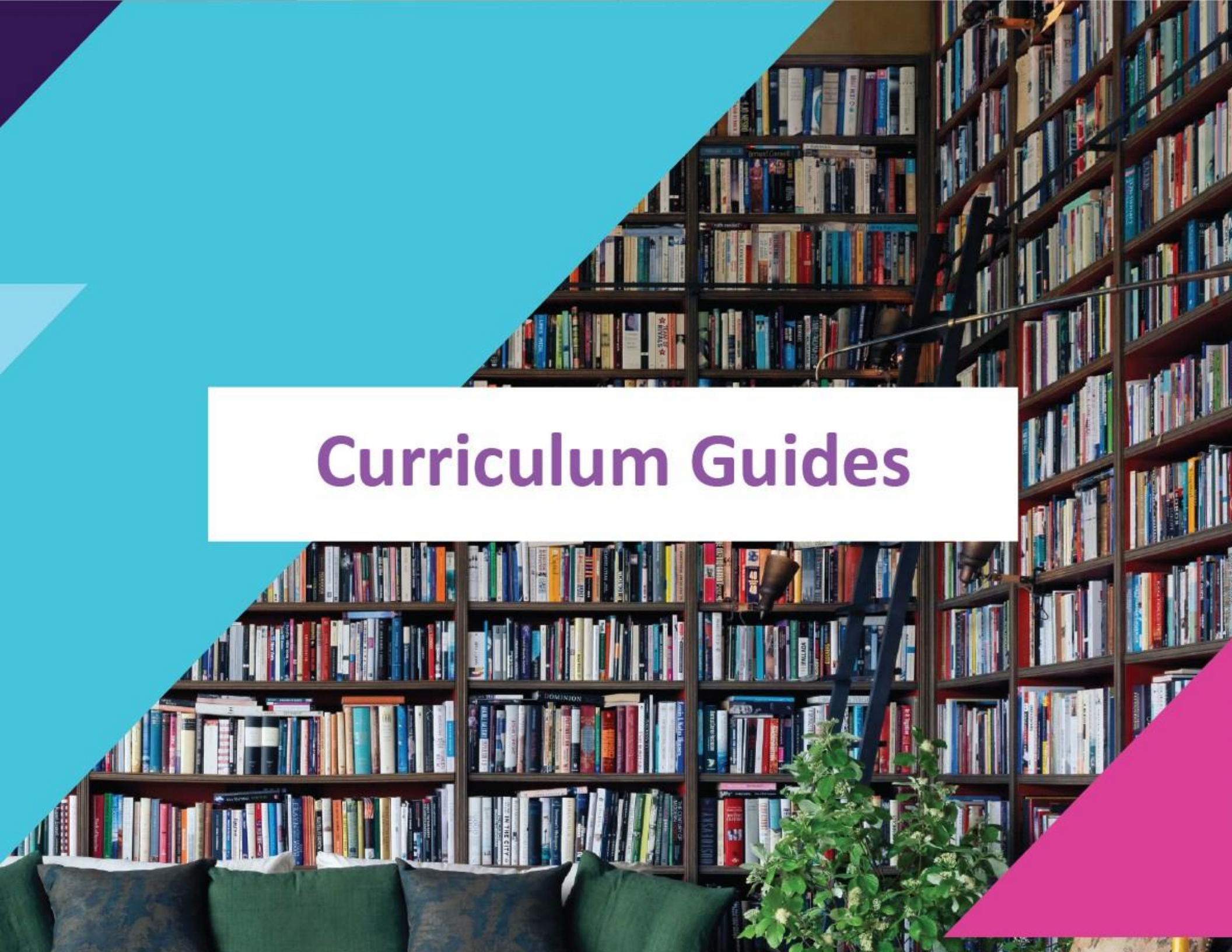
These reports will provide comprehensive information about what students know and can do in Mathematics, General Paper, English Language and English Comprehension and Composition. They will present information on strengths and weaknesses in students' knowledge of the Mathematics, General Paper, English Language and English Comprehension and Composition and their ability to apply that knowledge in problem-solving situations.

LSPE Test Specifications

Number of Items in Test Booklets for 2024 LSPE

Test Booklet	Subject Area	Number of Items
Mathematics	Mathematics	35
English Language Arts	English Language Arts	34
Composition and Comprehension	Composition/Comprehension	20
General Paper	Science/Agricultural Science	18
	Social Studies	26

Curriculum Guides



English Language Arts

ENGLISH LANGUAGE ARTS

Vocabulary				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
Synonyms	Define the term synonym and use synonyms.	Identify and use synonyms appropriately in sentences.	Read passages with highlighted words and insert suitable synonyms in context. Use a thesaurus/dictionary to find suitable synonyms.	https://www.youtube.com/watch?v=thf0XGOXE6w https://www.ezschool.com/Games/Grade3/English/Synonyms/ https://www.wordgametime.com/games/extraordinary-elephants-synonyms-game
Content Area Vocabulary	Determine the different meanings of words as used in different content areas.	Classify words and their meanings according to their content area.	Construct sentences to illustrate the meaning of words used in a particular context. Use graphic organiser to provide a detailed understanding of new words.	Word Wall Large manila folders, rulers and markers Graphic Organiser Frayer Model
Multiple-meaning words	Use words in context to show their different meanings.	Determine the meaning of words by analysing the context.	Provide examples of words used in different context. Write sentences to illustrate the different	https://www.youtube.com/watch?v=LoOzJRXrCMU

Vocabulary				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
			meanings of words e.g., cast, back, bolt, show. Construct sentences to illustrate the multiple meanings of words across subjects.	
Multiple-meaning words	Use words in context to show their different meanings.	Determine the literal and figurative meanings of words.	Provide examples of words used in different context. Identify specific multiple meaning words. Write sentences to illustrate the different meanings of words.	https://www.youtube.com/watch?v=LoOzJRXrCMU
Antonyms	Define the term, 'antonym' and use antonyms	Identify and use antonyms appropriately in sentences.	Students use graphic organisers to group words that are opposite to a given word. Read passages with highlighted words and insert suitable antonyms in context.	https://www.youtube.com/watch?v=QZ9CMRkBeuk https://www.wordgametime.com/games/furious-frogs

Vocabulary				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
			Use a thesaurus to find suitable antonyms.	
Context clues Antonyms	Distinguish words from other words opposite in meaning.	Identify and use antonyms in sentences.	Use dictionary and thesaurus to find meanings of words. Practise replacing words with antonyms.	https://www.youtube.com/watch?v=QZ9CMRkBeuk https://www.youtube.com/watch?v=eHCpJ86XDY4
Prefixes -pre, sub, ex, inter, mis, -en, ir, trans, anti, pro, super, un, under, dis, re, im, in, semi	Deduce the meaning of the words with prefixes in reading passages.	State the meaning of prefixes. Identify words containing prefixes in passages. Use words containing prefixes orally and in written sentences.	Activities to add or remove prefixes from words Exercises to underline/match prefixes in words. Students play online prefix games.	https://www.youtube.com/watch?v=w7oGNyHX81I https://www.ezschool.com/Games/Grade4/English/PrefixesAndSuffixes/Prefixes/TutorialPrefixes/#
Context Clues	Use context to determine meaning of words.	Use context clues to complete cloze passages.	Have students use signal words “is” and “means” to identify /guess the meaning of unfamiliar words.	https://www.youtube.com/watch?v=eHCpJ86XDY4
Homophones	Distinguish the differences in meaning of homophones.	Identify and explain the meaning of homophones in context.	Prepare sentences in cloze format requiring	https://www.ezschool.com/Games/Grade3/English/Homophones/

Vocabulary				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
			the use of homophones for completion.	https://www.youtube.com/watch?v=6kbkH4y9iXg
Suffixes - ly, er, ful, ness	Deduce the meaning of the words with suffixes in reading passages.	State the meaning of suffixes. Identify words. containing suffixes in passages. Use words containing suffixes orally and in written sentences.	Match suffixes to root words. Students play online suffix games.	https://www.youtube.com/watch?v=635oQTY61J8 https://www.ezschool.com/Games/Grade4/English/PrefixesAndSuffixes/#Suffixes

Comprehension				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
Main idea	Identify the main idea in visual and oral texts.	1. Identify the main topic of a multi paragraph text. 2. Identify the main idea stated or implied. 3. Identify the focus of specific paragraphs within the text. 4. Determine the main idea of a text. 5. Summarise the text (expository).	1. Students distinguish between main idea and supporting details using graphic organisers 2. State one main idea/message with supporting details 3. Analyse simple details from key words and represent in graphic organizers	https://educationtothecore.com/2019/11/10-great-activities-to-teach-main-idea-and-details/#:~:text=The%20main%20idea%20is%20defined,as%20well%20as%20in%20writing. https://www.k5learning.com/reading-comprehension-worksheets/topics/main-ideas-details
Literal questions	Know the 5 Ws and 1H – who, what, where, when why and how- and how to use them.	1. Use the 5 Ws and 1 H to determine literal information. 2. Respond to literal questions based on a given stimulus. 3. Demonstrate the ability to recall details in texts.	1. 5W+H graphic organiser 2. Display images and have students answer questions 3. Create their own 5Ws and 1 H questions from a given stimulus	https://www.youtube.com/watch?v=oi7RfnlkTL4 https://www.teacherspayteachers.com/Browse/Price-Range/Free/Search:5+ws+graphic+organizer

Comprehension				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
		4. Demonstrate the ability to ask and answer questions about texts. 5. Write a complete sentence answer to a literal comprehension question.		https://www.superteacherworksheets.com/comprehension.html
Inferential questions	Respond to and generate inferential questions.	1. Make inferences based on the use of pictures, situation cards and short texts. 2. Explore explicit details and implied messages in oral texts.	1. Use specific content area– literary or informational texts 2. Use pictures/short texts and allow students to infer by asking appropriate questions.	https://www.ereadingworksheets.com/free-reading-worksheets/reading-comprehension-worksheets/inferences-worksheets/ https://www.youtube.com/watch?v=g2G-MaIxjBI
Sequencing	Identify story sequence – beginning, middle and end. Identify sequence in expository texts.	1. List events in order 2. Show chronological order 3. Create a timeline for characters 4. Sequence details or events in a variety of genres.	Explore sequencing in Music and dance • Discuss sequencing of events in History and Social Studies texts. • Use of graphic organisers, e.g., time	https://www.k5learning.com/reading-comprehension-worksheets/topics/sequencing https://www.teacherspayteachers.com/Browse/Search:free%20sequencing%20graphic%20organizer

Comprehension				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
		5. Arrange sequentially, a series of steps in a simple process.	lines, to represent information	
Fact and Opinion	Differentiate between fact and opinion.	1. Identify facts and opinions in texts. 2. Identify the language of fact. 3. Identify the language of opinion. 4. Identify and assess the effects of words and phrases in messages, which are used for persuasion, facts and opinions.	1. Students read two accounts of the same incident, one factual and another from someone's point of view. 2. Students are given samples of factual and opinion statements. Using a T-chart, they place each statement in one of the two columns	https://www.easyteacherworksheets.com/langarts/factopinion.html https://www.easyteacherworksheets.com/graphorg/factopinion.html https://www.readwritethink.org/classroom-resources/printouts/chart#:~:text=The%20T%2DChart%20is%20a,phenomena%2C%20or%20social%20studies%20events.
Compare and Contrast	Identify the non-fiction text structure compare and contrast.	1. Identify the language of comparison and contrast 2. Identify similarities and differences in texts	1. Students solve "Spot the Difference" puzzle.	https://www.printitfree.net/spot-the-difference-picture-puzzles/

Comprehension				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
		3. Compare and contrast similar themes presented in two different literary texts	2. Using a Venn diagram, students record features identified in photographs that are similar and different.	https://www.k5learning.com/reading-comprehension-worksheets/topics/compare-contrast
Cause and Effect	Apply knowledge of inference and deduction to identify/ cause and effect relationships in texts.	1. Identify the language of cause and effect (transitions). 2. Determine the difference between cause and effect. 3. Respond to literal and inferential questions.	1. Represent cause and effect information using graphic representations. 2. Use print and electronic materials/passages (informational and literary) of interest to students.	https://www.k12reader.com/subject/reading-skills/cause-and-effect/ https://www.youtube.com/watch?v=mKBthdR8sYU https://www.readwritethink.org/sites/default/files/resources/lesson_images/lesson1035/cause.pdf

Comprehension				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
Relevant and Irrelevant information	Differentiate between relevant and irrelevant information.	1. Determine important information in expository text. 2. Recognise that not all information in a passage is important 3. Identify the information that supports the topic sentence in a paragraph.	1. Find the main idea of paragraphs and then get rid of the irrelevant details in these paragraphs. 2. Use relevant and irrelevant details worksheets 3. Analyse advertisements to determine what is really needed about the product.	https://quizizz.com/admin/quiz/5d8d23f9c2dde9001ad5790a/relevant-vs-irrelevant-details https://www.grammarbank.com/irrelevant-sentences-worksheets.html
Predicting & confirming outcomes	Make predictions.	1. Make predictions about content and meanings in reading passages. 2. Confirm and revise predictions about content in reading passages. 3. Employ taught strategies to assist in making meaning: predicting 4. Read title and study illustrations to gain understanding of or make predictions about the text.	1. Read the title/first sentence/ then predict what will happen next/what the piece will be about 2. Use KWL and Anticipation Guide	https://www.ereadingworksheets.com/worksheets/reading/predictions/making-predictions-worksheet-01/ https://www.readwritethink.org/sites/default/files/resources/lesson_images/lesson924/kwl.pdf https://www.readingrockets.org/strategies/anticipation_guide

Comprehension				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
Explicit details	Use explicit details to answer questions.	1. List explicit details in given texts. 2. Answer literal questions based on given texts. 3. Create literal questions. 4. Explain the importance of identifying key information in texts.	1. Students read selected descriptive texts 2. Students recreate what is described in the text in graphic form 3. Creation of questions based on a given text using the 5Ws and 1H	https://www.teacherspayteachers.com/Browse/Search:5ws+worksheets/Price-Range/Free
Drawing Conclusions	Draw conclusions and infer meaning.	1. Determine a purpose for writing 2. Discuss introduction, rising action, climax, falling action and conclusion in literary texts	1. Read a passage and draw conclusions about a character based on what was said about him/her 2. Use graphic organisers 3. Complete worksheets	https://www.youtube.com/watch?v=B4hNyUyfhvU https://www.k12reader.com/subject/reading-skills/drawing-conclusions/
Character traits	Identify character traits.	1. Discuss own ideas and opinions about characters. 2. Identify with story characters.	1. Read Aloud 5Ws and 1H 2. Encourage students to talk about	https://www.teacherspayteachers.com/Browse/Search:5ws+worksheets/Price-Range/Free

Comprehension				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
		3. Discuss characters using descriptive words.	characters in movies and stories 3. Make oral presentation of characters' profiles. 4. Sketch to stretch 5. Read culturally relevant stories. 6. Describe characters in photos and video clips.	https://www.teacherspayteachers.com/Browse/Search:character+sketch/Price-Range/Free
Research skills	Engage in research skills.	1. Find information in non-fiction texts. 2. Interpret information presented in a variety of media. 3. Apply research skills and categorise information through the appropriate use of • table of contents • index • dictionary • encyclopedia • library • portfolio	• Find information in non-fiction text using headings, sub-headings, illustrations and captions, alphabetise words according to the first letter. • Use worksheets	https://www.teach-nology.com/worksheets/research/

Comprehension				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/ MATERIALS**
		• glossary		
Instructions and directions	Follow and provide directions and instructions.	1. Follow directions and instructions accurately. 2. Follow and provide more complex instructions and directions in Standard English. 3. Use transitional words effectively.	Maps can be used to help students give directions from one point to another.	https://www.liveworksheets.com/worksheets/en/English_as_a_Second_Language_(ESL)/Giving_Instructions https://www.liveworksheets.com/pc69169bj
Graphic representation	Respond to a variety of diagrammatic representations.	1. Respond to diagrammatic representations, forms and advertisements such as vacancies for employment, job applications, and applications to membership (clubs and groups).	1. Authentic documents 2. Newspaper vacancy advertisements 3. Membership slips/forms	https://www.canva.com/posters/templates/recruitment/

Writing				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/MATERIALS**
Punctuation and Capitalisation	Know and apply rules of punctuation and capitalisation to use in and edit writing.	1. Use the following punctuation marks in sentences: full stop, question mark, exclamation mark, apostrophe in contractions and possessives, quotation marks, commas in apposition, in words in a series and in addresses.	1. Punctuation worksheets 2. Complete capitalisation worksheets 3. Apply C.U.P.S. and M.I.N.T.S. acronyms when writing.	https://www.k12reader.com/subject/grammar/punctuation/ https://cdn5-ss18.sharpschool.com/UserFiles/Servers/Server_222635/File/Academics/2nd%20Grade/Homework/CUPS.pdf
Spelling	Apply spelling rules when writing.	1. Know and apply spelling rules to spell words correctly in their writing. • Syllabication rules • Phonics • Inflectional Endings 2. Make and use new words by adding prefixes and suffixes to root words in writing.	Break words into chunks that are easier to spell (e.g., “planting” can be broken down into [pl] [ant] [ing]). Complete root words and affixes worksheets Have students create mnemonics to remember words.	https://www.k12reader.com/subject/spelling-skills/spelling-rules/ https://www.youtube.com/watch?v=G-bavyY9jj4 https://www.edhelper.com/language/Syllabication.htm

Writing				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/MATERIALS**
		3. Use spelling patterns, technical words, words derived from other languages in their writing	Use the Look-Say-Cover-Write-Check strategy.	
Grammar	Know and apply grammatical rules to writing and editing.	1. Identify and use the eight parts of speech. 2. Apply rules: • of subject and verb agreement • appropriate use of tense • correct usage of parts of speech	• Use authentic writing situations every day. • Encourage students to read a variety of nonfiction, informational, and fiction texts to expose them to multiple texts and a variety of writing situations.	https://www.grammarly.com/grammar https://www.grammarbank.com/english-grammar-exercises.html https://www.grammarbank.com/

Writing				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/MATERIALS**
Sentences	Build sentence knowledge.	1. Compose simple sentence (one subject and one verb) . 2. Use high-frequency words in simple sentences. 3. Differentiate sentence from fragments. 4. Identify subject and predicate. 5. Identify main clauses.	1. Matching exercises 2. Texts for Read Alouds -Visual aids (photos/ pictures/graphics) 3. Lyrics of popular songs/rap 4. Descriptions 5. Letters/Emails 6. Reflections 7. Instructions 8. Directions 9. -Examine clause structure in a range of content area texts 10. Compose subject specific sentences.	https://www.k5learning.com/free-grammar-worksheets/sentences https://www.k5learning.com/free-grammar-worksheets/first-grade-1/sentences/types https://www.ereadingworksheets.com/languageartsworksheets/sentence-structure/sentence-structure-worksheets/type-of-sentences-worksheets/
Narrative writing	Write stories.	1. Compose narratives (stories). 2. Demonstrate the use of plot structure, character development, setting and sensory descriptive words.	1. Create digital stories. 2. Use picture prompts. 3. Use the writing process: Pre-writing (brainstorming), writing, revising, editing, publishing	https://www.education.com/worksheets/narrative-writing/ https://k12.thoughtfullearning.com/FAQ/what-are-steps-writing-process

Writing				
Topic	**Learning or General Outcomes**	**Specific Objectives or Content Scope**	**Instructional Strategies**	**RESOURCES/MATERIALS**
		3. Use literary devices, simile, metaphor and personification effectively.	4. Use C.U.P.S., M.I.N.T.S. and A.R.M.S. acronyms when writing. 5. Use graphic organisers	
Expository writing	Write different forms of expository texts	Apply the stages of pre-writing, drafting, revising editing and publishing	Use the writing process: pre-writing (brainstorming), writing, revising, editing, publishing Use C.U.P.S., M.I.N.T.S. and A.R.M.S. acronyms when writing Graphic organisers	https://www.grammarly.com/blog/expository-writing/ https://www.teacherspayteachers.com/Browse/PreK-12-Subject-Area/Expository-Writing/Type-of-Resource/Worksheets/Price-Range/Free

