CONTENT DEVELOPMENT AND CLASSIFICATION OF TEST ITEMS

CONTENT AREAS FOR MULTIPLE SUBJECTS CONTENT FOR PRIMARY

S/N	CONTENT AREAS	COMPETENCIES	DESCRIPTIVE STATEMENT
	ENGLISH LANGUAGE (LANGUAGE AND LITERACY)		
1	Grammar	1. Demonstrate knowledge and understanding of subject-verb agreement rules.	1. Apply the various rules in subject-verb agreement.
		2. Demonstrate knowledge and understanding of nouns and pronouns.	2. Identify nouns and pronoun types in given sentences.
		3. Demonstrate understanding of sentences.	3. Describe the various types of sentences using cues.
		4. Demonstrate knowledge and understanding of mechanical writing (punctuations).	 Demonstrate how punctuation marks are applied in sentences.
		5. Demonstrate knowledge and understanding of semantics.	5. Identify semantic issues (such as homophones, homonyms, homographs, etc.) in sentences.
2	Language Teaching Skills (Writing)	1. Demonstrate knowledge in the components of writing at the primary school level.	1. Apply the components of writing in narrative/descriptive writing (essays) at the primary school level.
		2. Demonstrate understanding of the stages of writing development among primary school learners.	2. Show the stages of developing writing skills in primary school learners.
		3. Demonstrate knowledge in the techniques/strategies for effective writing instruction in primary	3. Describe various strategies, techniques and approaches of teaching effective writing in primary

		 schools. 4. Demonstrate knowledge in the stages of early/emergent writing at the primary school level. 5. Demonstrate understanding of challenges associated with primary school learners' writing. 4. Identify the various stages early/emergent writing skills at primary school level. 5. Outline various writing challenge difficulties and issues learners fac the primary schools. 	the ges,
3	Language Teaching Skills (Reading)	1. Demonstrate understanding of the types of reading. 1. Differentiate between the various ty of reading that are evident in prim schools.	-
		 Demonstrate knowledge of reading theories. Demonstrate knowledge of stages of reading development. Demonstrate knowledge of stages of reading development. Describe the theories of reading app when teaching reading to primary sch learners. Illustrate the stages involved developing reading skills of prim school learners. 	nool in
		A. Demonstrate knowledge of 4. Apply the various approaches/model approaches/models to reading. teaching reading in primary sch classrooms.	
		5. Demonstrate understanding of reading fluency challenges (problems) in primary schools. 5. Describe reading fluency problems controversies learners encounter primary schools.	and in
4	Language Teaching Skills (Speaking)	I. Demonstrateknowledgeofthe1. Describethecomponentsunderlycomponentsbeneatheffectivespeakingeffectivespeakingclassrooms.	<u> </u>

		2. Demonstrate knowledge and understanding of phonetics and 2. Identify places of articulation and how word sounds are produced and pronounced.
		 3. Demonstrate understanding of speaking instructional strategies. 3. Apply the various strategies and techniques to teaching speaking effectively in primary schools.
		 4. Demonstrate knowledge of instructional procedures involved in speaking lessons. 4. Outline the teaching and learning procedures involved in speaking lessons
5	Literature	1. Demonstrate understanding literature.knowledge elementsand of elements2. Describe poetry, prose and drama.
		3. Relate the elements to everyday stories and practical events in and out of the classroom.
6	English language curriculum	1. Demonstrateunderstandingofrationaleforlearninglanguage at the primary school level.1. Outlinethe primary school level.school level.
		 Demonstrate knowledge in the specific aims of the English Language (Language and Literacy) curriculum for primary schools. Identify the various the overriding (specific) aims of the English Language (Language and Literacy) curriculum for primary schools.
		 3. Demonstrate understanding of core competencies of the English Language (Language and Literacy) curriculum for primary schools. 3. Show a distinction among the core competencies of the English language (Language and Literacy) curriculum for primary schools.
		4. Demonstrateknowledgeinthe4. DescribetheorganizationoftheorganizationoftheEnglish4. Describetheorganizationofthe

