Texas
Educator Certification
Examination Program

Preparation Manual
Early Childhood: PK–3 (292)

Overview and Exam Framework
Sample Selected-Response Questions
Sample Selected-Response Answers and Rationales
Sample Constructed-Response Question

Section 3: Overview and Exam Framework
Early Childhood: PK–3 (292)

Exam Overview

Exam Name	**Early Childhood: PK–3**
Exam Code	292
Time	5 hours
Number of Questions	90 selected-response questions and 1 constructed-response question
Format	Computer-administered test (CAT)

The TExES Early Childhood: PK–3 (292) exam is designed to assess whether an examinee has the requisite knowledge and skills that an entry-level educator in this field in Texas public schools must possess. The 90 selected-response questions and the 1 constructed-response question are based on the Early Childhood: PK–3 exam framework. Questions on this exam range from grades PK–3. Your final scaled score will be based only on scored questions.

The Standards

The Early Childhood: PK–3 exam framework is informed by the following sets of standards.

Pedagogy and Professional Responsibilities Standards, Early Childhood: Prekindergarten–Grade 3

The pedagogy and professional responsibilities (PPR) standards identified in this section are targeted for classroom teachers of early learners (birth through age eight). The standards address the discipline that deals with the theory and practice of teaching to inform skill-based training and development. The standards inform proper teaching techniques, strategies, teacher actions, teacher judgements, and decisions by taking into consideration theories of learning, understandings of students and their needs, and the backgrounds and interests of individual students. The standards are also aligned with the Commissioner's Teacher Standards in 19 TAC Chapter 149 of this title (relating to Commissioner's Rules Concerning Educator Standards).

Instructional Planning and Delivery	Early Childhood: Prekindergarten–Grade 3 classroom teachers demonstrate understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students and makes learning relevant for today's learners.
Knowledge of Student and Student Learning	Early Childhood: Prekindergarten–Grade 3 classroom teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational and developmental backgrounds and focusing on each student's needs.

Content Knowledge and Expertise	Early Childhood: Prekindergarten–Grade 3 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards.
Learning Environment	Early Childhood: Prekindergarten–Grade 3 classroom teachers interact with students in respectful ways at all times, maintaining a physically and emotionally safe, supportive learning environment that is characterized by efficient and effective routines, clear expectations for student behavior, and organization that maximizes student learning.
Data-Driven Practices	Early Childhood: Prekindergarten–Grade 3 classroom teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed.
Professional Practices and Responsibilities	Early Childhood: Prekindergarten–Grade 3 classroom teachers consistently hold themselves to a high standard for individual development, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity.

Content Standards, Early Childhood: Prekindergarten–Grade 3

The content standards identified in this section are targeted for classroom teachers of early learners (birth through age eight). The standards address the discipline that deals with the content knowledge required to teach early learners. The standards address content knowledge in Prekindergarten-Grade 5, with an emphasis on Prekindergarten–Grade 3, in order to meet the needs of all learners and address vertical alignment. The standards align with the *Texas Prekindergarten Guidelines*, Chapter 110 of this title (relating to Texas Essential Knowledge and Skills for English Language Arts and Reading), Chapter 111 of this title (relating to Texas Essential Knowledge and Skills for Mathematics), Chapter 112 of this title (relating to Texas Essential Knowledge and Skills for Science), Chapter 113 of this title (relating to Texas Essential Knowledge and Skills for Social Studies), Chapter 115 of this title (relating to Texas Essential Knowledge and Skills for Health Education), Chapter 116 of this title (relating to Texas Essential Knowledge and Skills for Physical Education), Chapter 117 of this title (relating to Texas Essential Knowledge and Skills for Fine Arts), and The National Association for the Education of Young Children Professional Preparation Standards.

Child Development	The Early Childhood: Prekindergarten–Grade 3 classroom teachers use their understanding of young children's characteristics and needs, and of multiple interacting influences on children's development and learning, to create environments that are healthy, respectful, supportive, and challenging for each child.
English Language Arts and Reading	The Early Childhood: Prekindergarten–Grade 3 classroom teachers demonstrate understanding of Kindergarten–Grade 5 English Language Arts and Reading Texas Essential Knowledge and Skills (TEKS), with an emphasis on Kindergarten–Grade 3, and Emergent Early Literacy *Texas Prekindergarten Guidelines* and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.

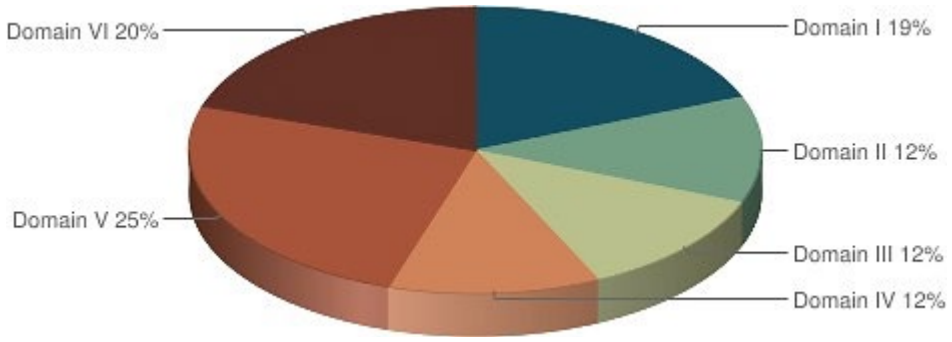
Mathematics	The Early Childhood: Prekindergarten–Grade 3 classroom teachers demonstrate understanding of Kindergarten–Grade 5 Mathematics TEKS, with an emphasis on Kindergarten–Grade 3, and Mathematics *Texas Prekindergarten Guidelines* and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.
Science	The Early Childhood: Prekindergarten–Grade 3 classroom teachers demonstrate understanding of Kindergarten–Grade 5 Science TEKS, with an emphasis on Kindergarten–Grade 3, and Science *Texas Prekindergarten Guidelines* and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.
Social Studies	The Early Childhood: Prekindergarten–Grade 3 classroom teachers demonstrate understanding of Kindergarten–Grade 5 Social Studies TEKS, with an emphasis on Kindergarten–Grade 3, and Social Studies *Texas Prekindergarten Guidelines* and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.
Fine Arts, including Theatre, Art, and Music	The Early Childhood: Prekindergarten–Grade 3 classroom teachers demonstrate understanding of Kindergarten–Grade 5 Theatre, Art, and Music TEKS, with an emphasis on Kindergarten–Grade 3, and Fine Arts *Texas Prekindergarten Guidelines* and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.
Health Education	The Early Childhood: Prekindergarten–Grade 3 classroom teachers demonstrate understanding of Kindergarten–Grade 5 Health Education TEKS, with an emphasis on Kindergarten–Grade 3, and Physical Development *Texas Prekindergarten Guidelines* and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills.
Physical Education	The Early Childhood: Prekindergarten–Grade 3 classroom teachers demonstrate understanding of Kindergarten–Grade 5 Physical Education TEKS, with an emphasis on Kindergarten–Grade 3, and Physical Development *Texas Prekindergarten Guidelines* and apply knowledge of developmentally appropriate, research- and evidence-based assessment and instructional practices to promote students' development of grade-level skills