Social Studies

SOCIAL STUDIES

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Who Am I? A Unique Individual	Appreciate one's uniqueness and understand oneself better as an individual	Define relevant terms and concepts • Uniqueness • Individuality • Characteristic • Heredity • Environment • Genes • Personality	**Teaching and Learning Strategy:** Research terms and concepts. Develop concept maps on the terms and concepts. Create a word wall using the terms and concepts. **Assessment Strategy:** Matching terms/concepts with definitions Word Sleuth on terms and concepts	Wellbeing For Children: Identity And Values https://www.youtube.com/watch?v=om3INBWfoxY
		Recognise themselves and others as unique individuals	**Teaching and Learning Strategy:** Teacher led discussion on ways in which each individual is unique and special On a flash card have each child write 2 things that make them unique and different, which can then be shared with the class **OR** In pairs, students list characteristics that are similar / different from the other person. **Assessment Strategy:** Students select one of the following art forms – song, dance, narrative, spoken word etc. Based on selection, students are placed in groups to prepare a two-minute	I am Human: Unique and Imperfect https://youtu.be/wS_HLYCOgR0

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			presentation titled **I am Unique and You are Unique Too.**	
		Explain the impact of heredity and environment on the individual.	**Teaching and Learning Strategy:** Class discussion based on a scenario: two children born at the same time and raised in different homes; **How would these two environments result in two different individuals?** **Assessment Strategy:** Write short sentences on how heredity and environment impact their lives today	Invisible Influence: The Hidden Forces that shape behaviour https://www.youtube.com/watch?v=XxfcaY86jpw
		Identify and describe different aspects of oneself.	**Teaching and Learning Strategy:** Small group discussion on the characteristics that make students different from their sibling or cousin **Assessment Strategy:** Write a paragraph on the different aspects of oneself and the effects on one's behaviour. Teacher creates a pictorial quiz of the different aspects of oneself using online tools for students to identify which aspect is depicted.	Use relevant resource materials available (textbooks, etc)

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Develop an appreciation for the differences in others.	**Teaching and Learning Strategy:** Game: Guess Who Students recognise the differences that exist among their peers – physical traits, strengths, skills/talent, behavioural and cognitive traits **Assessment Strategy**: Given scenarios, students demonstrate through role play respect for the differences in others Write a story about being different and you or others appreciating being different.	The Reflection in Me: https://youtu.be/D9OOXCu5XMg

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Family and Family Relationships	Develop an understanding of the role and importance (appreciation) of family life in Trinidad and Tobago.	Define the terms and concepts associated with types of families and unions: Nuclear, Extended, Single Parent, Sibling household, Reconstituted /Reconstructed; Common Law, Visiting Relationship and Marriage.	**Teaching and Learning Strategy:** Create a Word Map for each word. Include the following: definition, picture/drawing, synonyms, antonyms and create my own sentence	Bunji Garlin-One family https://www.youtube.com/watch?v=gW53GxvZQPc
		Identify and describe the different types of families that exist in our society- Nuclear, Extended, Single Parent, Sibling household, Reconstituted /Reconstructed (Blended).	**Teaching and Learning Strategy:** Use the Frayer Model for each family type or a graphic for illustrating the types of families Frayer Model Template - Bing images **Assessment Strategy:** Matching image with statements (See page 7 of the Social Sciences Curriculum Mapping Assessment Document)	Types of Family: CXC Social Studies https://youtu.be/IE2yfoHNa5s
		Identify and describe the different types of unions that exist in our society (Common Law, Visiting Relationship and Marriage).	**Teaching and Learning Strategy:** Class discussions on the different types of unions and elicit student's perspectives on unions and marriage	Family Unions: CXC Social Studies https://youtu.be/fPjZK2VnGBQ

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Assessment Strategy: Using real life scenarios students demonstrate their understanding of each type of union	
		Explain the relationships that exist within families	**Teaching and Learning Strategy:** Use of a chart depicting a family tree to establish relationships among members **Assessment Strategy:** Creation of a structured questionnaire to interview elders in the family about their family history	My family tree https://familyhistorydaily.com/wp-content/uploads/2018/04/Birds-Family-Tree-Printable_Family-History-Daily.pdf
		Construct a personal family tree showing at least three generations	**Teaching and Learning Strategy:** Create concept maps Illustrations / Diagrams of family trees using various methods Use digital tools or photographs to construct a family tree Creation of a structured questionnaire to interview elders in the family. **Assessment Strategy:** Students answer questions based on a fictitious family tree.	How to make a family tree diagram https://venngage.com/blog/family-tree/

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Describe the functions of the family – Biological, Economic, Emotional, Socialization, Cultural, Educational.	**Teaching and Learning Strategy:** Class discussion on the functions of the family using pictures **Assessment Strategy:** Classify functions of the family based on scenarios or statements presented	Functions of the Family https://youtu.be/hD-FKO0dxss
		Describe the roles, relationships and responsibilities of individual members of the family.	**Teaching and Learning Strategy:** Class discussion on the roles of individual members of the family Students engage in role play to demonstrate responsibilities associated with each role **Assessment Strategy:** Role play depicting the roles and responsibilities of individual family members	Roles, Relationships and Responsibilities of Family Members: https://youtu.be/g4lN90jyQR0
		Define relevant terms and concepts (domestic violence, unemployment, poverty, drug use/ abuse, gender roles, generation gap).	**Teaching and Learning Strategy:** Use terms and concepts appropriately) Create a glossary of terms and definitions	Use the resources provided for this topic to define and explain the relevant terms and concepts
		Explain the factors that cause conflict and affect family relationships	**Teaching and Learning Strategy:** Use newspaper articles to identify factors that affect families and their effects	Generational Gap: The Evolution of Dance - 1950 to 2019 - By Ricardo Walker's Crew https://youtu.be/p-rSdt0aFuw

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		• Generational gap (modes of dress, choice of friends etc.) • Poverty, unemployment and lack of finances • Drug and alcohol abuse • Gender roles • Responsibility e.g., application to schoolwork • Sibling rivalry Explain the effects of selected issues on family life (for example domestic violence, alcohol and drug use and abuse, unemployment). Explore strategies to support families affected by the previously mentioned issues.	Use of Resource Personnel Research steps in conflict resolution Use of Scenarios depicting different situations to elicit responses from students **Assessment Strategy:** Group presentation of strategies that can be used to support families affected by the issues identified Role play strategies to resolve conflict situations Students create posters which depict steps in conflict resolution; Use appropriate rubric to assess posters; Classroom display of posters	-100 Years of Teen Girls Fashion | Glamour https://youtu.be/sORunvibOYY Teen Substance Use and Abuse: https://youtu.be/wQl_4kcE5nw Trinity Smart Resources (NADAPP) Links for episodes Episode 1 https://www.youtube.com/watch?v=Uhj0EnT-NVA Episode 2 https://www.youtube.com/watch?v=Eu95MN2EZXU Episode 3 https://www.youtube.com/watch?v=jyKQ45hJR1A Episode 4 https://www.youtube.com/watch?v=Np5s00NCJaM

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				Episode 5 https://www.youtube.com/watch?v=-ZoZLQ31iJg National Drug Council Website http://www.nationalsecurity.gov.tt/ndc/ Ministry of Health http://www.health.gov.tt/ Child abuse, gender, HIV/AIDS https://sta.uwi.edu/igds/breakthesilence/documents/BTS_Toolkit_complete_AS13JUNE2017.pdf Gender based violence in Trinidad and Tobago http://opm-gca.gov.tt/LinkClick.aspx?fileticket=YISA4T--R6w%3D&portalid=0 (pgs 25-67)

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Appreciate and show respect for those in authority and senior members of the family.	**Teaching and Learning Strategy:** Use of student experiences with grandparents and other elderly persons in the home Use of news stories on students' interaction with police officers, teachers and administrators, school safety officers	Appreciation for the Elders in society- Infants-Activity-Pack-Week-5-Term-2.pdf (windows.net)
Key historical events in the development of Trinidad and Tobago up to 1976. -Pre-Columbian period -Arrival of Columbus, - Enslavement of African persons -Indentureship -Federal Union of Trinidad and Tobago -Self-government	Describe the key historical events in the development of Trinidad and Tobago up to 1976 within a chronological framework.	Define and use correctly the following terms and concepts: Colonialism, Colony, Slavery Indentureship, Self-government, Independence, Republicanism.	**Teaching and Learning Strategy:** Use of ABC Brainstorm Strategy to identify terms and concepts (See Social Studies Strategies Document Part 1)	The Road to Nationhood: Crown Colony Government to Republicanism https://www.natt.gov.tt/sites/default/files/pdfs/the-road-to-nationhood.pdf
		Outline the major historical events from the arrival of Columbus to Republicanism (including periods or dates)	**Teaching and Learning Strategy:** Use of videos with related questions followed by class discussion. **Assessment Strategy:** Create a timeline from the Pre-Columbian period to Republicanism	Trinidad and Tobago Independence in 1962 https://www.youtube.com/watch?v=GVlcBLX6UHU Republic Day- Infant-Activity-Pack-Week-1-V2.pdf (windows.net)/ Infants-Activity-Pack-Week-3-Term-1-2021-2022.pdf (windows.net)

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
-Independence -Republicanism				For the People: The Creation of a Republic https://www.youtube.com/watch?v=jtksHwX4tjs Milestones to Parliamentary Democracy in Trinidad and Tobago - 1498 to 1797 https://www.youtube.com/watch?v=jgTvdPDW36s Independence Day 2022 https://youtu.be/mxxgABnuvJQ TTT Live: Profile of a President: Sir Ellis Clarke https://www.youtube.com/watch?v=15CjenGSFkg

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
National Symbols/ Emblems	Develop a sense of loyalty and national pride by recognizing the significance of national emblems/ symbols.	Name and identify the National Symbols/Emblems (National Flag, National Anthem, National Pledge, National Birds, National Flower, National Instrument)	**Teaching and Learning Strategy:** Create a picture board to display the national symbols of Nationhood Display an accurate depiction of the National Flag Class Discussion on the elements of the Coat of Arms Create cut-outs of elements of the Coat of Arms and have students reproduce model Source resource personnel or students within the school to serenade the school body by playing an appropriate piece using the National Instrument **Assessment Strategy:** Group presentation: Each group assigned a national symbol, inclusive of National Instrument and based on research present the history of the symbol, its elements, creator and where it can be found. Include segment for personal reflection on appreciation and value of the selected national symbol/emblem	National Identity Guidelines: https://natt.gov.tt/sites/default/files/pdfs/National%20Identity%20Guidelines_FINALReduced%20Size.pdf Independence brochure (National Archives of Trinidad and Tobago) https://www.natt.gov.tt/sites/default/files/images/FINAL%20Independence%20Brochure%20REV%2021%20Aug%202018OptimizedMin%20%281%29.pdf National Instrument https://nationalarchivestt.wordpress.com/2016/01/22/vagabonds-hooligans-and-badjohns-the-violent-past-of-the-steel-bands/ https://www.nalis.gov.tt/Resources/Subject-Guide/Steelband National Symbols https://www.nalis.gov.tt/Resources/Subject-Guide/National-Symbols#tabposition_25662

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Recognise the significance of the National Awards	**Teaching and Learning Strategy:** Identify persons from the community who can receive a National Award and give reasons why Identify other types of awards that can be given to citizens of Trinidad and Tobago	National Awards https://otp.tt/trinidad-and-tobago/national-awards/ https://www.nalis.gov.tt/Resources/Subject-Guide/National-Awards
Government (Structure and Function; **Rights, Freedoms and Responsibilities of citizens and Electoral System in Trinidad and Tobago)**	Understand the structure and function of Government in Trinidad and Tobago.	State the reasons for having a government.	**Teaching and Learning Strategy:** Use of student experiences elicited from teacher questioning	Purpose of Government (with guidance) https://www.youtube.com/watch?v=IAnjKNUQERY (0.53-2.23 mins)
		Describe the electoral system in Trinidad and Tobago (First past the post system).	**Teaching and Learning Strategy:** Use of resources from the Elections and Boundaries Commission on the electoral process Review election results in Trinidad and Tobago to identify the characteristics of the system Simulate an election to explain First past the post system	The Electoral system in Trinidad and Tobago. https://ebctt.com/electoral-process/ Preliminary Election Results 2020 https://ebctt.com/wp-content/uploads/The-Preliminary-

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Assessment Strategy: Create fictitious election results from a named country and students respond to questions on the results	Results-for-the-2020-Parliamentary-Elections.pdf
		Describe the structure and function of government in Trinidad and Tobago.	**Teaching and Learning Strategy:** Graphic illustration of the three arms of Government.	See resource at: https://www.nalis.gov.tt/Resources/Subject-Guide/Government-Structure/Central-Government
		Define the term public institution Give examples of public institution in Trinidad and Tobago (Government ministries, departments and agencies, judiciary and statutory organisations).	**Teaching and Learning Strategy:** Classify public institutions Identify examples nationally and within the school community	Use the resources provided for this topic on public institutions to identify, define and explain the terms, concepts and examples
		Familiarise themselves with the role and function of public institutions in Trinidad and Tobago	**Teaching and Learning Strategy:** Group work – Each group is assigned a public institution. Group members interview someone employed in the selected institution and present to class	Governance Institutions of Trinidad and Tobago https://www.commonwealthgovernance.org/countries/americas/trinidad_and_tobago/governance-institutions/

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				Office of the Ombudsman of Trinidad and Tobago http://www.ombudsman.gov.tt/sitepages/default.aspx?id=13 Consumer Affairs Division, Ministry of Trade and Industry https://tradeind.gov.tt/consumer-affairs-division/ Police Complaints Authority https://www.pca.org.tt/
		Be aware of those public institutions from which they can seek redress (Ombudsman, Financial Services Ombudsman, Police Complaints Authority, Consumer Affairs Division).	**Teaching and Learning Strategy:** Identify concerns people may face when accessing services Conduct research on the public institutions through which persons can seek redress **Assessment Strategy-** Students are presented with scenarios and asked to select the appropriate public institutions from which to seek redress Write a letter of complaint to the relevant public institution seeking redress	Use the resources provided for this topic on public institutions to expand on this objective

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Describe the ways government earns revenue (for example, taxes, trade).	**Teaching and Learning Strategy:** Use a newspaper headline advertising budget day Students research and make a list of the different ways government earns revenue	Budget Statement 2023- Subsection Estimates of revenue and Expenditure pgs 42-51 https://www.finance.gov.tt/wp-content/uploads/2022/09/Budget-Statement-2023-E-Version.pdf
		Describe the ways in which government spends revenue (expenditure) (for example, building of infrastructure).	**Teaching and Learning Strategy:** Create an idea builder (Key ideas, facts, sample sentence, example, non-example, and definition) Use images of different aspects of society (schools, sports, roads, notice of salary payments) as examples for students to brainstorm other ways on which government spends revenue. Ask students to research and list the different Ministries in Trinidad and Tobago to identify government expenditure.	Budget Statement 2023- Subsection Estimates of revenue and Expenditure pgs 42-51 https://www.finance.gov.tt/wp-content/uploads/2022/09/Budget-Statement-2023-E-Version.pdf

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Assessment Strategy: The Minister of Education has planned to visit your school as part of her school tours. Prepare a list of items to present to the Minister for which money should be allocated to improve education for young persons at your school	
		Define the term Local Government Describe the functions of Local Government and the Tobago House of Assembly (THA) Differentiate amongst Central and Local Government and the Tobago House of Assembly (THA)	**Teaching and Learning Strategy:** Research the functions of Central, Local Government and the THA Local Government **Assessment Strategy:** Given examples students can match the functions with the three (3) bodies	Ministry of Rural Development and Local Government: What we do https://rdlg.gov.tt/our-ministry/what-we-do/ Ministry of Rural Development and Local Government: Our history https://rdlg.gov.tt/our-ministry/our-history/ THA-About the Assembly https://www.tha.gov.tt/about-the-assembly/ Infants-Activity-Pack-Week-4-Term-2.pdf (windows.net)

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Explain the meaning of the term Human Rights. Describe the rights and freedoms of citizens of Trinidad and Tobago, including the Rights of the Child. Describe the civic rights and responsibilities of citizens of Trinidad and Tobago.	**Teaching and Learning Strategy:** Use of the Preamble of the Constitution of Trinidad and Tobago which outlines the rights and freedoms of citizens Review of the Conventions of the Rights of the Child to identify and discuss these rights **Assessment Strategy:** Have students create a visual piece illustrating one Right of the Child	Constitution of the Republic of Trinidad and Tobago http://laws.gov.tt/pdf/Constitution.pdf Convention of the Rights of the Child https://www.unicef.org/child-rights-convention/convention-text-childrens-version We all have Rights: UNICEF https://www.youtube.com/watch?v=6F7ie1Z07aM

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Our Physical Resources	Develop an understanding and appreciation of the major physical resources that contribute to the economy of Trinidad and Tobago	Define the terms renewable and non-renewable resources; Primary, Secondary and Tertiary industries; Import and Export	**Teaching and Learning Strategy:** Word/picture wall of terms and concepts	Types of Energy for Kids- Renewable and Non Renewable Energies: https://youtu.be/w16-Uems2Qo Difference between Renewable and Non-Renewable Resources https://youtu.be/PLBK1ux5b7U Geo for CXC https://geoforcxc.com/economic-activities/ Importance of Water | Science For Kids | All Important Water | Periwinkle | Vid #10 https://youtu.be/c-3KCzxEgek
		Identify physical resources of Trinidad and Tobago Locate areas where our physical resources can be found (Petroleum, Natural Gas, Asphalt, Gypsum, Limestone, Sand and Gravel, Rivers, Forests)	**Teaching and Learning Strategy:** Use a Picture List to identify the physical resources and include an image of each resource Map work: On a blank map of Trinidad and Tobago use an appropriate key to locate the relevant physical resources	What are the major Natural Resources of Trinidad and Tobago? https://www.worldatlas.com/articles/what-are-the-major-natural-resources-of-trinidad-and-tobago.html Location of some of our natural/physical resources

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				https://www.energy.gov.tt/our-business/aggregates/economic-minerals/
		Identify types of industries in Trinidad and Tobago.	**Teaching and Learning Strategy:** Review products used within their families to ascertain the types of industries existing in Trinidad and Tobago	The major industries of Trinidad and Tobago https://www.worldatlas.com/articles/the-major-industries-in-trinidad-and-tobago.html The 7 sub industries in Trinidad and Tobago's Manufacturing industry https://www.investt.co.tt/industries-and-opportunities/Electricity%20Intensive%20Manufacturing/
		Given examples, classify Primary, Secondary and Tertiary Industries in Trinidad and Tobago.	**Teaching and Learning Strategy:** Use the Frayer Model to illustrate the terms and concepts previously mentioned **Assessment Strategy:** Worksheet to classify types of industries	How to use the Frayer Model – TeachLikeThis https://youtu.be/AdjN09VouaU What is the difference between Primary, Secondary and Tertiary Sectors of Industry? https://www.youtube.com/watch?v=eWpdcgOwVtg

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				Jobs and their classification: Primary, Secondary & Tertiary sector | Educational Videos for Kids https://youtu.be/GuzmULmcU0E Business Sectors https://www.youtube.com/watch?v=8KDxAWfMwf4
		Name the major imports and exports of Trinidad and Tobago.	**Teaching and Learning Strategy:** Collection of photographs of products imported and exported	Major imports and exports Trinidad and Tobago (2020) https://oec.world/en/profile/country/tto
		State the benefits of Trinidad and Tobago's physical resources to its economy.	**Teaching and Learning Strategy:** Refer to pages 24 to 41 of the Social Studies Strategies Document (Part 2) to highlight benefits of Tourism to the economy of Trinidad and Tobago	Main Drivers of Trinidad and Tobago's Economy https://www.investopedia.com/articles/investing/022415/main-drivers-trinidad-and-tobagos-economy.asp