		Language (Language and Literacy) curriculum for primary schools.Literacy) schools with emphasis on sub-strands, exemplars, etc.	strands,
		 5. Demonstrate understanding of the scope and sequence of the English Language (Literacy and Literacy) curriculum for primary schools. 5. Describe the scope and sector terms of content of the language (Language and curriculum for primary schools). 	English Literacy)
	MATHEMATICS (NUMERACY)		
7	Number	 Demonstrate an understanding of quantities and place value for multi-digit numbers. Identify and explain Roman factors, multiples and prime 	
		 Demonstrate understanding of mathematics strategies and number properties to determine answers for basic multiplication facts and related division. Apply mental mathematics and number properties to determine answers for basic multiplication facts and related division. Apply mental mathematics and number properties to determine answers for basic multiplication facts and related division. 	letermine iplication cts.
		Demonstrate understand division of number.	ling of
		 Demonstrate an understanding of integers. Perform simple multiplication integers. 	on with
		 4. Demonstrate an understanding of strategies for comparing, adding, subtracting, multiplying and dividing common, decimal and percent fractions. 4. Compare and order a m fractions: common, percent fractions. 	
		5. Demonstrate understanding of the concept of ratios and its relationship to fractions and to the multiplication and5. Use concrete models and representations to explain a	

		division of whole numbers.6. Understand the concept of proportion and its relationship to ratios and rates.	 concept that shows the number of times one quantity can be obtained in another and write this symbolically and in its simplest form. 6. Use proportional reasoning and rates to solve real world and mathematical problems.
8	Algebra	1.Determine the pattern rule to make predictions about subsequent elements.	1. Represent a given pattern visually to verify predictions.
		2.Demonstrate understanding of algebraic expressions.	2. Demonstrate understanding of algebraic expressions as mathematical phrases that can contain letters which represent ordinary numbers and operators.
		3.Solve problems involving single-variable, one-step equations with whole number coefficients.	 Translate word problems into mathematical sentences.
9	Geometry and measurement	1.Demonstrate understanding of prisms.	1. Identify examples of rectangular and triangular prisms in the classroom and in the community.
		2.Demonstrate understanding of the position of objects in space using the cardinal points.	 Indicate the position and motion of objects in space using the cardinal points north-east, north-west, south- east and south-west. Perform and identify images of a
		3.Demonstrate understanding of single transformation (i.e. reflection translation) on a 2D shape).	single transformation on 2D shapes in a plane.
10	Data	1. Create, label, and interpret line graphs to draw conclusions.	1. Draw a line graph by determining the common attributes (title, axes and intervals) and draw the graph for a

		given table of values.
	2. Demonstrate understanding of methods of collecting data, including questionnaires, interviews, observation, experiments, databases, electronic media, etc.	 Select a method for collecting data to answer a given question and justify the choice. List the possible outcomes of a
	3. Demonstrate an understanding of probability by identifying all possible outcomes of a probability experiment, determining the theoretical and experimental probability of outcomes in a probability experiment.	probability experiment, such as tossing a coin, rolling a die with a given number of sides, spinning a spinner with a given number of sectors and determine the theoretical probability of an outcome occurring for a given probability experiment.
11 Curriculum and teacher beliefs in mathematics teaching and learning	1. Demonstrate knowledge and understanding of key definitions of curriculum offered by different authors.	1. Outline and analyze different definitions of curriculum based on different views and to come out with their differences and similarities.
	 Demonstrate knowledge and understanding of key philosophies and goals of the current upper primary mathematics. 	 Outline the major philosophies underlying the current standard- based upper primary mathematics curriculum and the goals to be achieved as compared to the objective-based curriculum and goals of the current upper primary mathematics. Use knowledge gained from theories
	3. Demonstrate the core and transferable skills like problem solving and creativity, and taking advantage of the ICT integrating it into teaching and learning.	in mathematics to design appropriate problem-solving tasks.
SCIENCE		

12	Diversity of Matter	1. Show understanding of the physical features and life processes of living things and use this understanding to classify them.	 Classify plants based on their shoot and root systems.
		2. Present materials as important resources for providing human needs.	 Identify the general properties of metals such as lustre, malleability, conductivity and ductility. Investigate the uses of metals in everyday life and link the uses to their properties.
		3. Demonstrate understanding of mixtures, the types of formation, uses and ways of separating them into their.	 Examine some uses of mixtures in everyday life.
13	Cycles	1. Show the relationship between the earth and the sun.	1. Describe the relative sizes of the earth and sun and their importance.
		2. Show understanding of the roles of condensation, evaporation, transpiration and precipitation in the hydrological (water) cycle.	2. Explain how rain falls from clouds.
		3. Demonstrate understanding of how carbon and nitrogen are cycled in nature.	3. Describe the functions of carbon within the environment.
		4. Present water and air as important natural resources	4. Investigate ways of conserving water in the home, school and community.
		5. Demonstrate understanding of the life cycle of a plant.	5. Outline the materials needed for the survival of plants in the environment