Pedagogy and Professional Responsibilities Standards, Early Childhood–Grade 6

The pedagogy and professional responsibilities (PPR) standards identified in this section are targeted for classroom teachers of students in Early Childhood–Grade 6. The standards address the discipline that deals with the theory and practice of teaching to inform skill-based training and development. The standards inform proper teaching techniques, strategies, teacher actions, teacher judgements, and decisions by taking into consideration theories of learning, understandings of students and their needs, and the backgrounds and interests of individual students. The standards are also aligned with the Commissioner's Teacher Standards in 19 TAC Chapter 149 of this title (relating to Commissioner's Rules Concerning Educator Standards).

Instructional Planning and Delivery	Early Childhood–Grade 6 classroom teachers demonstrate understanding of instructional planning and delivery by providing standards-based, data-driven, differentiated instruction that engages students and makes learning relevant for today's learners.
Knowledge of Student and Student Learning	Early Childhood–Grade 6 classroom teachers work to ensure high levels of learning, social-emotional development, and achievement outcomes for all students, taking into consideration each student's educational and developmental backgrounds and focusing on each student's needs.
Content Knowledge and Expertise	Early Childhood–Grade 6 classroom teachers exhibit an understanding of content, discipline, and related pedagogy as demonstrated through the quality of the design and execution of lessons and the ability to match objectives and activities to relevant state standards.
Learning Environment	Early Childhood–Grade 6 classroom teachers interact with students in respectful ways at all times, maintaining a physically and emotionally safe, supportive learning environment that is characterized by efficient and effective routines, clear expectations for student behavior, and organization that maximizes student learning.
Data-Driven Practices	Early Childhood–Grade 6 classroom teachers use formal and informal methods to assess student growth aligned to instructional goals and course objectives and regularly review and analyze multiple sources of data to measure student progress and adjust instructional strategies and content delivery as needed.
Professional Practices and Responsibilities	Early Childhood–Grade 6 classroom teachers consistently hold themselves to a high standard for individual development, collaborate with other educational professionals, communicate regularly with stakeholders, maintain professional relationships, comply with all campus and school district policies, and conduct themselves ethically and with integrity.

Domains and Competencies



The content covered by this exam is organized into broad areas of content called domains. Each domain covers one or more of the educator standards for this field. Within each domain, the content is further defined by a set of competencies. Each competency is composed of two major parts:

- The **competency statement**, which broadly defines what an entry-level educator in this field in Texas public schools should know and be able to do.
- The **descriptive statements**, which describe in greater detail the knowledge and skills eligible for testing.

Domain I—Child Development

Competency 001—(Foundations of Child Development): Understand foundational concepts of early childhood development from birth to age 8 and factors that influence student development.

For example:

A. Demonstrate knowledge of key theoretical foundations, curriculum and program models, and scientifically based research regarding the development and learning of students from birth to age 8 (e.g., Bruner, Piaget, and Vygotsky; Montessori, Reggio Emilia, constructivist, social-learning, and environmental theories) upon which developmentally appropriate practices in early childhood education are based.

B. Demonstrate knowledge of characteristics, progressions, and variations of development in the physical, cognitive, social, language, sensory, aesthetic, and emotional domains and of the interrelationships between these domains and student learning.

C. Demonstrate knowledge of exceptionalities, including common health conditions, and factors related to over-and underrepresentation of specific student populations in special education and gifted and talented programs and use this knowledge to promote child development, learning, social skills, and emotional resilience skills for all students.

D. Demonstrate knowledge of the specific needs of English learners (ELs) and of practices that build on home language systems to develop academic and social skills.

Competency 002—(The Early Learning Process): Understand the developmental processes and characteristics of learning of young children from birth to age 8.

For example:

A. Demonstrate knowledge of the learning processes of young children, including the multiple functions, value, and role of play in constructing knowledge, building social skills and relationships, and developing problem-solving skills.

B. Demonstrate knowledge of the continuum of teaching strategies for promoting learning—from child-initiated activities to adult-guided instruction; methods to capitalize on incidental and spontaneous opportunities for teaching; and ways to use the environment, daily routines, and interactions to support learning and development (e.g., developmentally appropriate homework practices).

C. Demonstrate knowledge of the influence of stress and trauma, protective factors, resilience, and supportive relationships on the cognitive and emotional development of young children.

D. Demonstrate knowledge of risk factors impacting mental health in young children, including identifying behaviors that signify the need to intervene and/or engage in collaboration with others in order to provide responsive and developmentally appropriate intervention and support.

E. Demonstrate knowledge of methods for identifying students' readiness for learning and understand how development in one area may affect students' learning and performance in other areas.

F. Demonstrate knowledge of the roles of parents/guardians as primary caregivers and informal teachers of children, including factors in the home and community that may affect children's development and learning.

Competency 003—(Family Engagement): Understand the role and importance of the family in supporting the learning and development of young children from prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of how to create meaningful, respectful, and reciprocal relationships for families and how to use family-centered strategies to promote effective, ongoing communication and involvement with families to support young children's learning and social skills and emotional development.

B. Apply knowledge of skills and strategies for working collaboratively and effectively with families, including families with linguistically and culturally diverse backgrounds, and of how to build positive relationships by advocating for families and by respecting and valuing families' preferences and goals.

C. Demonstrate knowledge of evidence-based practices that support families in meeting their children's learning benchmarks and provide families with tools to enhance and extend children's learning at home (e.g., home visits by teachers and school staff, consistent in-person and written communication on student progress).