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Assessment Strategy: For a named physical resource, list two benefits of our physical resources to the economy of Trinidad and Tobago	What are the major natural resources of Trinidad And Tobago? https://www.worldatlas.com/articles/what-are-the-major-natural-resources-of-trinidad-and-tobago.html
Water as a physical resource		Define the terms, 'pollution', 'marine', 'biodiversity'.	**Teaching and Learning Strategy:** Students develop definitions based on the review of pictures/images showing the relevant terms and concepts	Captain Planet - Captain Planet Defeats Captain Pollution [Music & Sequence Appreciation] https://youtu.be/XLeLQy3aiSM What is Water Pollution? https://www.youtube.com/watch?v=IW8DdcS7xPA What is Biodiversity? https://www.youtube.com/watch?v=_bk2nnDI68g Introduction to Biodiversity (pages 23-24)

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				https://www.planning.gov.tt/sites/default/files/Green%20Days%20by%20the%20EPPD%20Activity%20Series%20%28Secondary%20School%20FINAL%20May%202020%29_compressed-2.pdf
		Outline the different uses of water	**Teaching and Learning Strategy:** Use of students' experiences Using pictures or drawings show how water is important in the student's everyday life Create a Word Wall of important terms and concepts or use of a Graphic Organiser to identify domestic, agriculture and other uses of water (see pages 19 and 20 of the Social Studies Strategies Document (Part 2) **Assessment Strategy**: Create a poster/collage showing the different uses of water	Uses of Water https://www.youtube.com/watch?v=D2s9cB1pzZ8 Make your own word wall https://www.youtube.com/watch?v=xass9ONzZxQ
		Discuss ways to conserve water.	**Teaching and Learning Strategy:** Discussion on the importance of water conservation based on the video titled Why I Conserve https://youtu.be/h4NwK_Xf7yE	Water Conservation Activities https://wateruseitwisely.com/kids-teachers/fun-activities/

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		Explain why water must be conserved.	(See page 21 of the Social Studies Strategies Document (Part 2) Make a commitment/personal pledge identifying ways students may conserve water **Assessment Strategy:** **Present the following scenario to students:** There is a leak in the community for over a month. Write a letter of complaint to the WASA outlining the issue of water wastage in your community and the need to address the situation Create a video on the importance of conserving water	Water - Water Use It Wisely https://wateruseitwisely.com/100-ways-to-conservewater
		Recognize the importance of water as a resource	**Teaching and Learning Strategy:** Organize a Water Appreciation Day- Have students make presentations to the assembly or make billboards. Place	Appreciation for what we have: Water https://www.youtube.com/watch?v=WpBdDRqRyX0

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			billboards around the school grounds advocating the importance of water	
		Discuss causes and effects of water pollution	**Teaching and Learning Strategy:** Create Discussion Web or Graphic Organiser to identify causes and effects of water pollution by viewing the following video, https://www.youtube.com/watch?v=Wv1urTMSXak (See pages 22 and 23 of the Social Studies Strategies Document (Part 2)	How does water pollution affect us? https://www.activesustainability.com/water/causes-consequences-water-pollution/?_adin=02021864894 Geo for CXC: Water Pollution https://geoforcxc.com/pollution/water-pollution/
		Explain the importance of the water bodies (rivers and seas) in Trinidad and Tobago.	**Teaching and Learning Strategy:** Identify on a blank map of Trinidad and Tobago areas of activities associated with water - agriculture, recreation, employment (tourism, transport, fishing) and trade Valuing Water- Infants-Activity-Pack-Week-11-Term-2.pub_.pdf (windows.net) page 1 &4	Relationship with ocean vital part of Trinidad and Tobago culture https://news.un.org/en/story/2017/06/558952-feature-relationship-ocean-vital-part-trinidad-and-tobago-culture Rights recognition for the Caroni River in Trinidad and Tobago https://www.earthlawcenter.org/blog-entries/2019/1/rights-

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				recognition-for-the-caroni-river-in-trinidad-and-tobago
		Identify how actions and attitudes of humans affect marine biodiversity	**Assessment Strategy:** Create a poster showing the effects of human activity on the marine biodiversity of the Caribbean Sea.	How do humans affect biodiversity https://royalsociety.org/topics-policy/projects/biodiversity/human-impact-on-biodiversity/ Human impact on Biodiversity https://www.youtube.com/watch?v=wXJiHr8jWBs
		Demonstrate ways of advocating for the conservation of our water bodies.	**Assessment Strategy:** Students can create video/vlog/flyer, write to MP to explain the for taking care of a water body in their community	http://planning.gov.tt/content/we-all-protect-our-species-institute-marine-affairs

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Cultural Heritage and Traditions. **The population and their origins** **Festivals and Celebrations** **Rites and Rituals** **Dates and Events**	Develop an appreciation of our Cultural Heritage and the need to conserve and preserve	Define the terms, 'Heritage', 'Cultural Heritage', 'Conservation', 'Preservation'.	**Teaching and Learning Strategy:** Create a word wall on the relevant terms and concepts	What is heritage? https://www.youtube.com/watch?v=nf8DyjCz8UE Glossary of terms-see pgs 50-51 https://edoc.coe.int/en/cultural-heritage/6551-cultural-heritage-and-cultural-diversity-lessons-a-handbook-for-teacher.html
		Describe the characteristics of our cultural heritage.	**Teaching and Learning Strategy:** Use of questioning to elicit responses based on students' knowledge and experiences Invite resource persons to provide information on groups which may not be represented in the class (Syrian Lebanese, Chinese) Conduct a field trip to a historical site **Assessment Strategy:** Write a report on their field trip	What is cultural heritage? https://www.heritageforpeace.org/heritage-for-peace/what-is-cultural-heritage/

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Describe the contributions by the various settlers to Trinidad and Tobago (First Peoples of Trinidad and Tobago (Tainos and Kalinagos), Europeans, Africans, Asians (Chinese and East Indians) and Syrians) to: languages, religions, traditions (religious practices rites and rituals), ethnicities, festivals (cuisine, music, dress), historical sites/relics/names of places and other traditions (folklore and art and craft).	**Teaching and Learning Strategy:** Group research and presentation using various forms of media on the contributions of the various settlers	The First Peoples Presence in Trinidad and Tobago. NALIS 2020 https://www.nalis.gov.tt/Resources/Exhibitions-and-Photo-Galleries/ID/26/FIRST-PEOPLES#prettyPhoto The Chinese in Trinidad and Tobago: https://youtu.be/UPa31Jep5N4 The Experience of Indian Indenture in Trinidad: Arrival and Settlement https://guyaneseonline.net/2012/03/16/the-east-indian-presence-in-trinidad-and-tobago-1845-1917-six-videos/ Remembering the Past Indian Arrival Day in Trinidad and Tobago https://www.youtube.com/watch?v=QPObDVqdBtQ

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				Sewdass Sadhu Temple in the Sea https://youtu.be/ybntQ_xMewI Historical Sites – Our African heritage https://natt.gov.tt/sites/default/files/pdfs/ Our-African-Heritage.pdf African Heritage – Food https://www.nalis.gov.tt/Resources/Subject-Guide/Emancipation-Day#tabposition_247612 African Heritage – Religion https://natt.gov.tt/sites/default/files/pdfs/Our-African-Heritage.pdf National Heritage Sites http://nationaltrust.tt/heritage-sites/
		Explain the significance of: Religious festivals, National festivals (Carnival, Emancipation Day, First Peoples Day, Indian Arrival Day, Tobago Heritage	**Teaching and Learning Strategy:** Student research of the different national and religious festivals and celebrations	Emancipation Day https://www.nalis.gov.tt/Resources/Subject-Guide/Emancipation-Day

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Festival, Celebration of religious festivals e.g., Divali, Phagwa, Christmas, Easter, Eid- ul-Fitr, Shouter Baptist Liberation Day		First People- Infants-Activity-Pack-Week-5-V2.pdf (windows.net) Divali/Ramleela- Infants-Activity-Pack-Week-9.pub_.pdf (windows.net)/ Infant-Activity-Pack-Week-9-2ndDraft.pdf (windows.net) Christmas- Infants-Activity-Pack-Week-11-V3.pub_.pdf (windows.net) Eid Mubarak-FINAL-Infants-Activity-Pack-Week-5-Term-3.pdf (windows.net) Indian Arrival Day- Infants-Activity-Pack-Week-8-Term-3-FINAL.pdf (windows.net) Carnival- Infant-activity-week-8-Term-1pdf.pdf (windows.net)

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				Shouter Baptist Liberation Day- Infant-activity-week-13.pdf (windows.net) Phagwa- Infant-activity-week-13.pdf (windows.net)
		Discuss safety precautions to be taken during celebrations	**Teaching and Learning Strategy:** Class Discussion on possible safety issues associated with festivals **Assessment Strategy:** Create a flyer highlighting safety precautions to be observed during a named festival	Trinidad and Tobago Electricity Commission: Safety Tips for the Christmas season https://www.facebook.com/watch/?v=1222887135320708 Safety in the home: Trinidad and Tobago Fire Servicehttps://www.facebook.com/watch/?v=340549927164421 Using fireworks safely-Trinidad and Tobago Fire Service https://www.facebook.com/watch/?v=720694365194547
		Examine the fusion of cultural interactions to create new cultural forms which are present and unique to Trinidad and Tobago (Soca, Chutney, Rapso, Soca parang)	**Teaching and Learning Strategy:** View/listen to an interview with/on Machel Montano, Ras Shorty I, Ricki Jai, Crazy or any artiste on these local genres	Music of Trinidad and Tobago https://www.cs.mcgill.ca/~rwest/wikispeedia/wpcd/wp/m/Music_of_Trinidad_and_Tobago.htm Remembering Brother Resistance

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				https://www.youtube.com/watch?v=whcZ2AcIshE The Chutney Phenomenon https://www.caribbean-beat.com/issue-22/chutney-phenomenon#axzz7omutQNIO Chutney Soca Succession https://www.caribbean-beat.com/issue-123/chutney-soca-succession#axzz7omutQNIO Parang https://www.nalis.gov.tt/Resources/Subject-Guide/Parang https://nationaltrust.tt/parang-heritage-connection/
		Explain reasons why it is important to conserve and preserve our cultural heritage.	**Teaching and Learning Strategy:** Use images of historical sites and landforms and identify reasons for their conservation and preservation Interview relatives to identify traditions of the past, example, folklore, Patois language	Heritage sites https://nationaltrust.tt/heritage-sites/ Information sheet on heritage https://en.unesco.org/sites/default/files/info_sheet_heritage.pdf

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Assessment Strategy: Students create a poster and/or slogan on the need to preserve our heritage	Preserving culture and heritage through generations https://amf.net.au/library/uploads/files/Diversity_Matters_Forum_overview_and_theme_summaries_2014.pdf
		Evaluate means of conserving and preserving our cultural heritage.	**Assessment Strategy:** Develop a brochure to highlight ways of conserving and preserving our Cultural Heritage. Students create a name for the brochure and feature photos of places that we should preserve	National Trust of Trinidad and Tobago https://nationaltrust.tt/reflections-on-heritage-at-60/ https://nationaltrust.tt/home/wp-content/uploads/2020/03/FREE-PRINTABLE-WORKSHEETS.pdf

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Man Made and Built Heritage		Define relevant terms and concepts (Man Made Heritage - Built Environment - Built Heritage), sustainable, tourist, tourism	**Teaching and Learning Strategy:** Create a glossary with the terms and their meanings	
		Name and describe the features in the environment that are part of our man-made or built heritage. • Historical Sites such as the Magnificent Seven and the Red House • Relics such as Fort George Tobago • Places of worship such as the Temple in the Sea in Waterloo, Bait-ul-Hamid Mosque (in Icacos) and the La Divina Pastora R.C. Church in Siparia • Features of the manmade environment as it relates to our heritage (Civic Building such as the National Academy of the	**Teaching and Learning Strategy:** Construct a worksheet to elicit the extent of student knowledge of heritage, cultural heritage and built heritage Use of worksheets from the National Trust of Trinidad and Tobago on heritage Conduct of a field trip to any heritage building or historical site **Assessment Strategy-** After the field trip students can work in pairs to develop strategies/activities to increase visitors to the site	The National Trust of Trinidad and Tobago https://nationaltrust.tt/ https://nationaltrust.tt/home/wp-content/uploads/2020/03/FREE-PRINTABLE-WORKSHEETS.pdf

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Performing Arts and Queens Hall) Value the significance of our built or manmade Heritage.		
Budgeting and Money Management	Promote wise decision making in the management of personal finances and the importance of a national budget.	Define the terms 'income', 'revenue', 'expenditure', 'budget', 'surplus and deficit budget', 'delayed gratification', 'savings', 'savings plan'.	**Teaching and Learning Strategy:** Graphic organiser on terms and concepts	National Financial Literacy Programme-Money World Game https://moneyworld.nflp.org.tt/
		Examine the relationship between income and budgeting.	**Teaching and Learning Strategy:** Using monopoly money and a list of expenditure have students illustrate how money is spent and why	SAVING, SPENDING, SHARING, BUDGET A Financial Literacy Musical Adventure for Planning Your Money https://youtu.be/nLPZzUp3Ues
		Differentiate between needs and wants.	**Teaching and Learning Strategy:** Generate a list to identify the must have items (needs) and the ones that the student can do without(wants) and illustrate using a graphic organizer **Assessment Strategy:** Students role play the difference between needs and wants	Difference between Needs and Wants https://youtu.be/9ZxpWI1rDTE

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Discuss the benefits of budgeting.	**Teaching and Learning Strategy:** Group presentation on the benefits of budgeting and its importance in money management	Budgeting for kids https://youtu.be/WRcgRimBac8
		Develop a simple budget.	**Teaching and Learning Strategy:** Create a journal or calendar to help plan a budget or to keep a record of spending Make adjustments to a simple budget in response to simple posed challenges, opportunities or unplanned simple expenditures **Assessment Strategy:** Group Work to develop a budget for a class party/ class outing/field trip/celebrating and commemorating a national festival or international day	CashVille Kidz Episode 23: SMART Budgeting https://youtu.be/58EuubFG9-c The Coffee Shop Game https://www.hoodamath.com/games/coffeeshopgame.html
		Describe ways of saving money	**Teaching and Learning Strategy:** Create concept map to distinguish between formal and informal ways of saving money (see page 47 of the Social Studies Strategies Document (Part 2)	A Lesson on Responsible Saving for Kids https://youtu.be/JkCmIxraWlM

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Invite persons from the National Financial Literacy Programme of Trinidad and Tobago to engage students on financial literacy Have students set a saving goal to be achieved in the short to medium term **Assessment Strategy:** Present a detailed scenario to students highlighting the improper use of money Students suggest ways money can be saved based on situations presented in the scenario	
		Identify the challenges of saving money.	**Teaching and Learning Strategy:** Brainstorming activity to determine the challenges of saving Teacher created scenarios to demonstrate the challenges of saving	Being Responsible With Money - Good Habits for Kids | Ask Coley Tips | Educational Videos by Mocomi https://youtu.be/IHDVnQg4T6c

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Construct a savings plan to purchase an item.	**Assessment Strategy:** Construct a savings plan to purchase an item in the short to medium term	Social Studies Strategies Document (Part 2) page 50
		Discuss the benefits of saving.	**Teaching and Learning Strategy:** Students view the video on savings from the Trinidad and Tobago Securities and Exchange Commission to understand the importance of savings Use of 321 strategy to summarise their ideas Using post-it, have each student write a benefit of saving and place it on the board, the teacher can then group the answers and discuss with the class **Assessment Strategy:** Create and share a hashtag to represent the importance of savings Teacher created Quiz on goal setting and savings	Trinidad and Tobago Securities and Exchange Commission-Savings https://youtu.be/MNQqJ0KGVRA Social Studies Strategies Document (Part 2) pages 48 to 49 321 Strategy The 3-2-1 lesson strategy for any grade and any subject!!! https://youtu.be/v4y0tUX1pOo

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
The Geography of Trinidad and Tobago	Know and develop an appreciation for the physical and man-made environment of Trinidad and Tobago and the Caribbean and apply relevant map skills.	**<u>Map Skills</u>** Identify different types of maps- Physical, Political and Land use.	**Teaching and Learning Strategy:** Use the atlas or any other resource available to illustrate different types of maps and their use **Assessment Strategy:** Students are presented with different types of maps and are asked to classify them	Features of a Map https://www.kiddle.co/s.php?q=features+of+a+map#gsc.tab=0&gsc.q=features%20of%20a%20map&gsc.page=1 What is a Map? https://www.kiddle.co/s.php?q=what+is+a+map+key#gsc.tab=0&gsc.q=what%20is%20a%20map%20key&gsc.page=1 Map Reading https://kids.britannica.com/kids/article/map-and-globe/353425
		Identify the elements of a map (border, legend or key, arrow showing north, scale, title).	**Teaching and Learning Strategy:** Use atlas to identify basic map features Students create of a fictitious country and include all elements of the map accurately **Assessment Strategy:** Using a blank map, have students insert the 5 key elements of a map	Map Skills: How to read a map https://emapshop.com/wp-content/uploads/2016/08/E3.jpg Using a Map Scale Song (Line it Up) Fall Out Boy Parody https://youtu.be/Xd8gJm5c4CY

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Read and interpret basic conventional symbols on a given map.	**Teaching and Learning Strategy:** Define the concept map symbol Given a map, students create a suitable legend or key using standard conventional symbols **Assessment Strategy:** Complete a worksheet or use oral questioning for students to identify symbols on a given map and state what they represent	Geo for CXC: Reading and Interpreting Conventional Symbols https://geoforcxc.com/map-skills/map-symbols/
		Measure the distance between two places on a map using a linear scale.	**Teaching and Learning Strategy:** Using a basic map with places identified as points, have students practice measuring distance using strips of paper and apply the rule "from" and "to" **Assessment Strategy:** Use a worksheet to test the application of the steps in measuring distance	Geography Map Skills: Scale and Distance https://youtu.be/K3aM0H7j_Jg
		Locate places on a map using Compass Direction (8 points) and 4 figure grid references	**Teaching and Learning Strategy:** Skill development through the application of the steps in locating places and giving directions	Cardinal Direction https://kids.kiddle.co/Cardinal_direction

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Assessment Strategy: Treasure Hunt: Use of the Compass Direction (8 points) and four figure grid reference to locate objects on a worksheet	Four figure grid references https://youtu.be/c-3KCzxEgek Geo For CXC: Four Figure Grid Reference https://geoforcxc.com/map-skills/4-figure-grid-reference/
		Using the Compass Direction (8 points), give the direction of Caribbean territories in relation to Trinidad and Tobago and vice versa.	**Teaching and Learning Strategy:** In class activity: Each child creates a small eight-point compass for the teacher to demonstrate its importance in determining the direction of places in relation to others Use of practice sheets for skill development	Compass Directions https://youtu.be/Cu4XY9eHRsU
		<u>Landforms and Land-use</u> Define Physical Environment, Man Made Environment, Land Use, Settlement (Rural and	**Teaching and Learning Strategy:** Use Google Maps, atlas and/or Ordinance Survey Maps and photographs to identify aspects of each term and concept and provide definitions	BBC Bitesize: What are human and physical features? https://www.bbc.co.uk/bitesize/topics/zqj3n9q/articles/zr8q7nb

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Urban) and Physical/Natural Resources.		
		Name and locate the main landforms of Trinidad and Tobago on a map.	**Teaching and Learning Strategy:** On a Map of Trinidad and Tobago accurately name and locate the major physical features (see page 5 of the Social Studies Strategies Document (Part 2) **Assessment Strategy:** Create a map showing the how the location of major landforms in Trinidad and Tobago	Places of Interest in Trinidad and Tobago places of interest in trinidad and tobago - Google Maps
		Describe with, examples, basic landforms: mountains, ranges, hills valleys, plains, peninsulas, swamps, river.	**Teaching and Learning Strategy:** Make 2D or 3D models of basic landforms (see pages 7 to 10 of the Social Studies Strategies Document (Part 2) **Assessment Strategy:** Create a multimedia presentation - one slide can be made for each landform or feature. Each slide should have the term, the student's definition and the image	Exploring Landforms and Bodies of Water for Kids - FreeSchool https://youtu.be/BsqKTJtK_vw
		Develop an appreciation for the physical environment of Trinidad and Tobago.	**Teaching and Learning Strategy:** Create a brochure Identifying a specific landform, for example, The San Fernando	EMA: Beauty of Nature https://youtu.be/lyZS_5qgNgU