			(water, carbon dioxide, oxygen, sunlight).
14	Systems	1. Recognise that different parts of the human body work interdependently to perform specific functions.	1. Explain the functions of organs in the excretory system of humans.
		2. Show understanding of the motion of bodies in the solar system.	2. Explain the difference between and among a star, a planet and a satellite.
		3. Show understanding of ecosystems, interdependency of organisms in an ecosystem and appreciate the interactions.	 Investigate various interactions in an ecosystem and the effect on humans.
15	Forces and Energy	1. Demonstrate understanding of the concept of energy, its various forms and sources and the ways in which it can be transformed and conserved.	1. Compare renewable and non- renewable sources of energy.
		2. Demonstrate knowledge of generation of electricity; its transmission and transformation into other forms.	2. Identify different forms of energy and trace conversion of one energy form to another.
		3. Show that movement is caused by applied forces due to the release of stored energy.	 3. Construct an electric circuit and give the functions of its components. . Identify the symbols used in representing various components in
			a given circuit diagram. Know conductors, semi-conductors and insulators.
		4. Present some simple machines used for making work easier, analyse	4. Identify levers, pulleys, inclined planes as classes of simple machines and cite some common examples.

		their advantages and show their uses.
16	Humans and the environment	1. Capture the importance of personal hygiene.1. Identify the causes and effects of foul body odour on humans and how it can be prevented.
		 Demonstrate knowledge of common diseases of humans; causes, symptoms, effects and prevention. Explain the causes, symptoms and prevention of Eczema. Explain how to prevent meningitis.
		Explain now to prevent meninguis.
		3. Show the impact of science and technology on society.3. Identify the scientific concepts and principles underlying the operation of some local industries.
		 4. Demonstrate understanding that climate change is one of the most important environmental issues facing the world today. 4. Describe the effects of climate change on humans.
	SOCIAL STUDIES	
17	Self	1. Demonstrate knowledge of what self- concept is and the types of self-concept. 1. Describe self-concept and its types.
		 Demonstrate understanding of the characteristics of positive and negative self-concept. Distinguish between the characteristics of positive self-concept and negative self-concept.
		 Demonstrate knowledge of the strategies to address negative self-concept. Identify the various strategies to address negative self-concept.
18	Family	1. Demonstrate knowledge of what family 1. Describe family and the various types. is and the types of family.
		 Demonstrate understanding of the Identify general functions of the family.

			functions of the family.		
		3. Demonstrate understanding of the functions of the extended and nuclear families.		Outline the functions of the extended and the nuclear families. Discuss the role of the father, mother	
		4.	Demonstrate knowledge in the role of the father, mother and children in the family.		and the children in the family.
19	Deviant Behaviour	6.	Demonstrate knowledge in concept of deviant behaviour.	1.	Define the concept of deviant behaviour.
		7.	Demonstrate understanding of forms of deviant behaviour.	2.	Describe the various forms of deviant behavior.
		8.	Demonstrate knowledge in ways of addressing deviant behaviour.	3.	Discuss the various ways by which deviant behaviour can be addressed.
20	Inheritance	1.	Demonstrate knowledge of the concept of inheritance.		Define the term inheritance.
		2.	Demonstrate understanding of the forms of Ghanaian inheritance.	2.	Explain the various forms of inheritance in Ghana.
21	Gender	1.	Demonstrate knowledge in concept of gender.		1. Explain the concept of gender.
		2.	Demonstrate understanding of terminologies in gender.		2. Describe the various terminologies in gender.

22	Citizenship	1. Demonstrate knowledge in the concept1. Explain the concept "citizenship education".1. Explain the concept"citizenship
		 Demonstrate understanding of the rationale of the teaching of citizenship education. Explain the rationale of teaching citizenship education.
		 Demonstrate knowledge of the ways of acquiring Ghanaian citizenship. Describe the various ways of acquiring citizenship in Ghana.
		 Demonstrate knowledge and understanding of the rights and responsibilities of a Ghanaian citizen. Discuss what makes one a responsible citizen.
23	The Environment	 Demonstrate knowledge of the meaning of the environment and the types of environments. Distinguish between Assemblage and Construction.
		 Demonstrate understanding of the need to preserve the environment. Describe human activities that can lead to the preservation of the environment.
		 Demonstrate knowledge of how to preserve the environment. Discuss ways by which the environment can be preserved or sustained.
	EDUCATION	
24	Theories of learning	1. Demonstrateunderstandingof1. Describebehaviourists' theory ofbehaviourists' theory of learning.1. Describebehaviourists' theory of
		 Demonstrate knowledge and understanding of constructivism theory of learning. Explain the two major constructivists' learning theories. Describe cognitive constructivism and social constructivism.
		3. Demonstrate understanding of key concepts in theories of learning.3. Apply the key concepts of theories of learning in the Ghanaian classroom context.
		4. Demonstrate understanding of implications of learning theories to4. Identify the various implications and the applicability of the learning