Domain II—The Instructional Setting

Competency 004—(Social Skills, Emotional Development, and Behavior Support): Understand how to create positive environments and relationships that help develop interpersonal skills, autonomy, and initiative to explore and learn in young children from prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of factors related to the development of executive function and self-regulation skills in young children, including motivation, autonomy, and decision-making and self-help skills.

B. Apply knowledge of strategies and principles for teaching and using problem-solving and conflict resolution skills and for providing individual and schoolwide positive behavioral interventions and supports (PBIS), including monitoring the effectiveness of PBIS, as well as making modifications and adaptations to interventions as needed.

C. Demonstrate knowledge of developmentally appropriate and effective individual and group management strategies, including best practices for teaching and supporting young children with additional behavioral needs and factors contributing to equitable and inequitable responses to behavior.

D. Demonstrate knowledge of the role of positive relationships and supportive interactions as a crucial foundation for teaching, and in developing social skills and emotional resilience, with a focus on children's individual strengths, needs, and interests.

E. Demonstrate knowledge of the relationships between communication, behavior, and learning, as well as the ability to use developmentally appropriate and culturally responsive positive behavior strategies, conflict resolution skills, and instructional methods to manage classroom behavior.

Competency 005—(The Instructional Setting): Understand how to create positive learning environments that promote the development and learning of young children in prekindergarten to grade 3.

For example:

A. Apply knowledge of strategies for structuring the physical environment and selecting appropriate learning curricula, materials, and technologies to promote active participation and independence in young children.

B. Apply knowledge of practices for creating and adapting safe indoor and outdoor learning environments that encourage active involvement, initiative, responsibility, and a growing sense of autonomy in young children.

C. Apply knowledge of the use of schedules, routines, and effective transitions to support children's emotional development, effectively manage instructional activities, and promote children's sense of security and independence.

D. Apply knowledge of methods for creating a physical environment and instructional procedures that are linguistically and culturally responsive and meet the needs of all young children, including those with exceptionalities (e.g., disabilities, gifts, talents) and English learners (ELs).

E. Demonstrate knowledge of practices and procedures for effectively planning and managing flexible student groupings, including pairings, individualized, and small-group instruction, to facilitate learning.

F. Demonstrate knowledge of activities, practices, materials, and technology to support the integration of oral, written, graphic, kinesthetic, and tactile methods into the teaching of key concepts and vocabulary and to assess student learning.

Domain III—Educating All Learners

Competency 006—(Differentiation Strategies in Planning and Practice): Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of the principles of universal design for learning (UDL) and how to apply UDL guidelines to incorporate the flexibility necessary to maximize learning opportunities for all students.

B. Apply knowledge of effective methods for fostering students' active participation and individual academic success in one-to-one, small-group, and large-group settings and for facilitating students' inclusion in various settings (e.g., academic, social).

C. Apply knowledge of activities and instruction that build on students' individual interests, primary language, experiences, and prior knowledge; respond to students' strengths and needs; and promote the development of prerequisite skills and positive dispositions toward learning in the content areas.

D. Demonstrate knowledge of how and when to adjust and scaffold instruction, instructional activities, and assessment in response to various types of feedback from young children.

E. Demonstrate knowledge of how to identify, select, and implement appropriate and effective accommodations for students with 504 plans or Individualized Education Programs (IEPs), including collaborating with other professionals to meet the needs of all students.

F. Demonstrate knowledge of the various categories of disabilities as outlined in the Individuals with Disabilities Education Act (IDEA), including Child Find obligations and educational implications specific to young children with unique learning differences (e.g., developmental delays, autism spectrum disorder, dyslexia, intellectual disabilities).

Competency 007—(Culturally Responsive Practices): Understand how to identify and implement culturally responsive, developmentally appropriate practices to effectively teach and engage young children from prekindergarten to grade 3 across all content areas.

For example:

A. Demonstrate knowledge of strategies and practices that acknowledge and respect diversity (e.g., cultural, economic, linguistic) and support inclusion in order to promote students' overall development and learning, including understanding of the benefits of primary and secondary languages and bilingualism to learning.

B. Recognize the role personal bias plays in potential learning expectations for students in order to promote safe, positive, and supportive interactions and learning environments for all students.

C. Demonstrate knowledge of activities, approaches, and resources that encourage and support exploration and engagement and promote a positive disposition toward learning for all students.

D. Demonstrate understanding of the role of language and culture in learning, as well as how to modify instruction to support language acquisition to ensure that both language and instruction are accessible across the content areas.

E. Demonstrate knowledge of ways to work collaboratively with parents/guardians, teachers, school and community service providers, and students to support all students, including but not limited to English learners (ELs), and programs such as ESL, bilingual, and dual language.

F. Demonstrate knowledge of ways to work collaboratively with teachers, related service providers, parents/guardians, and students to effectively support the implementation of an Individualized Education Program (IEP) and instructional accommodations and strategies.

Domain IV—Data-Driven Practice and Formal/Informal Assessment

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of the various purposes of the use of developmentally appropriate assessment for evaluating young students across domains.

B. Apply knowledge of basic assessment terminology and of types, characteristics, uses, and limitations of formal, informal, and alternative assessments (e.g., developmental screenings, formative and summative assessments, observations, portfolios, state-mandated assessments, types of assessment accommodations, curriculum-based measures).

C. Apply knowledge of ways to develop and select developmentally appropriate assessments and assessment strategies (e.g., use of TEA resources such as formative assessment banks), ensure that assessments are aligned to instructional objectives and outcomes, and use assessment results to inform instruction and measure student progress throughout the content areas.

D. Apply knowledge of considerations and strategies for effectively administering assessments and documenting assessment outcomes.

E. Recognize legal and ethical issues related to assessment, responsible assessment practices, and confidentiality.

Competency 009—(Progress Monitoring and Data-Driven Instructional Practice): Understand how to design, implement, and evaluate learning experiences and instruction in order to promote development and learning of all students in prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of the foundational elements of Response to Intervention (RtI) and the ability to apply this knowledge to differentiate tiered instruction for all students based on data.

B. Interpret and use information from formal and informal assessments, including the use of multiple measures of assessment, to inform decisions and plan and evaluate student learning.

C. Interpret assessment results to enhance knowledge of students; evaluate and monitor development, learning, and progress; establish goals; and plan, differentiate, and continuously adjust learning activities and environments for individuals and groups.