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Hill and explain how it can be appreciated by persons (see page 11 of the Social Studies Strategies Document (Part 2) **Assessment Strategy:** Based on given descriptions, students identify places of interest to populate a schedule for a **Know Your Country Tour**	National Trust: Caroni Swamp/Bird Sanctuary — National Trust of Trinidad and Tobago
		Discuss the types of land use: housing, agriculture, recreation, industry.	**Teaching and Learning Strategy:** Identify examples of each type of land use within the school's community	Types of land use https://youtu.be/vbP-o6-ETuA
		Differentiate between rural and urban settlements.	**Teaching and Learning Strategy:** Use of aerial photographs and Google Earth to observe differences between rural and urban settlements Class discussion to elicit from students observed differences between urban and rural settlements near to the school **Assessment Strategy:** Using the information provided on rural and urban areas, students produce a reflective piece on where they prefer to live and why	Types of Communities for Kids | Urban, Suburban and Rural Communities | Social Studies for Kids https://youtu.be/KMZF1Xwcms4
		Name major cities, /towns and villages of Trinidad and Tobago.	**Teaching and Learning Strategy:** Locate on a Map of Trinidad and Tobago major cities, /towns and villages	NALIS: Towns and Villages

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				https://www.nalis.gov.tt/Resources/Subject-Guide/Towns-and-Villages
		Compare the features of a town with those of a village.	**Teaching and Learning Strategy:** Using pictures/video of towns and villages have student identify the similarities and differences	Google Earth: Port of Spain https://earth.google.com/web/search/Port+of+Spain/@10.66850956,-61.51390425,28.89354115a,18284.16852853d,35y,0h,0t,0r/data=CngaThJICiUweDhjMzYwN2RlMTc0YmMzNDk6MHhkZGRlZjY1MzE2MGQ0Mjg1GcvQHWkVUiVAIWq8dJMYwU7AKg1Qb3J0IG9mIFNwYWluGAIgASImCiQJTaVlyZM8Q0AR16uHuVtNE0AZN09u9Tt9ZUAhmgMgvzsuQkA Google Earth: Cedros https://earth.google.com/web/search/Cedros/@10.10195511,-61.82849323,25.65701571a,18304.51539868d,35y,0h,0t,0r/data=CnEaRxJBCiUweDhjMzVhNjQ4MzM5Yjc1NTU6MHhmYzkwNjY0NTU5YzhiNGUyGYO2QZL-OyRAIfN0rigl507AKgZDZWRy

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				b3MYAiABIiYKJAnPKgG31VckQBFq6OiMiiIkQBm4sHV2Kc9OwCFFdtkfv-xOwA
		<u>Seasons and Hazards</u> Describe the seasons in Trinidad and Tobago: dry season, wet season.	**Teaching and Learning Strategy:** Use of a rainfall and temperature chart to show the variations across the two seasons	Trinidad and Tobago Meteorological Service: Climate https://www.metoffice.gov.tt/Climate
		Define the terms natural event, natural hazard and natural disaster. Distinguish between the terms natural hazard and natural disaster.	**Teaching and Learning Strategy:** Identify examples of natural disasters in the Caribbean	What Exactly is a Natural Hazard? https://youtu.be/rZjSVSxPm0Q
		Name three hazards that affect Trinidad and Tobago.	**Teaching and Learning Strategy:** Graphic organiser to show the three types of hazards	Hazards-Trinidad and Tobago https://odpm.gov.tt/node/15
		Explain the effects of Tropical Storms/Hurricanes, Flooding and Drought on people and the environment.	**Teaching and Learning Strategy:** Use examples in Trinidad and Tobago where possible, of students' experience. Have students make a list of the impact of	Hurricane Dorian tears through parts of the Bahamas https://youtu.be/P6ShYNAAyAQ

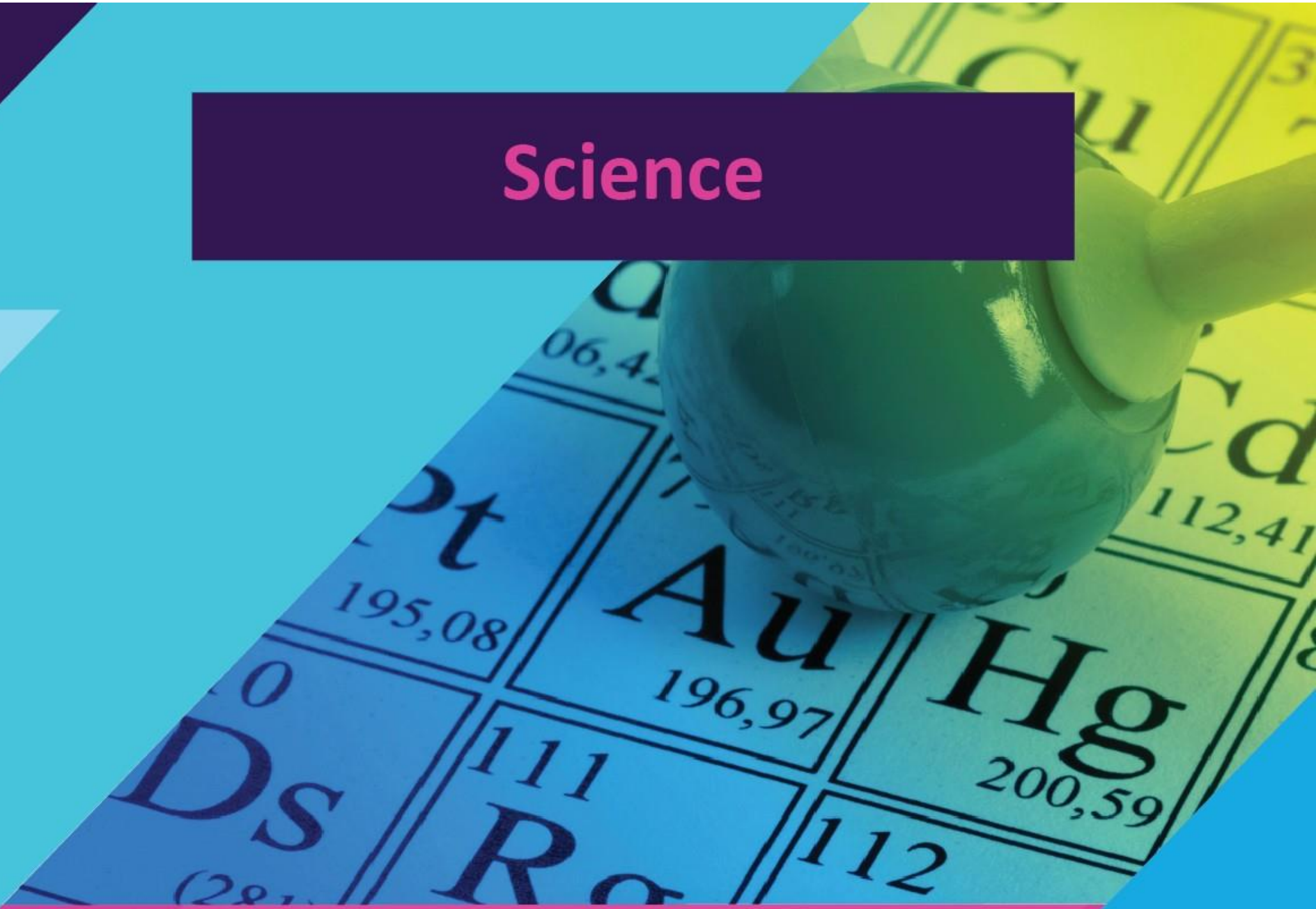
TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			flooding on their lives. The teacher can then expand through discussion Use of Photographs to highlight the effects on people and the environment	Hurricane Dorian hammers the Bahamas for more than 24 hours l ABC News https://youtu.be/qIuxhVpKdTw
		Know basic safety precautions for disasters such as fire, earthquakes and hurricanes. Identify the local agencies for disaster preparedness and management. Suggest three precautions that can be taken to protect life and property.	**Teaching and Learning Strategy:** Class Discussion on safety practices during a disaster Resource personnel form ODPM/Disaster Unit (Regional Corporation) Students can provide examples of some precautions they may have taken **Assessment Strategy:** For a named hazard, in groups, students prepare a disaster preparedness plan for placement on the class or school's notice board	Earthquakes https://odpm.gov.tt/sites/default/files/Earthquakes.pdf http://www.weready.org/earthquake/index.php?option=com_content&view=article&id=60&Itemid=73 CDEMA - WE READY - (Drop, Cover, Hold- On) https://youtu.be/ixWh2RA0m9Y Hurricanes https://odpm.gov.tt/sites/default/files/Hurricanes.pdf http://weready.org/hurricane/

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				Flooding https://odpm.gov.tt/sites/default/files/Flooding.pdf Trinidad and Tobago Fire Service-Fire Prevention Series Part 1 https://www.facebook.com/watch/?v=853078278928747 Trinidad and Tobago Fire Service-Fire Prevention Series Part 2 https://www.facebook.com/watch/?v=237432128144971 Trinidad and Tobago Fire Service-Fire Prevention Series Part 3 https://www.facebook.com/watch/?v=2951698458431912 ODPM: Wet Hurricane Season Preparedness Guidelines

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				https://odpm.gov.tt/sites/default/files/2019%20ODPM%20HURRICANE%20PREPAREDNESS%20GUIDE%20FINAL%20(1)-compressed.pdf Disaster Preparedness Checklist https://odpm.gov.tt/sites/default/files/Disaster%20Checklist.pdf Office of Disaster Preparedness and Management https://odpm.gov.tt/ Ministry of Rural Development and Local Government: What we do https://rdlg.gov.tt/our-ministry/what-we-do/
The Geography of the Caribbean		Locate on a map of the world the Caribbean Region.	**Teaching and Learning Strategy:** Use atlas, globes and Google maps to locate the Caribbean Region and Trinidad and Tobago	Blank Map of the World https://worldmapblank.com/blank-map-of-world/
		On a blank map of the Caribbean name and locate the following geographic divisions: Greater Antilles, Lesser Antilles, Windward	**Teaching and Learning Strategy:** Use Maps to locate the Caribbean territories and surrounding bodies of water	Geographic Divisions West Indies https://www.britannica.com/place/West-Indies-island-group-Atlantic-Ocean

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		and Leeward Islands and South and Central America territories. Name and locate on a blank map the water bodies which surround the Caribbean Region.		https://www.worldatlas.com/articles/what-is-the-difference-between-the-greater-antilles-and-the-lesser-antilles.html Blank Maps of the Caribbean https://www.twinkl.co.uk/illustration/caribbean-map-black-and-white https://www.sheppardsoftware.com/carribeanweb/blankmap.htm
		Define the Commonwealth Caribbean (historically). Identify countries of the Commonwealth Caribbean.	**Teaching and Learning Strategy:** Research and list the countries of the Commonwealth Caribbean	The Commonwealth https://thecommonwealth.org/our-member-countries

Science



SCIENCE

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/ GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Living and non-living things	Distinguish amongst living things based on their characteristics.	1. List the characteristics of living things (suggested use of acronym GRIMNER). 2. Describe each of the characteristics: • growing (growth), • reproducing (reproduction), • sensitive to environment, • moving (locomotion), • eating (nutrition), • producing waste (excretion), and • breathing (respiration) 3. Compare living and non-living things in terms of similarities and differences.	**Cooperative/Collaborative Learning** • **Drama** – Teaching strategies include Role Play and Artifacts. • **Brainstorming** – Students are assisted in understanding what they already know about the topic and general ideas related to living and non-living things. • **Think-Pair-Shar**e – Students required to think of their response with respect to living and non-living things, then share with class. • **Making of Posters** – A visual display either provided by teacher or which students construct about living and non-living things. • **Group Work** – Students work in manageable groups to reason and learn about the physical characteristics of living and non-living things.	https://youtu.be/eb-EjLiGROY https://www.openscied.org/7-4-matter-cycling-overview/

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/ GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Vertebrates and Invertebrates	Distinguish between vertebrates and invertebrates.	1. Define the terms, 'vertebrate. and 'invertebrate'. 2. Describe the characteristics of **invertebrates**. (Animals that do not possess a backbone or an internal skeleton e.g. snails, worms, insects). 3. Describe the characteristics of **vertebrates** (Animals that possess a backbone and an internal skeleton e.g. humans, birds, snakes). 4. List the groups of vertebrates (mammals, birds, reptiles amphibians, fish). 5. Describe the characteristics of each group. 6. Categorise vertebrates into groups of: • Mammals • Birds • Reptiles • Amphibians • Fish	**Inquiry-Based Learning** Teacher guided examination of specimen • Pose real questions, • Find resources, • Interpret information, and • Report findings. • Use of K-W-L-S (what I Know, what I Want to know, what I Learnt, what I Still want to know) • Chart as activity/learning tool. • Brainstorming • Think-Pair-Share • Classroom Discussion	https://www.oercommons.org/courses/water-retention-no-problem-with-the-key-vertebrates-invertebrates-investigation/view https://www.youtube.com/watch?v=mRidGna-V4E

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/ GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Soil types	Investigate the movement of water through various soil types.	1. List the different categories of soil types. 2. Describe the characteristics of the different soil types 3. Perform practical activities to investigate movement of water through various soil types.	**Collaborative Learning:** **Group work** – Student work in groups to conduct experiments to determine which soil type allows for better drainage.	Getting to Know Soils OER: https://www.globe.gov/documents/348830/351088/ElementaryGLOBE_SoilActivity1_en.pdf Types of Soils: https://www.youtube.com/watch?v=7h6psLfYA7w
Scientific instruments and their uses	Use of standard instruments used for measurement in science Length - meter rule Mass - balance Weight - spring balance Volume- measuring cylinder Time - stopwatch Temperature - thermometer	Identify instruments to measure length, mass, volume, temperature, and time. • Label the parts of a thermometer • Use instruments to measure length, mass, volume, temperature, and time. • Record readings in table, units used for each instrument and the abbreviated term used in measurement. • Define the terms mass and weight • Distinguish between mass and weight	**Measuring skills** – use of measuring cylinder and beakers to demonstrate reading off instruments. E.g., flat surface, reading at eye level, reading off the meniscus etc. **Demonstration** – teacher demonstrates the proper use of each instrument explaining the reading to be obtained, units and abbreviated term used for each instrument. Each student records their readings in the table provided by the teacher. **Groupwork** – students are placed in groups and are asked to prepare a checklist for the proper use of the instrument assigned. **Making of posters** – A visual display of all the standard	https://www.youtube.com/watch?v=-0p2RD0VnR0 https://www.youtube.com/watch?v=ptaVY3-vRZM https://www.youtube.com/watch?v=SE-nUsrbELE https://www.youtube.com/watch?v=6i1dc9ZrZCY

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/ GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			instruments used for measurement in science created by students or teacher **Student Workstation** – stations are set use with one instrument assigned to each station with instructions for a task using the instrument. Students in groups move from station-to-station completing the task given in the instructions. Class then meets to share and discuss the results for each task. **Class discussion** **Individual work -** Using a thermometer, the teacher names the parts of the thermometer and the function of each part. Students then label the parts from the diagram provided by the teacher	
Parts of the: **(i) plant** **(ii) flower**	Examine the external parts of a plant.	1. List the parts of a plant: Shoot System • Stem • Fruit • Flower • Leaf Root System	• **Classroom discussion**: parts of a plant and flower • **Inquiry-based**: 1. A specimen of an easily available plant (seedling) and flower (e.g., Hibiscus) should be provided for examination	Cornforth, Kyle. "Garden Science: Biology of a Flower". OER Commons. Institute for the Study of Knowledge Management in Education, 12 Feb. 2014. Web. 06 Jan. 2023. https://www.oercommons.org/au

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/ GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
	Examine the external parts of the flower.	• Root 2. Draw a plant and label its parts 3. List the external parts of a flower: • Petals • Sepals • Anther and filaments (parts of the stamen) • Style and Stigma (parts of the pistil). 4. Distinguish amongst the external parts of a flower. 5. Draw a flower showing all the external parts and label each clearly	and drawing. 2. Examination of a specimen as an experimental skill. 3. A hand lens may be use 4. Drawing as an experimental skill.	thoring/4958-garden-science-biology-of-a-flower Bawden-Davis, Julie. "Diagram of the Parts of a Flower" sciencing.com, https://sciencing.com/diagram-of-the-parts-of-a-flower-13426180.html 6 January 2023. Look inside a flower - https://youtu.be/R9sn7HZM7uY

Agricultural Science

AGRICULTURAL SCIENCE

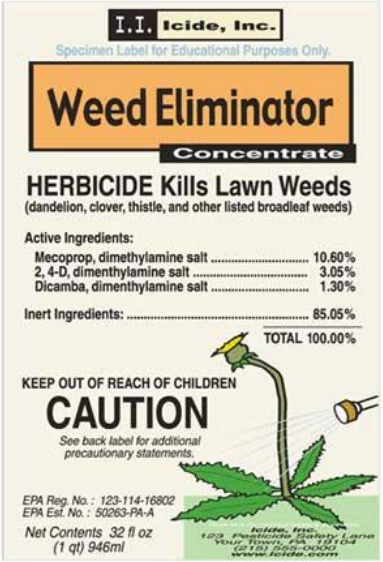
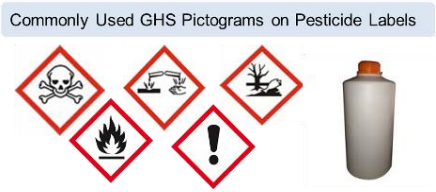
TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Crops commonly cultivated for food in Trinidad and Tobago	• Identify crops commonly cultivated for food in Trinidad and Tobago	1. Name the different Crop Groups: a. Cereals b. Legumes c. Leaf Crops d. Fruit Crops e. Root Crops f. Fibers g. Spices h. Medicines i. Forest products 2. Identify different crops from each crop group. 3. Classify different crops cultivated in Trinidad and Tobago according to crop groups.	**Use teacher guided activity for students to:** • Produce lists, tables and charts showing different crop groups. • Match/drag and drop different crops into crop groups. • Use of diagrams/pictures or drawings to help with the skill of distinguishing various crops commonly cultivated for food in Trinidad and Tobago **Cooperative/Collaborative Learning** • **Making of Posters** – A visual display either provided by teacher or which students construct about crops commonly cultivated for food in Trinidad and Tobago.	• Visit to Kaleb's Farm in Santa Cruz, Trinidad & Tobago: https://www.youtube.com/watch?v=LJHLI3FKRGM&t=28s • Visit to a Pawpaw / Papaya Farm in Trinidad & Tobago https://www.youtube.com/watch?v=SyJUImIDnME • Ministry of Agriculture, Land and Fisheries, Fruits grown in Trinidad and Tobago https://agriculture.gov.tt/publications/fruits-grown-in-trinidad-and-tobago/

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			• **Group Work** – Students work in manageable groups to deconstruct a vegetarian meal and classify ingredients into different crop groups.	
Animals commonly reared for food and Trinidad and Tobago	• Identify Animals commonly reared for food and Trinidad and Tobago	Definition of the term 'Breed" A breed is a specific group of domestic animals having a similar appearance, behaviour, and/or other characteristics that distinguish it from other organisms of the same species. Some breeds of different animals commonly reared for food and Trinidad and Tobago **Poultry**: Rhode Island Red, Vantress Cross **Cattle**: Holstein, Jamaica Hope **Pig**: Large White, Hampshire, Duroc **Goat**: Sannen, British Alpine **Rabbit**: New Zealand White, Flemish Giant. **Sheep**: Barbados Black Belly, Katahdin **Products from Livestock:**	**Use teacher guided activity for students to:** • Produce diagrams and charts showing different breeds of livestock. • Match/drag and drop different breeds of Livestock • Use of diagrams/pictures or drawings to help with the skill of distinguishing various livestock products and the associated animal. **Cooperative/Collaborative Learning** • **Making of Posters** – A visual display either	• Tour of Marilissa Farms, Trinidad & Tobago - The Largest Ruminant Farm in the Caribbean | GrownHome https://www.youtube.com/watch?v=7PS1SIUji9Y • Virtual Dairy Farm Tour https://www.youtube.com/watch?v=LFN1OPbXLMo