		teach	ng and learnin	g.			theories to teaching and learning at the primary school level.
25	Inclusivity		onstrate kno standing of sivity in classro		and term	1.	Explain inclusivity in classroom from the context of Ghanaian education enterprise.
		2. Dem featu	onstrate und es of inclusive	erstanding classroon		2.	Describe features of inclusive classrooms. Relate classroom conditions in Ghana to inclusive classrooms.
		class	standing o oom managem	ent.	and clusive	3.	Apply inclusive classroom management strategies in contemporary Ghanaian classrooms.
		4. Demo challo inclu		erstanding ciated	g of with	4.	Outline inclusivity-bound issues/challenges in primary schools in Ghana.
26	Classroom management	of cla	rate knowledg ssroom mar r management.	e underst agement	tanding and	1.	Differentiate between classroom management and behaviour management in primary schools.
		2. Demonst classroor	ate under 1 management	standing strategies.	of	2.	Identify classroom management strategies that primary school teachers use to control multi-grade classrooms, inclusive classroom and other related learning environments.
		 Demonst understar managen 	ding of	vledge beł	and haviour	3.	Design behaviour management strategies for learners in primary schools.
		 Demonst challenge 	rate under s of classroom	standing managem	of nent.	4.	Describe challenges teachers face in managing primary school classrooms.

27	Educational philosophies	1. Demonstrateknowledgeof1. Describe the various philosophies of education.1. Describe the various philosophies philosophies education.1. Describe the various philosophies of education.1. Describe the various philosophies education.1. Describe the various philosophies of education.1. Describe the various philosophies education.1. Describe
		 2. Demonstrate knowledge and understanding of ideas and assumptions of educational philosophies. 2. Apply assumptions and ideas of educational philosophies in teaching and learning at the primary school level.
		 3. Demonstrate understanding of implications of educational philosophies to education. 3. Demonstrate understanding of educational philosophies to educational philosophies to primary education.
		 4. Demonstrate knowledge and understanding of shortfalls of educational philosophies. 4. Identify shortfalls, limitations, challenges of the various educational philosophies.
28	Pedagogy	1. Demonstrate understanding approaches.knowledge pedagogical of pedagogical1. Identify pedagogical approaches to teaching learners in the primary school.
		2. Demonstrate knowledge and understanding of learning styles. 2. Show differences between learning styles teachers focus on.
		 Demonstrate understanding of instructional strategies for learning styles Use effective instructional strategies to build learners' learning styles.
		4. Demonstrate knowledge and understanding of learning style challenges. 4. Describe challenges that come with the various learning styles.
	ICT	
29	Introduction to Computing	1. Demonstrate the understanding of parts of a computer, technology tools and history of computers1. Identify components of a Computer System: Hardware, Software and Liveware.

 Demonstrate understanding of the use of the Desktop Background as well as working with folders. 	 Identify the left-right mouse button, holding of mouse, performing single, double and triple clicking, dragging object and using the scroll wheel. Demonstrate proper use of keyboarding technique. 2. Explore the use of the desktop Background, changing the themes, colours and User account. (e.g. classic, icons and Taskbar of the background). Demonstrate the use of the Recycle Bin or Trash Can. Perform permanent delete or Empty Trash Can and restoring files or icons in the recycle bin. Explore the use of Copy, Paste, bin or The background.
 Demonstrate the use of the Desktop Background as well as working with folders. Demonstrate the use of Data and identify sources of data. 	 delete tools, the moving of folders by using the Desktop Pop-Up menu. 3. Locate the hard drives, and other removable storage icons in the File explorer. 4. Identify types of data (Integers, double, characters, float etc.). Identify more sources of data and information e.g. internet (emailing, Skype, SMS etc.)

			Demonstrate sending and receiving information from other gadgets, e.g. Bluetooth, Infrared, Radio, Fax, Telephones calls, SMS, etc. Demonstrate basic manipulations on sample data, e.g. arranging data in a matrix table, sorting and calculations, etc.
30	Presentation	 Demonstrate understanding of how to use Microsoft PowerPoint 	 Demonstrate how to use the File menu, the Insert and Design Ribbon from B5. Demonstrate how to use icons in the Text group in the Insert Ribbon. Explain how to give a 5-side presentation in MS-PowerPoint using the tools of the ribbons studied.
31	Word Processing	 Demonstrate understanding of the use of word processing applications. 	 Demonstrate how to use the File menu and Insert, Design, and Layout Ribbons from B5. Demonstrate how to use icons in the Text group in the Insert Ribbon. Use the attributes of the ribbons studied in a paragraph.
32	Internet and social media	1. Demonstrate understanding of how to Network computers	 Give examples of facilities the internet offers. Describe the types of information available on the Internet. Identify data duplication. Outline what one needs to connect to