D. Demonstrate knowledge of a variety of types of systematic observation and documentation (e.g., anecdotal notes, checklists, data collection) and the ability to use these processes and procedures to gain insight into students' development, strengths, needs, and learning.

Domain V—Learning Across the Curriculum

Competency 010—(English Language Arts and Social Studies): Understand the foundational principles, concepts, and methods in English language arts and social studies to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of the Emergent Literacy – Writing domain of the *Texas Prekindergarten Guidelines* and of the Texas Essential Knowledge and Skills (TEKS) for English Language Arts and Reading (ELAR) (Kindergarten through Grade 5), including the development of the writing process (i.e., §110.2:10 and §110.3– 7:11), as well as ways to scaffold and sequence skills and concepts to teach writing to young children.

B. Apply knowledge of developmentally appropriate strategies for fostering students' ability to listen and speak for various purposes (e.g., expressing needs, interacting with others, responding to experiences, developing concepts).

C. Demonstrate knowledge of strategies and technology for developing and reinforcing young children's language acquisition (e.g., oral language, listening comprehension, expressive and receptive vocabulary, pragmatic language skills).

D. Apply knowledge of strategies and activities for infusing opportunities for purposeful, child-oriented, meaningful language and communication into all areas of the curriculum (e.g., purposeful conversations, dramatic play, word games, storytelling, songs, poetry, questioning).

E. Demonstrate knowledge of the developmental stages in children's acquisition of writing skills (e.g., scribbling, mock letters, letter formation, invented spelling) and of different ways that individual students may vary in their rates of acquiring these stages.

F. Apply knowledge of effective instructional strategies, materials, and activities for supporting explicit spelling instruction at various stages of a student's development and within the context of meaningful written expression.

G. Apply knowledge of instructional strategies, materials, and developmentally appropriate activities for teaching students English writing conventions (e.g., grammar, capitalization, punctuation).

H. Apply knowledge of how to teach and develop students' writing through planning, drafting, revision, editing, rewriting, and publishing.

I. Demonstrate knowledge of the Social Studies domain of the *Texas Prekindergarten Guidelines* and of the Texas Essential Knowledge and Skills (TEKS) for Social Studies (Kindergarten through Grade 5), as well as ways to scaffold and sequence skills and concepts to teach social studies to young children.

J. Apply knowledge of developmentally appropriate strategies and activities for teaching major concepts and processes of geography, including features of students' immediate environment, characteristics of major human and physical features of Texas, and how people adapt and live in the physical environment.

K. Apply knowledge of developmentally appropriate strategies and activities for developing students' understanding of the purpose of government and the key concepts of the Declaration of Independence, the U.S. Constitution and the Bill of Rights, and the beliefs and ideals of a democratic republican form of government (e.g., the rule of law, equality, human dignity).

L. Apply knowledge of developmentally appropriate strategies and activities for teaching basic concepts of economics, including scarcity, opportunity costs, markets, factors of production, and trade, as well as how these concepts relate to everyday life.

Competency 011—(Mathematics): Understand foundational principles, concepts, and methods in mathematics to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of the Mathematics domain of the *Texas Prekindergarten Guidelines* and the Texas Essential Knowledge and Skills (TEKS) for Mathematics (Kindergarten through Grade 5), as well as ways to scaffold and sequence skills and concepts to teach mathematics to young children.

B. Demonstrate knowledge of foundational characteristics and processes in children's mathematical development, including elements of mathematical understanding (e.g., conservation, one-to-one correspondence, counting, cardinality), and indicators that a student may be experiencing difficulties or demonstrating advanced abilities in mathematics.

C. Apply knowledge of developmentally appropriate strategies and activities, including the progression of conceptual to procedural understanding specific to areas of mathematical content (e.g., number sense, numeracy, whole-number operations, geometry, spatial sense, fractions, algebraic reasoning), and mathematical language for developing children's knowledge and skills in these areas through a variety of meaningful, authentic learning experiences and real-world applications.

D. Demonstrate knowledge of instructional resources, tools, and materials, including manipulatives, children's literature, and technology for teaching mathematics.

E. Apply knowledge of ways to build on children's interests by creating meaningful opportunities and experiences that promote the development of students' conceptual understanding and mathematical thinking, including incorporating play and manipulatives into daily activities.

F. Apply knowledge of teaching practices that enhance children's mathematical problem solving and reasoning and promote their ability to represent, communicate, and connect mathematical ideas in their everyday lives.

G. Apply knowledge of developmentally appropriate strategies for encouraging students to view themselves as competent mathematical thinkers and activities for promoting students' ability to think and communicate mathematically.

H. Apply knowledge of approaches for integrating mathematical content with other areas of the curriculum and with everyday activities, including written expression.

I. Demonstrate knowledge of ways to foster collaboration with families and with other professionals to promote and encourage all students' development of mathematical thinking and numeracy.

J. Demonstrate knowledge of developmentally appropriate activities for teaching mathematical language, vocabulary, and key concepts specific to financial literacy.

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of the Science domain of the *Texas Prekindergarten Guidelines* and of the Texas Essential Knowledge and Skills (TEKS) for Science (Kindergarten through Grade 5), as well as ways to scaffold and sequence skills and concepts to teach science to young children.

B. Apply knowledge of how to plan and implement inquiry-based science lessons that are responsive to children's diverse interests, knowledge, skills, and experiences and that promote children's development of scientific knowledge, inquiry, and skills.

C. Demonstrate knowledge of developmentally appropriate strategies for encouraging children to explore and make discoveries about their world (e.g., exploratory play, using senses, using simple tools or technology to gain information about environment, incorporating children's literature, making predictions and/or drawing conclusions on the basis of observation).

D. Demonstrate knowledge of instructional resources, tools and materials, including technology, for teaching science and procedures for ensuring the proper use of safety equipment and safe practices during classroom science activities.

E. Apply knowledge of key concepts of physical science, Earth and space science, and life science to select strategies and methods for developing children's knowledge and skills in these areas through a variety of developmentally appropriate, meaningful, authentic learning experiences and real-world applications.

F. Apply knowledge of developmentally appropriate strategies for encouraging students to view themselves as competent scientific explorers and activities for promoting students' ability to think and communicate scientific knowledge through written expression (e.g., providing opportunities to observe and describe objects and phenomena; engaging in simple investigation; applying skills such as collecting, classifying, and interpreting data; recognizing patterns and drawing conclusions).