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Milk, Cheese, Meat, Eggs, Hide, Furs, Feathers etc.	provided by teacher or which students construct about animals commonly reared for food and Trinidad and Tobago • **Group Work** – Students work in manageable groups to create a recipe using selected livestock products.	
Insect pests	• Classify insects according to their actions • Describe the effects of each type of organism on agriculture • Describe the control practices for these insect pests	• Insects: Helpful and Harmful • Mode of action on plants: biting, sucking, chewing, burrowing. • Effects of insects on agriculture: Destruction of crops, transmitting diseases in livestock and humans • Cultural practices associated with pest control • Integrated Pest Management (IPM)	**Use teacher guided activity for students to:** • Conduct labs to observe, identify and record pest damage to plants. • Collect, mount and preserve insects • Use of diagrams/pictures or drawings to help with the skill of distinguishing different types of insects and their effects on agriculture. • Conduct research on IPM	• Helpful Insects! https://www.youtube.com/watch?v=G23U1kWHb8k • 5 Beneficial Insects to Must Have in Garden https://www.youtube.com/watch?v=H-iIgTNdmRo • Helpful and Harmful Insects | AuSum Sisters | Learning Video https://www.youtube.com/watch?v=6eFlBHcVvOM

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			Cooperative/Collaborative Learning **Making of Posters** – A labelled visual display either provided by teacher or which students construct about different types of insects and their effects on agriculture. • **Group Work** – Students work in manageable groups to construct a diorama/model of a type of pest and how it is controlled**.**	
Safety precautions when using/handling Fertilizers and Pesticides **STUDENTS ARE NOT REQUIRED TO USE OR APPLY ANY FERTLIZERS OR PESTICIDES**	• Identify types of Personal Protective Equipment (PPE) and safety precautions when using/handling fertilizers and pesticides • Identify and explain the meaning of warning signs	Types of PPE 	**Use teacher guided activity for students to:** • Identify types of Personal Protective Equipment (PPE) and safety precautions when using/handling fertilizers and pesticides using pictures and videos	• Avoid pesticide exposure http://npic.orst.edu/outreach/ppe-infographic.png • Safety Measures for Farm Workers Handling Pesticides https://www.youtube.com/watch?v=r9x33zkLdKA

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
	and labels when using/handling fertilizers and pesticides	Source: **https://www.omrindustryjournal.com/personal-protective-equipment-ppe** • Using pesticides safely depends on many things. Some of the most important factors include selecting the appropriate product, storage of the product and using that product according to the label directions. The label directions are written to minimize the risk of problems and to define the legal uses for the product. • Interpreting and explaining warning signs and labels when using/handling fertilizers and pesticides	• Use of diagrams/pictures or drawings to help with the skills of identifying and explaining the meaning of warning signs and labels when using/handling fertilizers and pesticides **Cooperative/Collaborative Learning** • **Making of Posters** – A visual display which students construct safety charts for the school garden/farm. • Group Work – Students work in manageable groups to create a safety brochure on warning signs and labels when using/handling fertilizers and pesticides	• Farm Chemical Safety: Storing Chemicals on Farms https://www.youtube.com/watch?v=8Bu_6IdjOCc • SAFE Farms: Chemicals and Pesticides https://www.youtube.com/watch?v=3NPqu-EHqVY

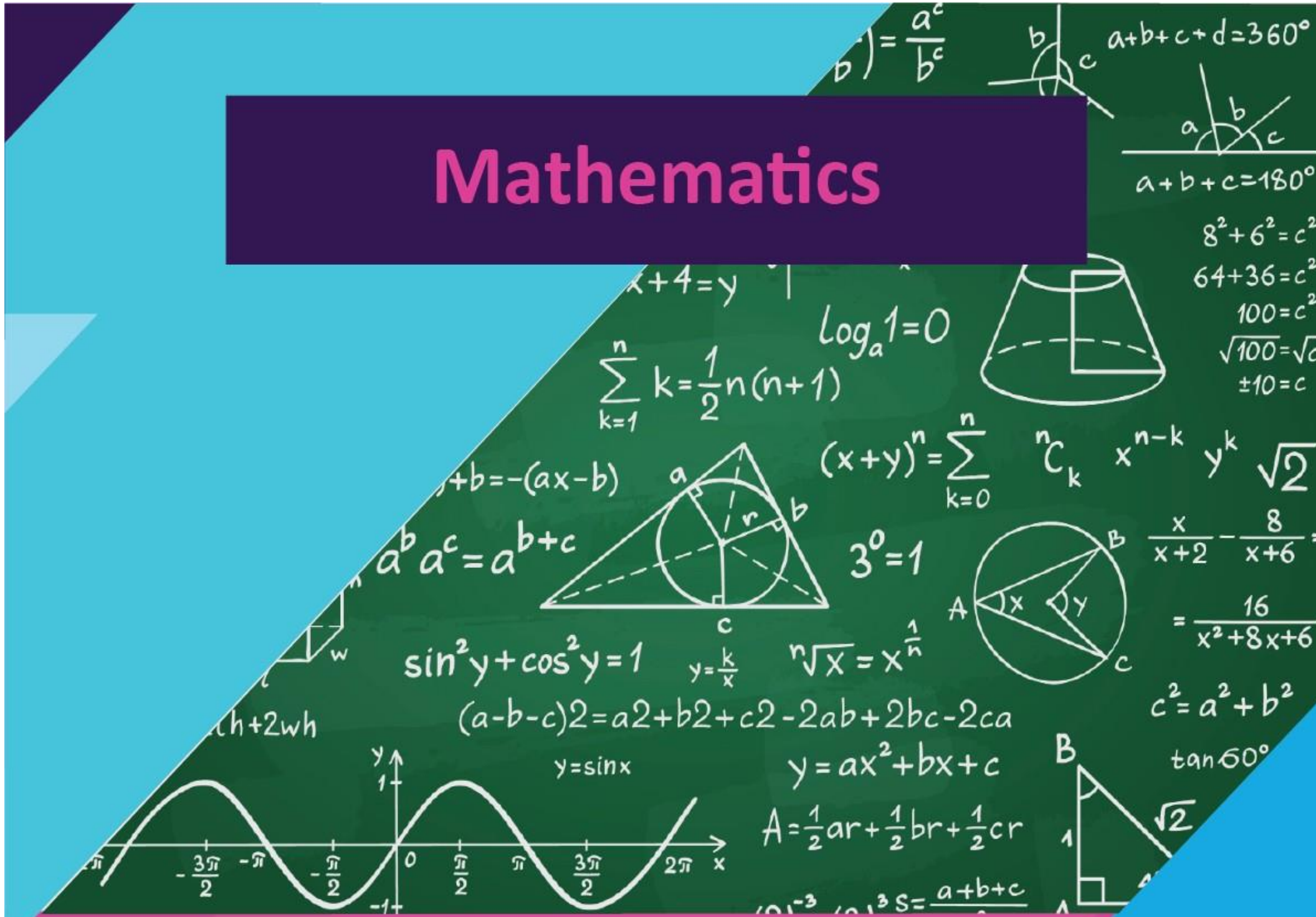
TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		  Source: http://www.chemsafetypro.com/Topics/GHS/GHS_for_pesticides.html		

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		 Source: https://apps.lucidcentral.org/ Source: https://www.dreamstime.com/danger-pesticide-symbol-sign		

<table>
<tr><th>TOPIC</th><th>GENERAL OUTCOMES</th><th>CONTENT SCOPE/GENERAL OBJECTIVES</th><th>INSTRUCTIONAL STRATEGIES</th><th>RESOURCES/MATERIALS</th></tr>
<tr>
<td>Scientific data from graphs and diagrams</td>
<td>Read and interpret scientific data from graphs and diagrams</td>
<td>Tables, Tally Charts and Bar Graphs
Demonstrate the ability to collect, classify, organize and represent data.
Demonstrate an understanding about the features of Tables, Tally Charts and Bar Graphs
Make decisions based on analysis or interpretation of data.
Demonstrate the ability to present findings orally or in writing.
Interpret, analyse and make decisions from data in tables such as the following:
<table>
<tr><th rowspan="2">Type of Crop</th><th colspan="2">Quantity Harvested (kg)</th></tr>
<tr><th>2018</th><th>2019</th></tr>
<tr><td>Pumpkin</td><td>100</td><td>250</td></tr>
<tr><td>Pepper</td><td>250</td><td>150</td></tr>
<tr><td>Eddoes</td><td>300</td><td>300</td></tr>
<tr><td>Pigeon Peas</td><td>50</td><td>150</td></tr>
</table>
</td>
<td>Use teacher guided activity for students to:
Interpret and analyse the data from tables, tally charts and bar graphs so as to make decisions about a real-life situation or problem
Identify the features of tables, tally charts and bar graphs
Use of diagrams/pictures or drawings to help with the skills of interpreting and analysing data from tables, tally charts and bar graphs
Cooperative/Collaborative Learning
Making of Posters – A visual display which students construct showing a table, tally chart or bar graph from data collected from agricultural activities</td>
<td>Making a Tally Chart https://www.youtube.com/watch?v=RRH1EqYDWnI
Making a Bar Chart https://www.youtube.com/watch?v=ZWvp2TQ428Q</td>
</tr>
</table>

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/GENERAL OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			performed by the students • **Group Work** – Students work in manageable groups to present data from a selected agricultural group activity.	

Mathematics



MATHEMATICS

NUMBER

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Whole Numbers	Understand the concept of numbers up to 1 000 000.	Represent whole numbers to 1 000 000 using multiple models and connect to numerals and number names. Represent any number up to one million using numerals or word names.	• Use multiple models (e.g., base ten materials, counters) to represent numbers up to one million concretely, pictorially and symbolically, and connect to numerals and number names. • Explore activities involving reading and writing number names and numerals and matching number names and numerals. • Describe the use of large numbers in real-life situations e.g., population, money applications. • Use worksheets for independent practice.	http://www.waitbutwhy.com/2014/11/from-1-to-1000000.html https://www.youtube.com/watch?v=DwYfxHzYS1w http://www.mathatube.com/place-value-by-7-numbers.html
	Develop an understanding of place value and value up to 1 000 000 (concretely, pictorially and symbolically).	State the place value and value of a digit in any whole number up to one million.	• Use base 10 manipulatives, place value charts and drawings to determine place value and value. • Reteach as necessary. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=eLRMI2ZX5Qw http://www.primaryresources.co.uk/maths/pdfs/place_value_grid_abacus.pdf
		Express a whole number up to one million using expanded notation.	• Use base 10 materials to represent numbers in expanded notation, e.g., 45 021 = (4 × 10 000) + (5 × 1 000) + (0 × 100) + (2 × 10) + (1 × 1) or 40 000 + 5 000 + 0 + 20 + 1. • Use worksheets for independent practice.	https://www.khanacademy.org/math/cc-fourth-grade-math/imp-place-value-and-rounding-2/imp-ways-to-write-whole-numbers-expanded-form-and-written-form/v/place-value-3

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Write the numeral represented by a given expanded notation.	• Explore activities involving the use of place value charts to determine a numeral represented by a given expanded notation. • Represent an expanded notation as a numeral, e.g. (6 × 10 000) + (4 × 1 000) + (0 × 100) + (9 × 10) + (3 × 1) = 64 093.	https://create.kahoot.it/share/standard-form-word-form-and-expanded-form/ae2d3289-1854-4634-a31f-8a61df064606 https://docs.google.com/document/d/1Ujab5wzX4iFYoG3oFl2-IVUwind-kwQ4KT4ZwNWsmmc/edit
	Develop an understanding of the comparison of numbers.	Compare whole numbers to one million.	• Compare whole numbers up to one million (using resources such as place value charts and number lines) and use the symbols > or < to show the relationship between them.	https://quizizz.com/join/quiz/5b8fe257b23e53001995022c/start?referrer=5b7b74bfe11b85001930f2d5 https://www.teachertube.com/videos/comparing-numbers-195759 https://www.topmarks.co.uk/ordering-and-sequencing/caterpillar-ordering
		Order whole numbers to one million.	• Explore activities related to order involving the use of manipulatives such as number lines and place value charts. • Order a given set of numbers in ascending or descending order and explain the order by making references to place value.	
	Approximate numbers to nearest ten, hundred, thousand and million.	Round numbers to the nearest tens, hundreds, thousands and up to millions.	• Review/check for prior knowledge of the rounding rule. • Reteach as necessary using number lines. • Independent practice (e.g., complete worksheets) to apply the rounding rule.	https://tasks.illustrativemathematics.org/content-standards/tasks/1806 https://www.khanacademy.org/math/cc-fourth-grade-math/imp-addition-and-subtraction-2/imp-rounding-whole-numbers/v/rounding-whole-numbers-2

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				https://www.free-training-tutorial.com/crossword-puzzles-kids.html#rounding
	Create and solve problems using whole numbers involving the four operations.	Solve problems in addition (sum less than 10 000) and subtraction (minuend less than 10 000).	• Solve problems using whole numbers involving the four operations by using appropriate strategies such as the written algorithm and mental strategies and manipulatives such as base ten materials, place value charts and grid paper. • Use estimation strategies when solving problems. • Use Polya's problem solving strategy/approach to solve problems. • Cooperative learning. • Model by 'thinking aloud' the process. • Create problems to pose to the class for solving. • Use worksheets for independent practice.	https://www.oercommons.org/courses/addition-and-subtraction-tutorial/view https://www.youtube.com/watch?v=TAB9vg6cNWE https://www.nextvista.org/adding-three-and-four-digit-numbers/ www.thesingaporemaths.com
		Multiply 2-, 3- and 4-digit numbers by 2-digit numbers.		https://ictgames.com/mobilePage/index.html
		Divide 2-, 3- and 4-digit numbers by 2-digit numbers (with and without remainder).		https://ictgames.com/mobilePage/index.html
		Solve one-step word problems involving any one of the four basic operations on whole numbers (including problems on increasing and decreasing patterns).		https://www.youtube.com/watch?v=BcXAdGvMefg

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Solve multi-step word problems involving any combination of the four basic operations on whole numbers (including problems on increasing and decreasing patterns).		https://www.khanacademy.org/math/cc-fourth-grade-math/division/multi-step-word-problems/e/multi-step-word-problems-with-whole-numbers https://www.youtube.com/watch?v=5N1aMDcHjrk
Fractions	Develop an understanding of fractions using the area, linear and set models.	Represent a fraction concretely, pictorially and symbolically.	• Discuss the uses of fractions in everyday life. • Explore and describe relationships between wholes and parts (equal and unequal) using all three models. • Direct instruction using manipulatives such as fraction pieces, number lines and counters. • Use concrete materials and worksheets to represent fractions using area, linear and set models.	https://www.khanacademy.org/math/arithmetic/fraction-arithmetic https://www.youtube.com/watch?v=MkFs11eEu9o https://phet.colorado.edu/en/simulations/fractions-intro
	Become aware of the names associated with fractions.	Name fractions using words and symbols.	• Explain the meanings of the terms numerator and denominator. • Connect word/number names to models and pictorial and symbolic representations. • Use worksheets for independent practice.	https://www.khanacademy.org/math/arithmetic/fraction-arithmetic https://www.youtube.com/watch?v=yT1WuyxTCmo https://phet.colorado.edu/en/simulations/build-a-fraction

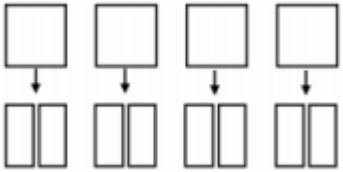
TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
	Extend the concept of fractions to involve two different quantities.	Express one quantity as a fraction of another.	• Review/check for prior knowledge and reteach as necessary. • Review wholes and parts of wholes as it relates to different quantities, e.g., one hour is the whole and 30 mins is a part. • Review the meanings of numerators and denominators. • Cooperative learning. • Guided practice and direct instruction to reinforce procedures for writing the appropriate fraction. • Use worksheets for independent practice (including for example, 'What fraction of 1 hour is 45 minutes?').	https://www.youtube.com/watch?v=WzebFXp2BXI https://www.youtube.com/watch?v=DvKmaFQSynE
	Distinguish between proper, improper and mixed number and convert from one form to another.	Classify fractions as proper fractions, improper fractions and mixed numbers.	• Use manipulatives, drawings and symbols to represent fractions. • Guided questioning and direct instruction to classify fractions. • Cooperative learning. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=RNt8CKGnPko https://www.youtube.com/watch?v=N3__8MmaiLE
		Express improper fractions as mixed numbers.	• Explore and explain, using models, the equivalent relationship of fractions that represent more than one e.g., 5 quarters = one whole and a quarter; $\frac{5}{4} = 1$ and $\frac{1}{4} = 1\frac{1}{4}$; 2 halves = $\frac{2}{2} = 1$. • Use manipulatives and drawings to model the relationship between improper fractions and mixed numbers. • Descibe the pattern observed in the relationship between improper fraction	https://www.youtube.com/watch?v=KEmCZGbd4R8 https://www.youtube.com/watch?v=EY4jtszKmGE
		Express mixed numbers as improper fractions.		https://www.youtube.com/watch?v=03HE-sUu6RU

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			and mixed number and explain conversion from one form to the other. • Cooperative learning. • Use worksheets for independent practice.	
	Recognise and generate equivalent fractions using a variety of models.	Generate equivalent fractions (proper) using a variety of models.	• Use manipulatives and drawings to model equivalent fractions. • Explore the equivalent relationships between fractions by matching/overlaying different fractional parts related to a common whole and describing the relationship. • Record equivalent relationships using the equal symbol (and non-equivalent relationships using the not equal to symbol). • Describe the pattern observed in equivalent relationships and state the pattern rule. • Use worksheets to illustrate equivalent fractions and to create equivalent fractions using the rule. • Reduce a fraction to its lowest equivalent form.	https://www.youtube.com/watch?v=qcHHhd6HizI https://www.youtube.com/watch?v=TLGw53eDTe0 https://www.youtube.com/watch?v=4xFwkDSMVw4 https://www.youtube.com/watch?v=AfIWgwDqNeQ https://www.youtube.com/watch?v=ItYAlt33IoY&list=PLoPH9JUqy7ESHmrz4YGtlyPAnvdNfu7Gf&index=4 https://www.khanacademy.org/math/arithmetic/fraction-arithmetic
	Develop an understanding of the comparison of fractions.	Compare and order proper fractions with unlike denominators using equivalent relationships.	• Explore the equivalent relationships between fractions by matching/overlaying different fractional parts related to a common whole and describing the relationship. • Compare and order fractions using equivalent relationships and by	https://www.youtube.com/watch?v=KNdUJQ_qd4U https://tasks.illustrativemathematics.org/content-standards/tasks/875 https://tasks.illustrativemathematics.org/content-standards/tasks/811

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			positioning a given set of fractions with like and unlike denominators on a number line and explain reasons. • Guided practice to develop a method to compare and order fractions. • Cooperative learning to practice the procedure (worksheets).	
		Compare and order fractions (proper, improper and mixed) in ascending and descending order using equivalent relationships.	• Guided discovery to develop a method to compare and order fractions. • Place a given set of fractions, including mixed numbers and improper fractions, on a number line and explain strategies used to determine position. • Cooperative learning to practice the procedure (worksheets).	https://www.youtube.com/watch?v=4Ql6o932ZFU https://www.khanacademy.org/math/arithmetic-home/arith-review-fractions/mixed-number/e/comparing_improper_fractions_and_mixed_numbers
	Solve problems involving fractions and four operations.	Add a fraction to a whole number.	• Model addition of a fraction to a whole number using concrete and pictorial representations, record symbolically, and explain findings. • Use cooperative learning to develop and apply the algorithm for solving problems involving adding a fraction to a whole number. • Use worksheets with problems for independent practice.	https://www.youtube.com/watch?v=SAgVrzkSsU4
		Subtract a fraction from a whole number.	• Model subtraction of a fraction from a whole number using concrete and pictorial representations, record symbolically, and explain findings. • Use cooperative learning to develop and apply the algorithm for solving problems	https://www.youtube.com/watch?v=RVMktMqUvn8