			the Internet.
		 Demonstrate understanding of the use of a Web Browser 	 Identify the address or links window. Recognise the status bar and list its use.
			Illustrate using help button. Recognise internet explorer speed keys.
33	Health and Safety in Using ICT	 Demonstrate understanding of how to apply Health and Safety measures in Using ICT Tools. 	 Identify five (5) major health hazards associated with the use of ICT tools. Discuss Eye strain, Eye irritation and Eye fatigue. Demonstrate solutions for the health-related problems in ICT.
	TVET (CREATIVE ART)		
34	Visual Art	 Demonstrate understanding of how to generate own ideas for artistic expressions on the people based on their history and culture, the environment and topical local/national/global issues. 	 Explore the artworks of some international visual artists and analyse how their artworks reflect the history and culture of some communities in the world. Explain how the artworks of the international visual artists studied reflect the history and culture of some communities in the world, and generate own ideas for creating own artworks.

			2. Describe some artworks created by international visual artists that reflect the physical and social environments of some communities in the world.
			3. Generate own ideas for designing and creating own visual artworks based on the physical and social environments of some communities in the world
			Explain the artworks of some international visual artists that reflect topical issues in some communities in the world
35	Performing Art	1. Demonstrate understanding of how to generate own ideas for artistic expressions on the people based on their history and culture, the environment and topical local/national/global issues.	1. Explore performing artworks of some international performing artists and analyse how their compositions reflect the history and culture of some communities in the world.
			Explain how the artworks of the international performing artists studied reflect the history and culture of some communities in the world and generate own ideas for creating own performing artworks.
		 Demonstrate understanding of how to plan a display/presentation of a portfolio of own artworks by identifying and preparing a venue, 	2. Describe how the artworks of the international performing artists studied reflect the physical and social environments of some

selecting and grouping artworks and inviting target audience for the planned display/performance.	communities in the world. Generate own ideas for creating own performing artworks based on the physical and social environments of some communities in the world.
3. Demonstrate understanding of how to organise own ideas through experimenting with available media and techniques for creating/ composing artworks based on the history, culture, environment and topical local/national/global issues of other communities.	3. Experiment with available visual arts media and methods to create visual artworks based on own views, knowledge and understanding of the artworks of some international visual artists.

INTEGRATED CONTENT AREA FOR PRIMARY EDUCATION

	CONTENT AREAS	Course Objectives/Outcomes (DoK)				Total
NO.		Level 1 (Recall)	Level 2 (Skills/Concepts)	Level 3 (Strategic Thinking)	Level 4 (Extended Thinking)	
	ENGLISH LANGUAGE (LANGUAGE AND LITERACY)					
1	Grammar	1	1	1	1	4
2	Writing		1	1	1	3
3	Reading	1		2	1	4
4	Speaking		1	1	1	3
5	Literature			1	1	2
6	English language curriculum	1	2	1		4
	Total					20
	MATHEMATICS (NUMERACY)					
7	Number	1	1	1	1	4
8	Algebra		1	2	1	4
9	Geometry and measurement	1	1	1	1	4
10	Data	1		1	2	4
11	Teacher Belief about mathematics teaching and learning		2	1	1	4
	Total					20
	SCIENCE					
12	Diversity of Matter	1	1	1	1	4

13	Cycles	1	1	1	1	4
14	Systems	1	1	1	1	4
15	Forces and Energy	1	1	1	1	4
16	Humans and the environment	1	1	1	1	4
	Total					20
	SOCIAL STUDIES					
17	Self		1		1	2
18	Family			1	1	2
19	Deviant Behaviour	1			1	2
20	Inheritance		1		1	2
21	Gender			1		1
22	Citizenship		1	1	1	3
23	The Environment		1	1	1	3
	Total					15
	EDUCATION					
24	Theories of Learning	1		1	1	3
25	Inclusivity		1	1	1	3
26	Classroom management		1	1	1	3
27	Educational philosophies		1	1	1	3
28	Pedagogy	1	1		1	3
	Total					15
	ICT					

29	Introduction to Computing			1		1
30	Presentation	1				1
31	Word Processing			1		1
32	Internet and social media				1	1
33	Health and Safety in Using ICT		1			1
	Total					5
	TVET (CREATIVE ART)					
34	Visual Art		1	1	1	3
35	Performing Art	1		1		2
	Total					5
	Total	15%	25%	30%	30%	100%