G. Demonstrate knowledge of developmentally appropriate strategies and procedures for implementing scientific inquiry methods in classroom laboratory and outdoor investigations, including understanding and applying terminology common to scientific investigations.

H. Demonstrate knowledge of types of digital tools and resources and strategies for using them to enhance teaching effectiveness, create learning experiences that facilitate creativity, and promote student achievement across the content areas.

I. Demonstrate knowledge of developmentally appropriate digital tools and resources and strategies to help children explore real-world issues, solve authentic problems, develop global awareness, participate in local and global learning communities, and develop the ability to pursue and manage their own learning, while understanding safety and privacy risks.

Competency 013—(Fine Arts, Physical Education, and Health): Understand foundational skills, concepts, and methods to provide developmentally appropriate instruction for fine arts, physical education, and health to students in prekindergarten to grade 3.

For example:

A. Demonstrate knowledge of the Fine Arts domain of the *Texas Prekindergarten Guidelines* and of the Texas Essential Knowledge and Skills (TEKS) for Fine Arts (Art, Music, and Theatre) (Kindergarten through Grade 5), as well as ways to scaffold and sequence skills and concepts to teach fine arts to young children.

B. Apply knowledge of developmentally appropriate strategies and meaningful activities, including children's literature, for promoting children's creativity, knowledge, and skills in visual arts, music, creative movement, dance, and theatre.

C. Apply knowledge of how to use the fine arts to help children achieve desired outcomes in various developmental domains (e.g., with regard to individual expression and motor skill development, language development, written expression, expressing feelings, awareness of the body, acknowledging one's own and others' cultures).

D. Demonstrate knowledge of methods for selecting and using technology resources to teach students strategies for creating, selecting, viewing, and sharing visual art, music, dance, and theatre.

E. Demonstrate knowledge of the Physical Development and Health domain of the *Texas Prekindergarten Guidelines*, the Texas Essential Knowledge and Skills (TEKS) for Physical Education (Kindergarten through Grade 5), and the Texas Essential Knowledge and Skills (TEKS) for Health Education (Kindergarten through Grade 5), as well as ways to scaffold and sequence skills and concepts to teach physical education and health to young children.

F. Demonstrate knowledge of the development of physical skills (e.g., fine- and gross-motor skills, locomotor skills, nonlocomotor skills, perceptual awareness, object handling) and the instructional implications of children's varied levels of physical skills development.

G. Apply knowledge of the components of fitness (e.g., muscular strength, flexibility) and activities for promoting children's health and fitness, physical skills development, and enjoyment of physical activity.

H. Demonstrate knowledge of the principles of nutrition and the role of nutrition in children's fitness, health, development, and readiness for learning.

Domain VI—Analysis and Response

Competency 014—(Analysis and Response): In a written response, analyze and interpret qualitative and quantitative data to identify a given student's strengths and needs and design developmentally appropriate instruction.

For example:

A. Demonstrate the ability to analyze and interpret formative and summative observational and assessment data for a given student in order to select and accurately describe a significant strength or need that the student demonstrates related to a foundational English language arts, mathematics, or science skill or objective.

B. Demonstrate the ability to select and accurately describe a developmentally appropriate, effective instructional strategy, intervention, or enrichment to build on a student's identified strength or address a student's identified need in the foundational English language arts, mathematics, or science skill or objective.

C. Using sound reasoning and knowledge of foundational English language arts, mathematics, or science skills, demonstrate the ability to explain the effectiveness of the selected instructional strategy, intervention, or enrichment to build on a student's identified strength and/or address a student's identified need.

D. Demonstrate the ability to select and accurately describe a developmentally appropriate method of informal assessment to effectively monitor the student's progress toward the identified learning skill or objective.

E. Demonstrate the ability to explain how the specific learning skill or objective in foundational English language arts, mathematics, or science can be integrated in other areas of the curriculum to support the generalization or enrichment of the identified learning skill or objective.

Section 4: Sample Selected-Response Questions Early Childhood: PK–3 (292)

This section presents some sample exam questions for you to review as part of your preparation for the exam. To demonstrate how each competency may be assessed, sample questions are accompanied by the competency that they measure. While studying, you may wish to read the competency before and after you consider each sample question. Please note that the competency statements do not appear on the actual exam.

The sample questions are included to illustrate the formats and types of questions you will see on the exam; however, your performance on the sample questions should not be viewed as a predictor of your performance on the actual exam.

Selected-Response Questions with Rationales

Each sample exam question here includes the correct answer and a rationale for each answer option.

Domain I—Child Development

Competency 001—(Foundations of Child Development): Understand foundational concepts of early childhood development from birth to age 8 and factors that influence student development.

1. Kindergarten students have been creating shapes using colorful rubber bands and geoboards. Which of the following instructional activities would promote students' progress with cognitive concepts relating to shapes?

   A. displaying geoboards in the classroom and encouraging students to explain their understandings of shapes

   B. presenting an example of an intricate shape to the students using precise vocabulary terms

   C. comparing students' geoboards during circle time based on characteristics of shapes

   D. providing ongoing shape exploration with additional materials for students to use independently

Answer _____

2. A prekindergarten teacher is using a shared reading strategy with a three-year-old child who demonstrates an expressive language delay. As the child becomes more responsive to answering knowledge-level questions, which of the following practices should the teacher add to the strategy?

   A. playing audiobooks for the child and then asking the child questions about the books to determine listening comprehension skills

   B. developing the child's precise vocabulary by encouraging the child to repeat words illustrated on flash cards

   C. engaging the child with interactive software designed to develop semantic knowledge and practice age-appropriate syntax

   D. promoting dialogue with the child through open-ended questions that relate to areas of the child's interests during read-alouds

Answer _____

Competency 002—(The Early Learning Process): Understand the developmental processes and characteristics of learning of young children from birth to age 8.

3. A four-year-old child is building towers using wooden blocks of different shapes and colors. The yellow blocks are long and wide and the green blocks are short and narrow. The child builds a tower made with yellow blocks at the bottom and green blocks on the top and says, "Look, my tower is so tall, and the green blocks are all on top!" The teacher responds, "Wow, your tower is so straight and tall! What do you think would happen if you make another tower using the green blocks on the bottom this time?" This scenario demonstrates the teacher's awareness of how incidental learning experiences can be used to:

A. deepen children's knowledge through exploration and hypothesis testing.

B. establish trust by responding to children's appropriate expression of needs.

C. evaluate children's ability to develop hypothesis and prediction skills.

D. facilitate activities that promote children's ability to sustain attention to tasks.

Answer _____

4. Which of the following scenarios exemplifies a situation in which a child's separation anxiety behaviors signify the need to intervene and provide a developmentally appropriate response and support?