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			involving subtracting a fraction from a whole number. • Use worksheets for independent practice.	
		Add and subtract fractions involving same denominator.	• Model addition and subtraction of fractions involving the same denominator using concrete and pictorial representations, record symbolically and explain pattern observed. • Use cooperative learning to develop and use the algorithm for solving problems involving the addition and subtraction of fractions involving the same denominator. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=EJjnEau6aeI https://www.khanacademy.org/math/cc-fourth-grade-math/imp-fractions-2/imp-adding-and-subtracting-fractions-with-like-denominators/e/adding_fractions_with_common_denominators
		Add and subtract fractions involving one denominator a multiple of the other.	• Model addition and subtraction of fractions involving one denominator a multiple of the other using concrete and pictorial representations, record symbolically and explain pattern observed. • Use cooperative learning to develop and use the algorithm for solving problems involving the addition and subtraction of fractions involving one denominator a multiple of the other by utilizing equivalent fractions. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=bcCLKACsYJ0 https://www.khanacademy.org/math/arithmetic/x18ca194a:add-and-subtract-fractions-different-denominators https://www.mathsisfun.com/fractions_addition.html
		Add and subtract fractions involving different denominators	• Cooperative learning and guided discovery to develop a method to solve problems. • Review and use equivalent relationships to solve problems.	https://www.khanacademy.org/math/arithmetic/x18ca194a:add-and-subtract-fractions-different-denominators

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		(one not a multiple of the other).	• Use LCM to add and subtract fractions involving different denominators. • Model by 'thinking aloud' the process. • Use worksheets for independent practice.	https://www.mathsisfun.com/fractions_addition.html
		Solve problems involving addition and subtraction of mixed numbers.	• Model addition and subtraction involving mixed numbers using concrete and pictorial representations, and record symbolically. • Use cooperative learning to explain procedures used to solve problems. • Model by 'thinking aloud' the process. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=pynfj2bYRms https://www.youtube.com/watch?v=RqUPSZLwHH0 https://www.oercommons.org/authoring/22348-add-and-subtract-mixed-numbers/view
		Multiply fractions by whole numbers.	• Cooperative learning to solve problems using the repeated addition strategy before developing the rule. • Model the multiplication of proper fractions by whole numbers concretely, pictorially and symbolically and record the process, e.g., 'You gave your 3 friends $\frac{2}{3}$ of a sandwich each. How many sandwiches did you give away?' • Use worksheets for independent practice.	https://www.youtube.com/watch?v=is4Fa4zqri8 https://www.youtube.com/watch?v=XaJQse2u5TQ https://www.khanacademy.org/math/cc-fourth-grade-math/4th-multiply-fractions/multiplying-whole-numbers-and-fractions/e/multiplying_fractions_by_integers
		Calculate fractions of a collection or set.	• Use real-life examples and manipulatives to calculate fractions of a collection or set, e.g., 'What is $\frac{1}{2}$ of 30?'	https://www.youtube.com/watch?v=nST5wnUMG70

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			• Use guided questioning to engage students to solve problems conceptually before relating to multiplication.	https://www.youtube.com/watch?v=orI0oL9_q9c https://www.ck12.org/c/elementary-math-grade-5/multiply-whole-numbers-and-fractions/
		Calculate the whole given a part expressed as a unit fraction.	• Review/check for prior knowledge. • Use manipulatives and drawings to model solutions to problems. • Explore patterns observed while solving conceptually in order to develop an algorithm. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=prs-v53owVQ https://www.youtube.com/watch?v=sWObNz8Wp7c
		Divide a whole number by a fraction.	• Model the concept of division concretely or pictorially to develop the skill of dividing a whole number by a fraction and record the process, e.g., 'I have 4 crackers that I want to divide into halves. How many pieces would I have?'  • Derive and describe patterns resulting from the division of whole numbers by fractions.	https://www.oercommons.org/courseware/lesson/93737/overview?section=2 https://www.ck12.org/c/elementary-math-grade-5/dividing-whole-numbers-by-fractions/ https://www.youtube.com/watch?v=SPMoNUAbV48 https://www.khanacademy.org/math/cc-sixth-grade-math/cc-6th-arithmetic-operations/x0267d782:dividing-fractions-and-whole-

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			• Use cooperative learning to develop and use the algorithm to solve a variety of real-life problems involving division of whole numbers by fractions. • Use worksheets for independent practice.	numbers/e/divide-whole-numbers-by-fractions
		Divide a fraction by a whole number.	• Model division of fractions by whole numbers using linear models and pictorial representations. • Use cooperative learning to develop and use the algorithm for solving problems involving the division of a fraction by a whole number. • Use worksheets for independent practice.	https://flexbooks.ck12.org/cbook/ck-12-middle-school-math-concepts-grade-6/section/7.8/primary/lesson/division-of-fractions-by-whole-numbers-msm6/ https://www.youtube.com/watch?v=HJDdryQpJXU https://www.youtube.com/watch?v=1YWyTdtofdE
	Solve problems involving fractions.	Solve one-step and multi-step real-life problems involving fractions.	• Use Polya's problem solving strategy/approach to solve problems. • Cooperative learning. • Model by 'thinking aloud' the process. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=f4-xdO3vQOg htt.ps://www.khanacademy.org/math/cc-fifth-grade-math/5th-multiply-fractions/imp-multiplying-fractions-word-problems/e/multiplying-fractions-by-fractions-word-problems https://www.khanacademy.org/math/arithmetic/x18ca194a:divide-fractions/x18ca194a:dividing-fractions-and-whole-numbers-word-

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
				problems/e/division-with-fractions-and-whole-numbers https://www.khanacademy.org/math/cc-fifth-grade-math/imp-fractions-3/imp-adding-and-subtracting-fractions-with-unlike-denominators-word-problems/e/adding-and-subtracting-fractions-with-unlike-denominators-word-problems
Decimals	Develop the concept of a decimal fraction i.e. • tenth • hundredth	Demonstrate an understanding of decimals up to hundredths.	• Explore concrete (base ten materials, fraction models) and pictorial representations (number lines and fraction charts) to introduce base ten fractions (tenths and hundredths). • Extend place value chart to include decimal fractions (tenths and hundredths). • Use decimal notation as another form of writing base ten fractions (tenths and hundredths), e.g., '0.1 is the same as $\frac{1}{10}$.' • Represent decimals (tenths and hundredths) concretely on a place value mat, pictorially and symbolically and read the amount represented.	https://flexbooks.ck12.org/cbook/ck-12-middle-school-math-concepts-grade-6/section/3.3/primary/lesson/decimals-in-words-msm6/ https://www.khanacademy.org/math/arithmetic/arith-decimals https://www.youtube.com/watch?v=XNnRKAwwKWc
		Match number names to decimal fractions and quantities.	• Check for understanding by matching the number names (e.g., two and five tenths) and decimal fractions (e.g., 2.5), to the quantities they represent. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=ibR_iBxnITE https://www.youtube.com/watch?v=z9RlPXl4r7A

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	Explore the place value of decimals to hundredths including expanded notation (and involving money).	State the place value of digits in decimal fractions up to hundredths.	• Guided practice to determine the place value and value of digits in numerals using base ten materials including place value mats. • Use worksheets for independent practice. • Use of technology to conduct research about the pattern of adjacent place positions moving from left to right and right to left of the decimal point.	https://youtu.be/2xGzQXn3WUQ https://www.mathgames.com/skill/5.15-identify-place-values-in-decimal-numbers
		State the value of digits in decimal fractions up to hundredths.		https://www.ck12.org/c/elementary-math-grade-4/completing-a-decimal-place-value-chart-up-to-hundredths/
		Write decimal fractions using expanded notation.	• Review expanded notation involving whole numbers. • Use base ten materials to model the process. • Use worksheets to write decimal fractions using expanded notation and vice versa.	https://tasks.illustrativemathematics.org/content-standards/tasks/145 https://www.youtube.com/watch?v=EWHM8gMzVck
		Convert expanded notation to decimal fractions.		https://www.youtube.com/watch?v=DDd1B3yNM58 https://www.youtube.com/watch?v=wxwP_Y00mEY
		Record money values using decimals.	• Guided practice. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=M_Njjd5YQiE
	Demonstrate an understanding of rounding involving decimals.	Round decimals to tenths and whole numbers.	• Review/check for prior knowledge of the rounding rule. • Reteach as necessary using number lines. • Independent practice (e.g., complete worksheets) to apply the rounding rule.	https://www.youtube.com/watch?v=zwg9wdGijv8 https://www.youtube.com/watch?v=sdq2ckDsSbA

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	Develop an understanding of the comparison of decimals.	Compare two decimals up to hundredths.	• Cooperative learning/guided discovery to develop a method to compare decimals. • Use place value charts and number lines to aid in comparing decimals. • Compare two decimal fractions and use the symbols > or < or = to show the relationship between them.	https://www.khanacademy.org/math/4th-engage-ny/engage-4th-module-6/4th-module-6-topic-c/v/comparing-decimals-with-hundredths https://www.youtube.com/watch?v=DwgESLxWrQw https://www.youtube.com/watch?v=GsdSMz0WwTM
		Arrange decimal fractions in ascending and descending order (up to hundredths).	• Use cooperative learning to compare and order decimal fractions in ascending and descending order. • Use worksheets for independent practice.	
	Relate common fractions to decimals.	Convert decimal fractions to common fractions and vice versa (halves, quarters, fifths, tenths).	• Review of prior knowledge on equivalent fractions using manipulatives such as base ten materials, place value charts and fraction pieces. • Guided instruction to write decimals as fractions and reduce the fractions to the lowest term. • Guided instruction to express common fractions (halves, quarters, fifths and tenths) as decimal fractions (tenths and hundredths). • Use worksheets for independent practice.	https://www.youtube.com/watch?v=qesj2jpktaE https://www.youtube.com/watch?v=_jcW-ZgpRbM&t=337s https://www.youtube.com/watch?v=do_IbHId2Os&t=133s https://www.youtube.com/watch?v=hE5kUq--KqI
	Solve problems involving decimals.	Solve problems involving the addition and subtraction of decimals including money (up to hundredths and including the use of the algorithm).	• Solve problems involving the addition and subtraction of decimals by using concrete and pictorial representations of base ten materials and place value charts, and explain the procedure used. • Record the procedure used for solving addition and subtraction problems	https://www.youtube.com/watch?v=PnwLv6khwk8 https://www.khanacademy.org/math/5th-engage-ny/engage-5th-module-1/5th-module-1-topic-d/e/subtracting-decimals-without-the-standard-algorithm-8

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			involving decimals, symbolically, and explain the algorithm. • Explain why keeping track of place value positions is important when adding and subtracting decimals. • Provide worksheets for independent practice.	
		Solve problems involving the multiplication of a decimal by a whole number and involving the multiplication of tenths by tenths.	• Investigate multiplication of decimals by whole numbers and decimals by converting decimal to base ten fractions before multiplying, e.g., $0{\cdot}8 \times 6 = \frac{8}{10} \times 6 = \frac{48}{10} = 4.8$ $0{\cdot}6 \times 0{\cdot}4 = \frac{6}{10} \times \frac{4}{10} = \frac{24}{100} = 0.24$. • Observe patterns before generalizing and applying rules (algorithms) for multiplication involving decimals. • Recognise the number patterns formed when decimal numbers are multiplied by 10 or 100. • Explain why keeping track of place value positions is important when applying the operations on decimal numbers. • Use guided practice with worksheets.	https://www.youtube.com/watch?v=r8sngF1WSVU https://www.youtube.com/watch?v=yueSfjh2ra4 https://www.khanacademy.org/math/cc-fifth-grade-math/imp-multiplication-and-division-3/multiplying-decimals-and-whole-numbers/e/multiply-whole-numbers-and-decimals
		Solve problems involving the division of a decimal fraction by a whole number (dividend up to 2 decimal places).	• Investigate division of decimals (limited to hundredths) by whole numbers. • Generalize and apply rule (algorithm) for dividing decimals by whole numbers.	https://www.youtube.com/watch?v=IheBIlt2s20 https://www.youtube.com/watch?v=bIRwzhhBzEU

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			• Recognise the number patterns formed when decimal numbers are divided by 10 or 100. • Explain why keeping track of place value positions is important when applying the operations on decimal numbers.	
		Solve problems involving the division of two whole numbers, with answer less than one.	• Cooperative learning to solve problems. • Investigate the relationship between decimals and the division of two whole numbers with answer less than one, e.g., 3 ÷ 4 = 3.00 ÷ 4 = 0.75 • Model by 'thinking aloud' the process. • Guided practice. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=oAOwYjRizk0 https://www.youtube.com/watch?v=8hWnezlQ_lk
		Solve real world problems involving whole number, fractions and decimals using the four operations.	• Use Polya's problem solving strategy/approach to solve problems. • Cooperative learning. • Use a number of strategies to solve routine and non-routine problems involving decimals. • Use estimation strategies when solving problems • Model by 'thinking aloud' the process. • Create problems to pose to the class for solving. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=hy_bDS3aHO4 https://www.youtube.com/watch?v=kIz9m62yAKE

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Percent	Develop an understanding of percent concretely, pictorially and symbolically.	Write the percent displayed in a given concrete or pictorial representation.	• Investigate area models (including base ten materials, geoboards and grid paper) divided into 100 equal parts pictorially to connect fractions to percents. • Explain that "percent" means "hundredths" and that the symbol % means 'percent'. • Explore real-life situations involving percent. • Record the percent displayed in a given concrete or pictorial representation symbolically. • Identify and describe percents from real-life situations, and record them symbolically.	https://www.youtube.com/watch?v=JeVSmq1Nrpw https://www.youtube.com/watch?v=nV6bRozq5Po https://www.khanacademy.org/math/cc-sixth-grade-math/x0267d782:cc-6th-rates-and-percentages/cc-6th-percentages/e/intro-to-percents
	Demonstrate an understanding of the relationships between fractions, decimals and percents.	Convert among fractions, decimals and percents.	• Guided discovery to allow students to develop the algorithm for converting among fractions, decimals and percents using manipulatives such as base ten materials, geoboards, grid paper and place value charts. • Relate percents (e.g., 50%, 25%, 20% and 10%) to fractions (e.g., $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{10}$) and decimals (e.g., 0·5, 0·25, 0·2 and 0·1). • Recall commonly used related percents, decimals and fractions, e.g., 75%, 0.75 and $\frac{3}{4}$. • Direct instruction for converting among fractions, decimals and percent.	https://www.youtube.com/watch?v=wwg052FC_Zw https://www.youtube.com/watch?v=-gB1y-PMWfs https://www.khanacademy.org/math/pre-algebra/xb4832e56:percentages/xb4832e56:equivalent-representations-of-percent-problems/a/converting-between-percents-fractions-decimals

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			• Use technology tools to verify solutions. • Demonstrate the algorithm for converting from one form to another. • Provide opportunities for students to practice using worksheets.	
	Develop an understanding of the comparison of numbers.	Compare and order fractions, decimals and percents in ascending or descending order.	• Cooperative learning/guided discovery to develop a method to compare fractions, decimals and percents using resources such as place value charts, number lines and grid paper. • Cooperative learning to practice the procedure (worksheets).	https://www.youtube.com/watch?v=8jzRlvp3BX8 https://www.youtube.com/watch?v=pZkYQK8eLJQ
	Solve problems involving percentages.	Calculate the percent of a quantity.	• Guided instruction to solve problems, e.g., 10% of \$200 = $\frac{1}{10}$ of \$200 = \$20.	https://www.youtube.com/watch?v=rR95Cbcjzus
		Express a quantity as a percentage of another.	• Review expressing a quantity as a fraction of another. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=Uf-Rl1e2I4Q https://www.youtube.com/watch?v=aQsswk2pdas
		Solve one-step real-life problems involving percentages.	• Use Polya's problem solving strategy/approach to solve problems. • Cooperative learning. • Model by 'thinking aloud' the process. • Engage students in solving problems that include fractions, decimals and precents.	https://www.youtube.com/watch?v=RBFR0Ss72yQ https://www.khanacademy.org/math/cc-sixth-grade-math/x0267d782:cc-6th-rates-and-percentages/cc-6th-percent-word-problems/e/percentage_word_problems

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		Solve multi-step real-life problems involving percentages.		https://www.youtube.com/watch?v=dJMYNdMjdy4 https://www.youtube.com/watch?v=OFr5jktfl6g https://www.youtube.com/watch?v=voDhj3Z9YyA https://www.youtube.com/watch?v=suAikQqJD34

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Number Theory	Demonstrate an understanding of different types of numbers and/or the relationship between numbers: • odd • even • multiple • factors • prime • composite • squares • square root	Differentiate between or among (a) odd and even numbers (b) factors and multiples of numbers (c) prime and composite numbers (d) square numbers and their square roots	• Use technology tools to conduct research. • Cooperative learning to conceptually understand the different types of numbers and describe relationships among them using appropriate resources and activities. • Describe patterns observed and explain rules. • Apply the algorithm for finding factors and multiples with or without arrays. • Exploration activities involving the use of resources such as counters, number lines, hundred charts, grid paper, multiplication and division tables and calculators.	https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:rational-exponents-radicals/x2f8bb11595b61c86:radicals/e/square_roots https://www.khanacademy.org/math/in-class-6-math-foundation/x40648f78566eca4e:factors-and-multiples/x40648f78566eca4e:even-and-odd-numbers/e/identifying-odd-and-even-numbers https://www.primarygames.com/math/matheggsevenodd/ https://www.youtube.com/watch?v=S7CLLRHe8ik https://www.youtube.com/watch?v=3h4UK62Qrbo https://www.youtube.com/watch?v=yICR9PiW340
Proportion	Demonstrate an understanding of direct proportion.	Solve real-world problems involving direct proportion.	• Cooperative learning to solve real world problems involving direct proportions, e.g., 'If the cost of 6 apples is $30, what would be the cost of 4 apples?' • Model by 'thinking aloud' the process used to solve problems. • Guided instruction related to the solving of problems.	https://thirdspacelearning.com/gcse-maths/ratio-and-proportion/direct-proportion/

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Money	Develop an understanding of our currency and the value of coins and bills.	Identify coins, bills, their value and the value of a set of coins/bills (up to 100 cents and $100).	• Review the value of coins and bills. • Engage students in practical situations involving coins and bills. • Use actual coins and bills to count money. • Use a combination of bills and coins to allow students to represent the value. • Provide opportunities for multiple purchases with larger bills. • Encourage students to "spot the error" in different money representations.	https://www.math-aids.com/Money/Counting_Bills_Trinidad.html https://youtu.be/6Oo8xwi8TIQ (Lesson can be taught using new TT currency) https://www.youtube.com/watch?v=FRySrcuSLa8 https://www.youtube.com/watch?v=1MpxAhG-VZI
	Demonstrate an understanding of equivalent relationships using money.	Determine the possible combinations of coins/bills, which are equal to given amounts (up to 100 cents and $100).	• Practical hands-on activities to show equivalence of money. • Cooperative learning to determine equivalence. • Independent practice to determine equivalence. • Engage in problem solving activities related to equivalence.	https://www.youtube.com/watch?v=dwuUHMuoxSU (Lesson can be taught using new TT currency)
	Solve problems involving money transactions.	Calculate total cost and the change in money transactions.	• Cooperative learning activities involving the shopkeeper method. • Hands-on activities that involve getting change after purchasing a single item using various bills. • Hands-on activities that involve calculating total cost and change after purchasing item (s): - use various bills.	https://www.youtube.com/watch?v=mLSV1PSkJOQ https://www.youtube.com/watch?v=OYMw96NPy0w

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			• Use of worksheets to solve problems related to finding total cost and calculation of change. • Independent practice.	
		Solve real-life, one-step problems involving money, (including profit and loss, best buy, discount, savings, salaries, wages, loans, simple interest, VAT, Hire Purchase, Billings-e.g. telephone, rates and taxes, buying at a sale and otherwise). Include: Rate of pay: i. hourly ii. daily iii. weekly iv. fortnightly v. monthly vi. annual salaries vii. overtime (time and a half, double time)	• Create and solve real-life, one-step and multi-step problems involving whole numbers, fractions, mixed numbers, decimals, percents and money. • Discussion about concepts related to money such as profit and loss. • Select and use appropriate estimation strategies to check for reasonableness of answers and use calculators to check answers/solutions. • Solve problems in mathematical games. • Use Polya's problem solving strategy/approach to solve problems. • Model by 'thinking aloud' the process. • Cooperative learning to create and solve real-life problems. • Engage in practical "real-life" role play activities involving money such as opening a business (e.g., transporting, gardening, shop keeping, store). • Independent practice. **Best Buy** • Cooperative learning to compare the prices of two similar products to determine which is the better buy.	https://www.youtube.com/watch?v=tHF2bXCQ3y4 https://youtu.be/1rejTIaFRvU https://www.basic-mathematics.com/find-regular-hourly-rate.html https://www.youtube.com/watch?v=4zvjGgaE3KI https://youtu.be/03JX5c2AY8M https://www.youtube.com/watch?v=TSaivwREeAk
		Solve real-life, multi-step problems involving money,		

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		(including profit and loss, best buy, discount, savings, salaries, wages, loans, simple interest, VAT, Hire Purchase, Billings-e.g. telephone, rates and taxes, buying at a sale and otherwise). Include: Rate of pay: i. hourly ii. daily iii. weekly iv. fortnightly v. monthly vi. annual salaries vii. overtime (time and a half, double time)	• Simulation of a shop to role play a Unit Price Game - Are you getting value for money. • Discussion about unit prices - finding the unit prices does not give information about the quality of what is bought, but it can help us to make a decision. **Hire Purchase** • Encourage a discussion about what students understand by Hire Purchase highlighting the use of appropriate vocabulary such as down payment, interest, monthly, total cost. • Use an advertisement in a newspaper/magazine to work out the total cost of an item. • Have students work out the total cost of an item on Hire Purchase and compare the Cash Price with the Hire Purchase price. • Engage the students in a discussion about the merits and demerits of Hire Purchase. • Encourage students to do a mini project on the best Hire Purchase option for purchasing an item.	