A. a four-year-old hides behind her parent's/guardian's leg at prekindergarten drop-off while waiting for the teacher to greet her

B. a five-year-old repeatedly bites his nails and appears quiet at the start of the kindergarten school year

C. a seven-year-old pleads for his father to stay with him in his first-grade classroom and complains of stomachaches daily at school

D. an eight-year-old prefers to work alone rather than in small groups in her second-grade classroom

Answer _____

Competency 003—(Family Engagement): Understand the role and importance of the family in supporting the learning and development of young children from prekindergarten to grade 3.

5. A kindergarten teacher is preparing for the first conferences of the school year. The teacher plans to provide parents/guardians with an overview of the grade-level Texas Essential Knowledge and Skills (TEKS) and information about classroom procedures and schoolwide expectations. Which of the following additional actions by the teacher would best support the teacher in developing a positive relationship with families?

A. ensuring that parents/guardians understand the best way to schedule a meeting with the teacher

B. reminding parents/guardians of their specific responsibilities to support their children's learning

C. encouraging parents/guardians to share insights that would help the teacher promote their children's learning

D. providing parents/guardians with examples of research to support the teacher's instructional approaches

Answer _____

6. The parents/guardians of incoming prekindergarten children are provided with handbooks to support their understanding of what the children will learn each school year. An excerpt of the handbook is shown below.

Understanding What Your Child Will Learn in Prekindergarten—Three-Year-Olds
Reading and Literacy
Listening Goals: • Follow two- or three-step directions during activities, playing, or cleaning up. • Have short conversations with expected words and phrases.
Reading Goals: • Enjoy being read to and exploring books. • Name familiar characters or events from books.
Writing Goals: • Make scribbles, line marks, and letter-like forms when asked to write.

Which of the following principles does the practice of providing these handbooks most effectively promote?

A. developing parents'/guardians' knowledge of how teachers accommodate individual children's learning needs

B. engaging parents/guardians in understanding the expectations for their children's academic development

C. ensuring parents'/guardians' acceptance of what the school believes is best for their children's learning

D. supporting parents'/guardians' involvement in decision making for the school's academic curriculum

Answer _____

Domain II—The Instructional Setting

Competency 004—(Social Skills, Emotional Development, and Behavior Support): Understand how to create positive environments and relationships that help develop interpersonal skills, autonomy, and initiative to explore and learn in young children from prekindergarten to grade 3.

7. Considering the developmental stages of brain growth and cognitive development of young children, which of the following teacher activities would most effectively promote development of executive function in four-year-olds?

A. providing children with challenging puzzles and riddles that foster thinking skills in mathematics

B. modeling organizational routines for children and practicing these routines with them often

C. asking children to choose their favorite game in the classroom and during outdoor play

D. allowing children to spend most of the prekindergarten day participating in self-directed activities

Answer _____

8. A third-grade teacher notices that a few students who are highly motivated during science instruction appear disinterested when learning social studies content. The teacher could best use developmentally responsive strategies to promote the students' participation in social studies in which of the following ways?

A. providing opportunities to develop study skills tailored to support students' achievement in social studies
B. defining social studies learning outcomes to be more qualitative, including interactive features for students to study topics independently
C. creating cross-curricular learning modules for students designed to support connections to social studies
D. setting a predetermined time requirement for students to complete work during social studies to earn an incentive

Answer _____

Competency 005—(The Instructional Setting): Understand how to create positive learning environments that promote the development and learning of young children in prekindergarten to grade 3.

9. A first-grade teacher notices that a number of students have been frequently off-task and demonstrating difficulty completing projects in learning center environments within the classroom. The teacher would like to increase student engagement during these activities. After determining that the center activities do not align with student interests, which of the following approaches should the teacher take *first* to promote this goal?

A. creating a separate work area of the classroom where students who cannot finish projects during center time can work
B. providing opportunities for student choice in assignments and learning materials within the centers
C. encouraging students to partner with classmates with whom they enjoy working during center activities
D. implementing direct whole-group instruction instead of center activities until students demonstrate focused learning

Answer _____

10. A second-grade teacher notices that at certain times of the day, students in the class become easily distracted and display outbursts of excitable energy. Which of the following supports would be most appropriate to address the needs of the students?

A. dividing the class into small groups and assigning students independent group work projects
B. incorporating learning opportunities for students that promote purposeful and vigorous movement
C. playing soothing music for students and allowing them to take a short break to rest
D. providing rewards of extra recess for students who are able to focus on their work

Answer _____

Domain III—Educating All Learners

Competency 006—(Differentiation Strategies in Planning and Practice)—Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

11. A second-grade teacher is planning an end-of-unit assessment. The teacher has a goal of incorporating universal design for learning (UDL) principles throughout the unit's lesson design and assessments. Which of the following strategies would be the most effective application of UDL for the teacher to use to assess student knowledge?

A. pairing students and having them cooperate on a take-home written assessment
B. allowing students to choose from a list of project activities that allow for a variety of means of expression
C. creating a class game that allows students to demonstrate their knowledge by answering questions orally
D. designing a short-answer assessment that students can complete at any point within a set time period

Answer _____

12. A kindergarten teacher observes a student investigating the balance scales in the simple machines learning center. The teacher watches as the student adds the entire collection of pennies to one side of the balance scale, where the full pan is already resting on the tabletop. The teacher says, "When you added pennies to the full side, it stayed down. I wonder about the other side. What can you do to the empty side to make it go down?" The teacher's interaction with the student is an example of which of the following techniques?

A. explaining the scientific method
B. scaffolding conceptual understanding
C. facilitating interdisciplinary content connections
D. differentiating learning experiences

Answer _____

Competency 007—(Culturally Responsive Practices)—Understand how to identify and implement culturally responsive, developmentally appropriate practices to effectively teach and engage young children from prekindergarten to grade 3 across all content areas.

13. A third-grade teacher considers practices to use during the first week of school that will foster the students' sense of a culturally inclusive classroom. Which of the following practices would best support the teacher's goal?

A. adapting classroom lessons based on students' preferred learning styles
B. asking students to bring in an item that represents their cultural background
C. creating activities that encourage students to share interest in the cultural backgrounds of peers
D. emphasizing relatable books from a variety of cultural perspectives in the classroom library that students may select

Answer _____

Domain IV—Data-Driven Practice and Formal/Informal Assessment

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

14. **Use the excerpts below to answer the question that follows.**

National Oral Reading Fluency Norms

Grade	Percentile	Winter WCPM	Spring WCPM
1	90	81	111
	75	47	82
	50	23	53
	25	12	28
	10	6	15
Key: Words Correct Per Minute = WCPM			

Classroom Teacher's Progress-Monitoring Data

Student: WW Grade: 1			
Concern addressed with progress monitoring: Reading Fluency			
Intervention: Timed repeated readings on Mondays, Wednesdays, and Fridays. Record progress data on Fridays.			
Goal: 53 words correct per minute (WCPM)			Assessment: Oral Reading Fluency weekly
Monday	Wednesday	Friday	Data (WCPM)
3/2	3/4	3/6	34 WCPM
3/9	3/11	3/13	36 WCPM
3/16	3/18	3/20	40 WCPM
3/23	3/25 (absent)	3/27	40 WCPM

Which of the following statements best describes the intervention for student WW?

A. The goal for WW's intervention is set too high considering the student's grade and time of year.

B. The intervention is not working and the teacher needs to try a different intervention.

C. The intervention appears to be working and should be continued.

D. WW falls into the 50th percentile of students in the same grade; therefore, no intervention is needed.

Answer _____

Competency 009—(Progress Monitoring and Data-Driven Instructional Practice): Understand how to design, implement, and evaluate learning experiences and instruction in order to promote development and learning of all students in prekindergarten to grade 3.

15. A second-grade teacher plans to embed developmentally appropriate activities into classroom routines to support students' application of skills in capitalization and punctuation. Which of the following approaches would be most effective for this purpose?

A. asking students to identify and correct omitted punctuation and capitalization errors in morning messages and discussing the findings as a group

B. encouraging students to include appropriate capitalization and punctuation during freewriting time

C. creating opportunities for students to engage with peers to share the importance of using accurate capitalization and punctuation

D. developing assignments for students to edit peers' writing for capitalization and punctuation and provide corrections as needed

Answer _____

Domain V—Learning Across the Curriculum

Competency 010—(English Language Arts and Social Studies): Understand the foundational principles, concepts, and methods in English language arts and social studies to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

16. A third-grade teacher assigns students several newspaper articles to read that have differing opinions about a proposal to build a new park in the community. After reading the articles, students work in small groups to complete a T-chart listing the pros and cons of building the park. Each group then presents its results to the class. This activity is likely to be most effective in helping develop the students':

A. ability to comprehend and analyze key information found in their reading.

B. knowledge of the appropriate use of metacognitive strategies.

C. understanding of inferential questioning to expand their knowledge.

D. recall of key events and vocabulary presented in content-area readings.

Answer _____

17. A first-grade teacher supports students' language development by regularly modeling storytelling. For example, the teacher tells the following brief story to students as part of introducing a science unit on living things.

> "First, I dug a very small hole and put a sunflower seed in it. Next, I covered the seed with dirt and gently watered it. For the past five days I have gone outside to check to see whether the seed has sprouted, and all I have seen is a dirt mound! And guess what? This morning, when I went to check on it, I finally saw a tiny sprout coming through the dirt. I was elated!"

In addition to modeling storytelling, the teacher provides students with opportunities to tell their own stories. The teacher's use of these storytelling strategies best exemplifies which of the following approaches to supporting students' language development?

A. infusing meaningful communication with students into multiple areas of the curriculum

B. demonstrating developmentally appropriate use of figurative language for students

C. teaching students explicit linguistic functions and form

D. instructing students on the use of academic language in whole-class discussions

Answer _____

Competency 011—(Mathematics): Understand foundational principles, concepts, and methods in mathematics to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

18. A kindergarten student recognizes that five pencils represent the same quantity as five desks, even though desks are much larger and heavier than pencils. The knowledge of this fundamental mathematical concept demonstrates that the student:

A. can determine the approximate values of numbers from one to ten.

B. has acquired an understanding of conservation.

C. is able to demonstrate the concept of subitizing.

D. will understand the relationship between numerals and ordinal numbers.

Answer _____

19. A third-grade math teacher collects the following data from 20 students after a mathematics quiz. The teacher plans to adjust instruction as needed based in part on these results.

Results from Quiz on Adding and Subtracting Fractions

Problem	Solution 1 (correct)	Number of Students with Solution 1 Response	Solution 2 (incorrect)	Number of Students with Solution 2 Response	Solution 3 (incorrect)	Number of Students with Solution 3 Response
$\frac{1}{3}+\frac{4}{3}$	$=\frac{5}{3}$ (or $1\frac{2}{3}$)	7	$=\frac{5}{6}$	11	$=\frac{5}{0}$	2
$\frac{3}{5}-\frac{1}{2}$	$=\frac{1}{10}$	3	$=\frac{2}{3}$	12	$=\frac{4}{7}$	5
$\frac{4}{5}+\frac{4}{10}$	$=\frac{12}{10}$ (or $\frac{6}{5}$ or $1\frac{2}{10}$ or $1\frac{1}{5}$)	4	$=\frac{8}{15}$	11	$=\frac{8}{10}$	5

These results show that the teacher should address students' misconceptions related to which of the following errors?

A. changing the denominator of a mixed fraction and keeping the numerator the same

B. using the largest denominator in the answer when fractions have different denominators

C. treating numerators and denominators as separate whole numbers

D. applying the invert-and-multiply procedure to fractions with different denominators

Answer _____

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

20. Teachers in the early elementary grades can best promote students' use of digital technology as tools for learning by emphasizing which of the following approaches?

A. providing students with instruction in basic digital technology skills such as keyboarding

B. integrating a variety of lessons for students linked to curriculum topics that can be supported using technology applications as appropriate and that promote attainment of the learning goal

C. assigning every student a specific learning task that must be completed using digital technology and requesting that proficient students provide assistance to students experiencing difficulty with the task

D. creating bookmarks on classroom digital technology that students can use to access approved online games

Answer _____

21. **Use the third-grade student science center activity sheet below to answer the question that follows.**

Science Center Activity Sheet

Texas Essential Knowledge and Skills (TEKS):

§112.14. Science, Grade 3

(2) Scientific investigation and reasoning. The student uses scientific practices during laboratory and outdoor investigations. The student is expected to:

A. plan and implement descriptive investigations, including asking and answering questions, making inferences, and selecting and using equipment or technology needed, to solve a specific problem in the natural world;

B. collect and record data by observing and measuring using the metric system and recognize differences between observed and measured data.