GEOMETRY

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Solids	Demonstrate familiarity with pictorial representations of solids.	Name solids from pictorial representations. • cuboid • cube • cylinder • cone • sphere • pyramid • triangular prism	• Explore/investigate and name solids in the environment. • Construct models using various solids and name the solids used. • Discussion about the solids shown in pictures (including real-life objects such as book, Rubik's cube, party hat, globe, can). • Cooperative learning to name and classify solids using concrete materials and pictorial representations. • Use of worksheets to name solids represented in pictures in different orientations.	https://uk.ixl.com/math/year-2/name-the-three-dimensional-shape https://www.bbc.co.uk/bitesize/topics/zbtp34j/articles/zjjkpg8 https://uk.ixl.com/maths/year-2/shapes-of-everyday-objects https://uk.ixl.com/maths/year-2/shapes-of-everyday-objects-ii
	Develop an understanding of the properties of solids.	Draw faces of solids and describe their properties (e.g., shape of faces, number of faces, parallel and perpendicular lines, angles – right, non-right and equal, number of sides).	• Explore/investigate the properties of solids through hands-on manipulation of solids. • Construct solids using cut-outs of plane shapes. • Cooperative learning to trace, and describe, the faces of solids. • Pose questions to students on the properties of solids using 3D shapes and pictures of 3D shapes. • Use of videos to show the properties of various examples of solids.	IXL - Compare vertices, edges and faces (Year 2 maths practice) IXL - Identify shapes traced from solids (Year 2 maths practice)
		Describe the properties of solids in relation to	• Explore the properties of solids through the use of models.	https://uk.ixl.com/maths/year-2/count-vertices-edges-and-faces

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		number and types of faces, edges and vertices.	• Construct frames of solids using various resources such as plasticine and straws. • Journal entry about the properties of solids. • Discussion about faces, edges and vertices. • Draw/sketch solids and label to show faces, edges and vertices.	https://uk.ixl.com/maths/year-2/compare-vertices-edges-and-faces https://www.youtube.com/watch?v=Cn3QiGlklRI
		Describe the properties of solids in relation to their cross-sections, base, height and angles.	• Investigate the cross section, base, height and angles of solids through hands-on activities. • Investigate right angles and non-right angles in solids. • Discussion about the properties of solids. • Journal entry to list the properties of solids.	https://www.mathsisfun.com/geometry/cross-sections.html https://flexbooks.ck12.org/cbook/ck-12-interactive-geometry-for-ccss/section/1.12/primary/lesson/cross-sections-of-solids-geo-ccss/
		Name the solids with uniform cross-sections.	• Describe the cross-section of solids. • Sort and name solids according to those with a uniform cross-section and those that do not have a uniform cross-section.	https://www.mathsisfun.com/geometry/cuboids-rectangular-prisms.html https://www.bbc.co.uk/bitesize/guides/zw7scj6/revision/1 https://www.youtube.com/watch?v=hlD_j3AtxGs
	Develop an understanding of the nets of solids.	Draw the nets of solids.	• Explore/investigate the nets of solids by engaging in practical activities involving the use of manipulatives/models.	https://jimmymaths.com/understanding-nets-of-solids/

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			• Cooperative learning to draw, describe and display the nets of solids. • Use technology tools to draw the nets of solids.	https://mathspace.co/textbooks/syllabuses/Syllabus-452/topics/Topic-8359/subtopics/Subtopic-110052/ https://www.geogebra.org/m/pCv2EvwD https://www.geogebra.org/m/aJv7KdWB#material/kzFjDDEn https://flexbooks.ck12.org/cbook/ck-12-cbse-maths-class-8/section/10.3/primary/lesson/visualisation-of-3-d-objects/
	Solve problems involving solids.	Solve problems involving solids including problems related to increasing and decreasing geometric patterns.	• Use Polya's problem solving strategy/approach to solve problems. • Cooperative learning. • Model by 'thinking aloud' the process. • Review/check for prior knowledge about geometric patterns and reteach as necessary.	https://www.youtube.com/watch?v=dx64YZbktuo https://mathisvisual.com/growing-geometric-patterns/

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Plane Shapes	Demonstrate familiarity with pictorial representations of plane shapes.	Name plane shapes from pictorial representations.	• Explore plane shapes in the environment. • Match cut-outs of plane shapes to their pictorial representations and name them (squares, triangles, rectangles and circles). • Create plane shapes using geo-strips and toothpicks and on resources such as geoboards and grid paper. • Use worksheets, to identify different plane shapes in pictures, for independent practice.	Pattern Blocks | Math Playground https://uk.ixl.com/maths/year-2/name-the-two-dimensional-shape https://uk.ixl.com/maths/year-2/select-two-dimensional-shapes https://uk.ixl.com/maths/year-2/count-sides-and-vertices
	Demonstrate an understanding of the different types of triangles.	Identify and name triangles as scalene, right angled, isosceles and equilateral.	• Review/check for prior knowledge. • Explore the properties of triangles through the use of cut-outs and other manipulatives. • Discussion about the properties of triangles. • Hands-on sorting/classification activities. • Guided practice to measure angles in relation to the right angle. • Use worksheets, to name and describe the types of triangles, for independent practice.	https://www.mometrix.com/academy/introduction-to-types-of-triangles/ https://byjus.com/maths/triangles/
		Describe the properties of triangles in relation to sides, angles and lines of symmetry.		https://www.youtube.com/watch?v=1k0G-Y41jRA https://e-gmat.com/blogs/properties-of-triangles/
	Develop an understanding of the properties of quadrilaterals.	Identify and name quadrilaterals (rectangles, squares, trapezoids,	• Review/check for prior knowledge. • Reteach as necessary using appropriate resources, such as, cut-outs and geoboards.	Quadrilaterals: Classification - Varsity Tutors https://www.khanacademy.org/math/cc-third-grade-math/quadrilaterals-3rd/imp-

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		parallelograms, rhombuses).	• Explore the properties of quadrilaterals through the use of cut-outs and other manipulatives. • Discussion about the properties of quadrilaterals. • Sketch and label quadrilaterals from a given verbal description. • Independent practice to name and describe the different quadrilaterals through the use of worksheets.	quadrilaterals/v/introduction-to-types-of-quadrilaterals
		Describe the properties of quadrilaterals.		https://www.youtube.com/watch?v=yiREqzDsMP8 https://www.khanacademy.org/math/cc-fifth-grade-math/properties-of-shapes/imp-quadrilaterals-2/v/quadrilateral-properties
		Classify and compare quadrilaterals according to their attributes (including type of angles, no. of equal sides, no. of pairs of parallel sides, no. of perpendicular sides, lines of symmetry).	• Sort quadrilaterals (rectangles, squares, trapezoids, parallelograms, rhombuses) according to their attributes (e.g., angles, lengths of sides, parallel sides). • Guided practice to measure angles and lengths of sides and, hence, classify and compare the quadrilaterals. • Discussion about the similarities and differences of quadrilaterals.	https://www.youtube.com/watch?v=HUSVwQ0UuGI https://www.youtube.com/watch?v=m7_kqf0hm68
	Develop an understanding of the properties of shapes with five and more sides (pentagon,	Identify and name pentagons, hexagons and octagons.	• Review/check for prior knowledge. • Explore the properties of pentagons, hexagons and octagons through the use of cut-outs and other manipulatives. • Discussion about the properties of the shapes. • Hands-on sorting/classification activities.	https://byjus.com/maths/pentagon/
		Describe the properties of pentagons, hexagons and octagons in relation to sides, angles and lines of symmetry.		https://www.mathsisfun.com/geometry/symmetry-line-plane-shapes.html https://www.skillsyouneed.com/num/polygons.html

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
	hexagon, octagon).		• Independent practice to name and describe the different shapes.	
	Demonstrate an understanding of the properties of regular and irregular polygons.	Differentiate between regular and irregular polygons (triangles, quadrilaterals, pentagons, hexagons, octagons).	• Explore/investigate the properties of polygons using manipulatives. • Use toothpicks or other materials to create regular and irregular polygons. • Name and describe regular and irregular polygons • Discussion about the differences between regular and irregular polygons. • Cooperative learning to classify, compare, draw and name regular and irregular polygons. • Use computer software to generate shapes.	https://unacademy.com/content/ssc/study-material/mathematics/differences-between-regular-and-irregular-polygons/ https://www.youtube.com/watch?v=MVMidnAe7SM https://mathmonks.com/polygon/regular-and-irregular-polygons
	Develop an understanding of compound shapes.	Name plane shapes used to create compound shapes (concrete and pictorial representation). Create compound shapes.	• Explore/investigate compound shapes in real-life/nature (e.g., buildings, bridges). • Use cooperative learning to create or draw compound shapes and name and describe the plane shapes used. • Use worksheets for independent practice.	https://sciencing.com/make-3d-hexagon-8709151.html https://www.twinkl.co.uk/teaching-wiki/composite-shape
	Solve problems	Solve problems involving plane shapes including problems	• Use Polya's problem solving strategy/approach to solve problems.	https://www.youtube.com/watch?v=VVy7caxUgRA

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
	involving plane shapes.	related to increasing and decreasing geometric patterns.	• Cooperative learning. • Model by 'thinking aloud' the process. • Review/check for prior knowledge about geometric patterns and reteach, as necessary.	https://www.studysmarter.co.uk/explanations/math/geometry/area-of-plane-figures/
Lines	Develop an understanding of the different types of lines in shapes.	Draw and name different types of lines. Include: • horizontal • vertical • diagonal • curved	• Review/check for prior knowledge. • Reteach as necessary using resources such as cut-outs of shapes, geoboards and geo-strips. • Use worksheets to identify the different types of lines and name the different types of lines. • Explore, and discuss, the different types of lines in shapes.	https://www.youtube.com/watch?v=k5etrWdIY6o https://byjus.com/maths/lines/
		Differentiate between parallel and perpendicular lines in shapes.	• Review/check for prior knowledge. • Reteach as necessary. • Cooperative learning to identify parallel and perpendicular lines in shapes. • Draw parallel and perpendicular lines and discuss their differences. • Journal entry about parallel and perpendicular lines in shapes. • Draw shapes using the properties of parallel and perpendicular lines.	https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-geometry/cc-8th-angles-between-lines/v/identifying-parallel-and-perpendicular-lines http://www.differencebetween.net/language/difference-between-parallel-and-perpendicular/ https://www.youtube.com/watch?v=u1ly2jiojyA

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Symmetry	Develop an understanding of line symmetry.	Classify shapes into those that are symmetrical and those that are not.	• Investigate plane shapes to determine whether or not they are symmetrical through folding and superimposing activities and/or by using a Mira. • Discuss observations made about symmetrical shapes and shapes that are not symmetrical. • Create shapes that are symmetrical and those that are not using resources such as cut-outs of shapes, geoboards and grid paper.	https://www.mathsisfun.com/geometry/symmetry-line-plane-shapes.html https://www.mathsisfun.com/geometry/symmetry-reflection.html
		Draw lines of symmetry in symmetrical shapes.	• Engage in hands-on activities involving folding and drawing lines of symmetry in cut-outs of shapes. • Cooperative learning to determine the number of lines of symmetry in shapes. • Discussion about shapes that are symmetrical. • Display of shapes with lines of symmetry drawn. • Use of worksheets (where shapes are drawn without grids and on grids) for independent practice.	https://www.youtube.com/watch?v=wGy7jXisNdQ https://www.youtube.com/watch?v=TAfLJLq_q0k
		State the number of lines of symmetry in shapes.		https://www.splashlearn.com/math-vocabulary/geometry/line-of-symmetry https://www.youtube.com/watch?v=vI23PrTEIJM
	Solve problems involving line symmetry.	Solve problems involving line symmetry inclusive of completing a symmetrical shape given half of the shape and a line of symmetry.	• Cooperative learning to solve problems and share ideas. • Use questioning strategies to elicit the process used to solve problems. • Model by 'thinking aloud' the process.	https://thirdspacelearning.com/gcse-maths/geometry-and-measure/lines-of-symmetry/ https://fuse.education.vic.gov.au/mcc/CurriculumItem?code=VCMMG144

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			• Guided instruction to solve problems. • Use of worksheets for independent practice.	
Angles	Demonstrate an understanding of angles in solids and plane shapes.	Describe an amount of turn (e.g., whole turn, three quarter turn, half turn, quarter turn).	• Explore and describe turns in the environment such as the opening and closing of doors and the movement of hands of a clock. • Use geo-strips to model and describe turns.	https://www.youtube.com/watch?v=8r7D7GFg0kg https://my.homecampus.com.sg/Learn/Primary4/Geometry/Angles-Turns-and-Directions
		Describe the quarter turn as a right angle.	• Discussion about the right angle as it relates to a quarter turn and perpendicular lines.	https://www.youtube.com/watch?v=2JSk0DC5q4g
		Identify and classify angles according to type (acute, right, obtuse, straight and reflex).	• Review of prior knowledge including identifying angles (right angles, angles greater than and smaller than right angles) in regular and irregular polygons and faces of solids. • Describe angles in the environment, on solids and plane shapes. • Engagement in hands-on activities to identify and name angles on faces of solids or plane shapes. • Discussion about the different types of angles. • Cooperative learning to classify angles.	https://www.vedantu.com/maths/types-of-angles https://www.math-only-math.com/types-of-angles.html https://www.youtube.com/watch?v=lxkqJc3P40E

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Draw angles of various sizes and describe the angles.	• Guided practice to manipulate drawing tools. • Engagement in hands-on activities involving the drawing of angles. • Cooperative learning for practice.	https://www.youtube.com/watch?v=_erF7VM5-zI https://www.youtube.com/watch?v=3NHnTHhnv8g https://www.youtube.com/watch?v=O3V2AdwoBBU
		Draw shapes with angles of various sizes and describe the angles.	• Cooperative learning. • Create shapes on geoboards. • Journal entry with drawings of different shapes with descriptions. • Use worksheets to solve problems involving the drawing of shapes.	https://www.youtube.com/watch?v=gr3auGI9_mY

MEASUREMENT

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Linear Measure **1. Length**	Understand that linear measure can be quantified using standard units (km, m, cm, mm.)	Select and use the most appropriate standard unit for measuring various lengths/distances.	• Review/check for prior knowledge. • Cooperative learning to engage in practical activities using non-standard and standard units and using various linear resources including rulers and measuring tape. • Use of technology tools to conduct research related to the use of measures in the community and the need for standard units of measures. • Explain the need for standard units of measures. • Performance task - journal writing about the need for standard units of measures. • Discussion about the different units used to measure length and the different instruments (including the trundle wheel). • Explain the suitability of the unit as it relates to the length to be measured.	https://www.youtube.com/watch?v=pGyf1YxcdXc https://www.youtube.com/watch?v=AVC-426M6V0 https://www.youtube.com/watch?v=4sBC3ojd6CE

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Measure and record lengths of objects and lines using standard units.	• Hands-on activities related to the measuring of lengths of objects and recording the measure. • Direct instruction and demonstration on the appropriate use of measuring instruments. • Use of worksheets to measure and record the lengths of drawn objects and lines.	https://www.youtube.com/watch?v=Mw7Jzhy8YxI https://www.youtube.com/watch?v=0YqMjjEMMmE https://www.youtube.com/watch?v=tuBLuIW1U70
		Draw lines of various lengths.	• Demonstration on the use of measuring instruments to draw lines of various lengths. • Independent practice to draw lines of given lengths. • Draw basic shapes with straight lines and state the lengths of the lines.	https://www.youtube.com/watch?v=_sEouQEMQbA https://www.youtube.com/watch?v=mCAoB7dkfHI
	Understand the relationship between units of measure.	Convert linear measure from one form to the other (millimetres, centimetres, metres, kilometres). • millimetres to centimetres and vice versa	• Cooperative learning to explain the relationships between the sub-units of the metric system. • Review of multiplication and division by 10, 100 and 1000. • Display of student-created conversion charts. • Direct instruction to demonstrate and explain how	https://www.youtube.com/watch?v=kOJFSH_Bn9U https://www.youtube.com/watch?v=Q-O1HeobVEs https://www.youtube.com/watch?v=DNEai7aJyy4

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		• centimetres to metres and vice versa • metres to kilometres and vice versa.	linear measures are converted from one unit to another. • Cooperative learning and independent practice using worksheets.	
	Develop an understanding of the comparison of lengths.	Compare and order lengths.	• Cooperative learning to share ideas on the procedure used to compare and order lengths in ascending or descending order. • Use questioning strategies to determine students' understanding. • Direct instruction. • Independent practice using worksheets.	https://www.youtube.com/watch?v=jI_a2ySpi_4 https://www.youtube.com/watch?v=6I5P19LcG1s https://www.youtube.com/watch?v=mhtpFvNbiPE
	Develop an understanding of approximation and estimation of lengths.	Approximate lengths to the nearest metre and centimetre.	• Review of prior knowledge of rounding rules. • Cooperative learning to approximate lengths. • Independent practice using worksheets.	https://www.youtube.com/watch?v=t1NbcEZZq9U https://www.youtube.com/watch?v=IOgTCpuJJRg
		Estimate lengths in centimetres and metres and verify results and determine	• Collaborate in groups to estimate the lengths of objects and measure the lengths of the objects.	https://www.youtube.com/watch?v=d5awyeF10cs https://www.youtube.com/watch?v=fcAl2g92NyY

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		reasonableness of estimates.	• Group presentations on procedures used to estimate lengths. • Discussion on the reasonableness of the estimates made. • Engagement in self-monitoring practical activities related to the development of estimation skills.	https://www.mathworksheets4kids.com/length.php
	Solve problems involving linear measure.	Solve computational and real-life problems involving length.	• Cooperative learning to solve problems and share ideas. • Group presentation of solutions and strategies used. • Journal writing about problem solving activities. • Use questioning strategies to elicit the process used to solve problems. • Model by 'thinking aloud' the process. • Guided instruction to solve problems. • Use of worksheets for independent practice.	https://www.youtube.com/watch?v=DNEai7aJyy4 https://www.youtube.com/watch?v=Ei5mgFtUGns https://www.youtube.com/watch?v=0x4hi513D6g

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
2. Perimeter	Develop a conceptual understanding of perimeter.	Calculate the perimeter of plane shapes.	• Explore/investigate the concept of 'distance around' using the environment and manipulatives including cut-outs of shapes. • Cooperative learning to measure the perimeter of regular and irregular shapes including shapes created on geoboards and drawn on grid paper. • Independent practice to calculate the perimeter of shapes.	https://www.youtube.com/watch?v=AAY1bsazcgM https://www.youtube.com/watch?v=zYronumSj6Q
		Draw plane shapes given the perimeter.	• Cooperative learning to create shapes on geoboards and draw shapes on paper (including grid paper) given the perimeter. • Use questioning strategies to elicit the process used to draw plane shapes of a given perimeter. • Group presentations and display of shapes drawn. • Independent practice using worksheets.	https://www.youtube.com/watch?v=gokSmirQ3bg https://classroom.thenational.academy/lessons/draw-shapes-of-a-given-perimeter-6dh6cd
	Develop and apply formulae for	Calculate the perimeter of squares and rectangles using formulae.	• Cooperative learning guided discovery activities to discover the formulae for	https://www.youtube.com/watch?v=K_aR9B4tKFk

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
	measurement of perimeter.		calculating perimeter of squares and rectangles. • Use guided questions to elicit how the rules were determined. • Cooperative learning and independent practice to apply the rules in calculating perimeter of shapes.	
	Solve problems involving perimeter.	Solve problems in real-life contexts involving perimeter.	• Use Polya's problem solving strategy/process to solve problems. • Problem solving activities using Virtual Learning Environments/Learning Management Systems. • Cooperative learning to solve problems and share ideas. • Use questioning strategies to elicit the process used to solve problems. • Model by 'thinking aloud' the process. • Guided instruction to solve problems. • Use of worksheets for independent practice. • Engage students in creating and posing problems for the class to solve.	https://www.youtube.com/watch?v=uuLCfn_00Hs https://www.youtube.com/watch?v=KcgbDnIQkJY

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Area	Understand that area can be quantified using standard units (m^2, cm^2.)	Calculate the area of shapes by counting squares.	• Review/check for prior knowledge. • Explore/investigate the concept of area using surfaces in the environment and manipulatives including cut-outs of shapes, grid paper and geoboards. • Cooperative learning to engage in practical activities using the standard units and covering surfaces with cut-outs of the standard units and recording the measure of the area of the surfaces. • Discussion about the different units used to measure area. • Explain the suitability of the unit as it relates to the area to be measured. • Direct instruction and demonstration on the appropriate use of the units of measure (e.g., placing the cut-outs of same sized units end-to-end without leaving gaps and without overlapping).	https://www.youtube.com/watch?v=E3xWiVYba3A https://www.youtube.com/watch?v=_uKKl8R1xBM
		Calculate the area of shapes drawn on a grid with unit squares	• Cooperative learning to calculate the area of shapes including shapes created on	https://www.youtube.com/watch?v=oL9iF9Se6lc

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		(including compound shapes).	geoboards and drawn on grid paper. • Independent practice to calculate the area of shapes.	https://www.youtube.com/watch?v=rc0t4ZiPqJA
		Draw different shapes of a given area on grids.	• Cooperative learning to create shapes on geoboards and draw shapes on grid paper given the area. • Use questioning strategies to elicit the process used to draw plane shapes of a given area. • Group presentations and display of shapes drawn. • Independent practice using worksheets.	www.youtube.com/watch?v=UbRVeYYJM9M
	Develop and apply formulae for measurement of area.	Calculate the area of squares and rectangles using formulae.	• Cooperative learning guided discovery activities to discover the formulae for calculating area of squares and rectangles. • Use guided questions to elicit how the rules were determined. • Cooperative learning and independent practice to apply the rules in calculating area of shapes.	https://www.youtube.com/watch?v=E3xWiVYba3A https://www.youtube.com/watch?v=_uKKl8R1xBM
		Calculate the area of compound shapes.	• Cooperative learning and independent practice to calculate the area of	https://www.youtube.com/watch?v=z4Lat1uOQI4

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			compound shapes by dissecting them into squares and rectangles. • Use questioning strategies to elicit the process used to calculate the area.	www.youtube.com/watch?v=A3UCsiJkyDg
	Solve problems involving area.	Solve problems in real-life contexts involving area. Include: • carpeting • brick laying • tiling • gardens e.g., size of garden, plots, garden paths	• Activate prior knowledge of area of plane shapes. • Engage students in cooperative learning activities related to area and involving the use of tangrams. • Cooperative learning to share problem solving strategies. • Use Polya's Problem Solving Strategy. • Problem solving activities using Virtual Learning Environments/Learning Management Systems. • Use worksheets or textbooks with problems.	https://www.youtube.com/watch?v=1VbihcPlFQg
Capacity and Volume	Understand that capacity and volume can be quantified using standard units.	Measure and record the capacity of containers using standard units (litre and millilitre).	• Hands-on activities related to the measuring of the capacity of containers and recording the measure. • Display of containers (such as boxes and measuring cups) of various capacity.	www.youtube.com/watch?v=_ouNQqyDASk

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		Measure and record the volume of boxes and constructed models using 1 cm cubic blocks and 1 m cubic blocks.	• Hands-on activities related to the measuring of the volume of boxes by filling with cubic blocks (of various sizes initially) and recording the measure. • Explain the need for standard units of measure and engage students in activities using the standard units to measure volume. • Cooperative learning to construct models using cubic blocks and recording the volume of the model. • Construct different models or solids using the same number of cubic blocks and verify that the volume remains the same by counting and explaining that solids with different appearances may have the same volume.	www.youtube.com/watch?v=RxkRlIAucMk www.youtube.com/watch?v=_BbLH8R1mHo www.youtube.com/watch?v=RmXVY8V6gE8 www.youtube.com/watch?v=-8LbKdRPyV4
	Understand the relationship between units of measure.	Convert litres to millilitres and vice versa.	• Explain the relationship between the litre and millilitre. • Guided or direct instruction to demonstrate and explain how measures are converted from one unit to another.	https://www.youtube.com/watch?v=djTNUp4XIRo www.youtube.com/watch?v=b3rcIj-geuY www.youtube.com/watch?v=ToGNq7Tf3GY

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			• Cooperative learning and independent practice using worksheets.	
	Understand that capacity and volume are related.	State the relationship between the units for volume and capacity.	• Investigate the relationship between capacity and volume through filling plastic containers with cubic centimetre blocks and liquid and comparing the results, or via displacement of liquid in a measuring cup by a cubic centimetre block. • Explain that there is a corresponding relationship between the units that are used to measure capacity and units that are used to measure volume. (1 ml = 1 cm^3 and 1000 ml = 1000 cm^3 = 1 L).	www.youtube.com/watch?v=GKCE8ohIBqE www.youtube.com/watch?v=dtCM56EBeBo www.youtube.com/watch?v=tvHvurOHVdY www.youtube.com/watch?v=028tWJGCSdM
	Develop and apply formula for measurement of volume.	Calculate the volume of cubes and cuboids using the formula.	• Cooperative learning guided discovery activities to discover the formula for calculating volume of cubes and cuboids. • Use guided questions to elicit how the rules were determined. • Cooperative learning and independent practice to apply the rules in calculating volume of solids.	www.youtube.com/watch?v=MLgrbWEdCCk www.youtube.com/watch?v=J3MyJmgypUc https://youtu.be/x8zQNnTwmLY https://www.mathworksheets4kids.com/volume-cubes.php

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
	Solve problems involving capacity and volume.	Solve real-life problems involving capacity and volume.	• Use of Polya's Problem Solving Strategy. • Cooperative learning to solve problems and share ideas. • Use questioning strategies to elicit the process used to solve problems. • Model by 'thinking aloud' the process. • Guided instruction to solve problems. • Use of worksheets for independent practice.	www.youtube.com/watch?v=tBBNbExCWY4 www.youtube.com/watch?v=_m1MJA_7AXs www.youtube.com/watch?v=RP5LsnG-bYM
Mass and Weight	Understand that mass/weight can be quantified using standard units (kg, g).	Measure and record mass/weight of objects using standard units.	• Hands-on activities related to the measuring of mass/weight of objects using various measuring instruments (such as equal arm balances and scales) and recording the measure. • Explain the suitability of the unit as it relates to the mass/weight to be measured. • Discussion about the different instruments used to measure mass/weight. • Demonstrate the different ways that measurements can be recorded (e.g., 3 kg and 100 g, or 3 $\frac{1}{10}$ kg or 3.1 kg).	www.youtube.com/watch?v=A0DdQe66_aY www.youtube.com/watch?v=mGMtyuVJ5to www.youtube.com/watch?v=rEb_P8ZGxd4 www.teachingmeasures.co.uk

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			• Use of worksheets to record the mass/weight of objects shown on various measuring instruments.	
	Understand the relationship between units of measure.	Convert kilograms to grams and vice versa.	• Cooperative learning to explain the relationship between the kilogram and the gram. • Direct instruction to demonstrate and explain how measures are converted from one unit to another. • Cooperative learning and independent practice using worksheets.	https://www.youtube.com/watch?v=z-iSpbO3eU0 https://www.youtube.com/watch?v=djTNUp4XIRo www.youtube.com/watch?v=mGMtyuVJ5to
	Develop an understanding of the comparison of mass/weight.	Compare and order mass/weight.	• Cooperative learning to share ideas on the procedure used to compare and order mass/weight in ascending or descending order. • Use questioning strategies to determine students' understanding. • Direct instruction. • Independent practice using worksheets.	http://nrich.maths.org/public/ www.youtube.com/watch?v=ivAD44nh0D0
	Solve problems involving mass/weight.	Solve computational and real-life problems involving grams and kilograms.	• Use of Polya's Problem Solving Strategy. • Cooperative learning to solve problems and share ideas.	https://www.youtube.com/watch?v=xK6j5BnVIdo http://nrich.maths.org/public/

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			• Use questioning strategies to elicit the process used to solve problems. • Model by 'thinking aloud' the process. • Guided instruction to solve problems. • Use of worksheets for independent practice.	
Time	Understand that time can be quantified.	Write the time shown on digital and analog clocks (including the 24-hour clock) to the minute.	• Review of previous knowledge including the features of analog and digital clocks and using terms such as "minutes to", "minutes after or past", "quarter to", "half past", "o'clock", "a.m." and "p.m." • Guided practice in the telling of time using various clocks and the recording of time. • Use of worksheets for independent practice.	www.mathisfun.com/time-clocks-analog-digital.html www.youtube.com/watch?v=fRkqE6wV0uk
		Match times displayed on standard digital clocks, 24-hour digital clocks and analog clocks to the minute.	• Cooperative learning in the telling of time and representing it using different clocks. • Guided practice to show the same time using the three different clocks. • Use of worksheets for independent practice.	www.maths-games.org https://www.scootle.edu.au/ec/viewing/L9646/index.html#

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		Measure and record the duration of events using clocks.	• Hands-on activities related to measuring the duration of events, practically. • Cooperative learning.	www.maths-games.org www.teachingideas.co.uk/subjects/maths
		Show the time after given time intervals on analog and digital clocks.	• Engagement in activities where the start time or end time of an activity is stated together with the time taken to do the activity and the end time or start time has to be displayed on a clock. • Cooperative learning and independent practice.	www.maths-games.org www.teachingideas.co.uk/subjects/maths www.youtube.com/watch?v=ttSQQdeDjeM
		Calculate the duration of events using starting and finishing times (elapsed time).	• Cooperative learning to determine duration of events. • Discussion to share strategies used to determine the elapsed time. • Independent practice to record measurements using various formats, e.g., 3 hr and 30 min, $3\frac{1}{2}$ hrs or 3.5 hrs.	https://www.youtube.com/watch?v=zjz_rcia79Y www.youtube.com/watch?v=ML6r7BEZo7M www.youtube.com/watch?v=sFERcs2oEVk www.youtube.com/watch?v=e1l56frbqZE www.youtube.com/watch?v=oIbpR_RFDWs
	Understand the relationship between units of measure.	Convert from one unit to another (seconds/minutes, minutes/hours, hours/days, days/weeks, days/month,	• Cooperative learning to explain the relationship between the units of measure. • Direct instruction to demonstrate and explain how measures are converted from one unit to another.	https://www.youtube.com/watch?v=zjz_rcia79Y https://www.youtube.com/watch?v=QU-XUmujbuM https://www.youtube.com/watch?v=gGo6t6Z0rCg

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
		weeks/months, months/years).	• Cooperative learning and independent practice using worksheets.	
	Develop an understanding of the comparison of the duration of events.	Compare and order activities/events according to time taken.	• Cooperative learning to share ideas on the procedure used to compare and order activities according to time taken, in ascending or descending order. • Use questioning strategies to determine students' understanding. • Direct instruction. • Independent practice using worksheets.	https://www.youtube.com/watch?v=SdpSgBj4Fog http://www.primaryresources.co.uk/maths www.youtube.com/watch?v=HHYcqJQrp-4
	Demonstrate an understanding of time schedules.	Sequence activities or events according to time of occurrence.	• Cooperative learning to share ideas on the procedure used to sequence activities according to time of occurrence. • Use questioning strategies to determine students' understanding. • Direct instruction. • Independent practice using worksheets.	https://ucmp.berkeley.edu/fosrec/ScotchmoorTime.html
		Interpret simple time schedules (e.g., the calendar).	• Use questioning strategies to determine students' understanding. • Cooperative learning involving students	https://www.youtube.com/watch?v=SZv_a0fjDfE www.youtube.com/watch?v=wS4wwaDrCic

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			formulating and answering questions on time schedules. • Independent practice in the interpretation of time schedules in worksheets.	
	Solve problems involving time.	Solve computational and real-life problems involving time and other related concepts.	• Use of Polya's Problem Solving Strategy. • Cooperative learning to solve problems and share ideas. • Use questioning strategies to elicit the process used to solve problems. • Model by 'thinking aloud' the process. • Guided instruction to solve problems. • Use of worksheets for independent practice.	http://nrich.maths.org/public/ www.youtube.com/watch?v=2-grQFqvHN0 www.youtube.com/watch?v=02w1yI9y8dY

STATISTICS

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
Tally Charts, Frequency Tables, Pictographs, Block Graphs and Bar Graphs	Demonstrate the ability to collect, classify, organise and represent data using Tally Charts/Frequency Tables/Pictographs/ Block Graphs/Bar Graphs.	Tally ungrouped discrete data into a frequency table.	• Cooperative learning to collect and classify data based on the investigation of a problem, question or real-life situation using surveys, questionnaires, experiments and other sources. • Use worksheets to tally data into frequency tables. • Reteach as necessary using resources such as objects, pictures, grid paper and geoboards.	https://www.youtube.com/watch?v=R6m8OQAQzPk https://www.youtube.com/watch?v=_xXJSDxRZP4 https://www.youtube.com/watch?v=mukk8Zaettg
		Represent data using tally charts, frequency tables and graphs (pictographs, block graphs, bar graphs) using various scale factors.	• Activate prior knowledge about the features/characteristics of charts, tables and graphs, and scale factors. • Guided instruction to create representations. • Discussion to elicit justification for scale factors used. • Independent practice to construct representations. • Use technology tools to create data displays. • Engage students in self-assessment (self-monitoring)	https://www.youtube.com/watch?v=fNpvOwM6K5c https://www.youtube.com/watch?v=4sMtOfNa5H8 https://www.youtube.com/watch?v=yyy2uYxzcbM https://www.youtube.com/watch?v=COYWXSfKqaA https://www.youtube.com/watch?v=J2DKgCf353k https://www.youtube.com/watch?v=FedQKVvd8tU

TOPIC	GENERAL OUTCOMES	CONTENT SCOPE/SPECIFIC OBJECTIVES	INSTRUCTIONAL STRATEGIES	RESOURCES/MATERIALS
			activities using a customised math error self-correction checklist.	
	Draw conclusions or make decisions from data displays.	Interpret the data displayed in charts, tables and graphs (including tally charts, frequency tables, pictographs, block graphs and bar graphs).	• Use questioning strategies to determine students' understanding. • Cooperative learning involving students formulating and answering questions on data displays. • Collaborate in groups to collect samples of statistical representations or data displays on real-world phenomena and analyse the data so as to make decisions about the real-life situation or problem. • Group presentations to justify decisions made. • Independent practice in the interpretation of data displays in worksheets.	https://www.youtube.com/watch?v=IjcLW7Y7Ndk https://www.youtube.com/watch?v=p4oOtkLvdGE https://www.youtube.com/watch?v=0M76XCRwiIU https://www.youtube.com/watch?v=oQ7NEGBeIfM https://www.youtube.com/watch?v=yRu2NmuM4EY

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Mean, median and mode	Determine measures of central tendency.	Calculate the mode of a given set of data.	• Review/check for prior knowledge about mode. • Reteach as necessary.	https://www.youtube.com/watch?v=khP3ge7a2Yk https://www.youtube.com/watch?v=xObCUytIVMo https://virtualnerd.com/middle-math/probability-statistics/mean-median-mode-range/mode-data-set
		Find the mode for data taken from frequency tables and graphs.	• Guided instruction and independent practice.	https://thirdspacelearning.com/gcse-maths/statistics/mode-from-a-frequency-table/ https://www.youtube.com/watch?v=57XQTdrCinM https://www.youtube.com/watch?v=4LPSqrn26Ec
		Calculate the mean of a given set of data.	• Explore the concept of mean using various activities related to equal sharing or distribution. • Journal writing to explain the concept of mean. • Guided instruction to determine the rule for calculating the mean. • Use of worksheets for independent practice.	https://www.youtube.com/watch?v=UYGdcmr_oIE https://blog.prepscholar.com/how-to-find-the-mean https://www.youtube.com/watch?v=0io9U8Jcjeo https://www.youtube.com/watch?v=H7u0Zrra060

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			• Use of technology tools e.g., spreadsheets, for checking answers.	
		Calculate the median of a given set of data.	• Guided instruction using frequency distributions to calculate the median.	https://www.indeed.com/career-advice/career-development/how-to-find-the-median https://www.youtube.com/watch?v=qglJSIp6n7M&list=PLiT3pCvK_cfXIGQ5FLXEW01r2f2fQSOtR&index=2 https://www.youtube.com/watch?v=0SYsi38XucI https://www.youtube.com/watch?v=cc7ELv2_Xww https://www.youtube.com/watch?v=4kS8J4q8pC8
	Solve problems involving measures of central tendency.	Solve problems involving mode, median and mean.	• Use questioning strategies to elicit the process used to solve problems. • Use Polya's problem solving strategy/process to solve problems. • Model by 'thinking aloud' the process. • Discussion to justify process used to solve problems. • Cooperative learning using problem solving worksheets.	https://youtu.be/k3aKKasOmIw https://www.youtube.com/watch?v=oatwXlZBPw0&t=7s https://www.youtube.com/watch?v=6DYtC7lrVuY https://www.youtube.com/watch?v=B1HEzNTGeZ4

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			• Engage students in creating and posing problems for the class to solve. • Use worksheets for independent practice.	https://www.youtube.com/watch?v=A8_H6hvBmA4 https://www.youtube.com/watch?v=5xoEhWpupFY https://www.youtube.com/watch?v=qpbaglogObM https://www.youtube.com/watch?v=XXlgx7oeTpQ https://www.youtube.com/watch?v=sqMFGndF4ak https://www.youtube.com/watch?v=PleS4NwNnQ8