Materials: magnifying glasses, balance scales, flashlights, bowl of eggs, bowl of water, pencils, activity sheets

Directions: There are hard-boiled and raw eggs in the bowl. Taking care not to break the eggs, answer the following questions in your science notebook.

1. Do the eggs all look alike?
2. What other factors are similar?
3. What are some characteristics that are different?

Which of the following phases of the 5-E plan is implemented at the science center?

A. Exploration
B. Explanation
C. Elaboration
D. Evaluation

Answer _____

Competency 013—(Fine Arts, Physical Education, and Health): Understand foundational skills, concepts, and methods to provide developmentally appropriate instruction for fine arts, physical education, and health to students in prekindergarten to grade 3.

22. A prekindergarten teacher presents various flowers for children to explore. Following their observations, the children are given art materials, including markers, construction paper, cotton balls, pipe cleaners, and tissue paper, to design their own creation. Which of the following concepts from the *Fine Arts Texas Prekindergarten Guidelines* is best exemplified by the activity?

A. teaching children to notice the similarities and differences of objects in the environment and replicating the objects in their creations
B. encouraging children to focus on the process of creating rather than the product that is created
C. providing children with high-quality art materials to promote higher-order thinking skills
D. supporting children in understanding the principles of design (e.g., repetition, balance) in their artwork

Answer _____

Clustered Questions

Use the information below to answer the two questions that follow.

A prekindergarten teacher assesses children's social skills while observing their interactions during play activities by using the teacher-developed rating scale shown below.

Teacher Rating Scale—Social Skills

Child: Lena			
Prekindergarten Guideline	**Target Skills**	**September: Child's Age: 3 years, 3 months**	**December: Child's Age: 3 years, 6 months**
Key: E = Emerging, D = Developed		Skill Level:	Skill Level:

		E	D	E	D
Relationship with Others: I.C.I. Child increasingly interacts and communicates with peers to initiate pretend-play scenarios that share a common plan and goal.	Plays with two or three children in a group	✓			✓
	Takes turns while playing	✓			✓
	Negotiates with peers during play routines	✓		✓	
	Acts out pretend play with others	✓			✓
	Plays more than one role		✓		✓
	Acts out roles/themes that are less familiar (e.g., firefighter, veterinarian)	✓			✓

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

23. The teacher's assessment method is effective for which of the following purposes?

A. measuring children's abilities within an authentic context using a tool that aligns with learning standards
B. collecting specific data on children's abilities across a variety of content areas
C. quantifying children's abilities and progress toward developmental milestones
D. comparing children's abilities to same-aged peers using norm-referenced developmental criteria

Answer _____

Competency 009—(Progress Monitoring and Data-Driven Instructional Practice): Understand how to design, implement, and evaluate learning experiences and instruction in order to promote development and learning of all students in prekindergarten to grade 3.

24. After analyzing the data, which of the following instructional strategies should the teacher implement to most effectively promote Lena's social development?

A. telling Lena to let other children go first and to take turns using classroom materials
B. modeling appropriate interactions for Lena while interacting with other children
C. leading discussions about friendships with Lena centered on children's literature
D. asking Lena to emulate children in the class who are working together productively

Answer _____

Additional Selected-Response Questions

This section includes additional sample selected-response questions for you to review in preparation for the exam. The correct answer is provided for each question below.

Domain I—Child Development

Competency 001—(Foundations of Child Development): Understand foundational concepts of early childhood development from birth to age 8 and factors that influence student development.

25. Research suggests a strong correlation between effective, direct instruction in key components of reading and the development of literacy skills by English learners (ELs). Which of the following additional instructional strategies would be most effective for promoting the development of English vocabulary skills for ELs?

A. following loosely structured lesson formats that allow more time to process English
B. modeling how to use a digital English language dictionary
C. using English exclusively to describe common actions when introducing new concepts
D. providing frequent opportunities for the use of academic and social English in the classroom

Answer _____

26. A prekindergarten teacher plans to support the development of children's language skills during group story time. The class includes children who are at a beginning level of speaking and understanding English. Which of the following actions should the teacher take to attend to the language needs of English learners (ELs) in the group?

A. calling on proficient English speakers to answer comprehension questions about the story
B. using nonverbal cues to support ELs, such as pointing to an object or an illustration, while reading the story
C. substituting synonyms for unfamiliar words during read-alouds to improve ELs' engagement with stories
D. avoiding reading aloud stories that include English vocabulary with which the ELs are not familiar

Answer _____

Competency 003—(Family Engagement): Understand the role and importance of the family in supporting the learning and development of young children from prekindergarten to grade 3.

27. A first-grade teacher uses a home survey to learn more about how students like to spend their time outside of school with their families. The teacher finds that students and their families value and appreciate a wide range of activities. The teacher could best use this information to support effective teaching of students from all families by taking which of the following approaches?

A. asking students and their families to learn about and develop interests in activities unfamiliar to them
B. requesting that members of each family visit during the school day to share interests with the class
C. grouping students from similar family backgrounds together for interactive play and activities
D. creating differentiated learning groups based on students' individual interests and strengths

Answer _____

Domain II—The Instructional Setting

Competency 004—(Social Skills, Emotional Development, and Behavior Support): Understand how to create positive environments and relationships that help develop interpersonal skills, autonomy, and initiative to explore and learn in young children from prekindergarten to grade 3.

28. Four-year-olds Jessie and Simone have been quietly engaged in a center activity for a short time when the prekindergarten teacher observes the following interaction.

> *Jessie:* (*Exasperated*) You have all the red cubes. I want some, too.
>
> *Simone:* I'm making a red fire truck. You don't need them.
>
> *Jessie:* It can have other colors, too. I want some red or I'm telling.
>
> *Simone:* (*Defiantly*) Go ahead, I don't care.

The teacher walks over to the children in the center area. Which of the following actions would be most effective for the teacher to use to resolve this conflict?

A. modeling active listening and relevant questioning to engage the children's participation in resolving the dispute equitably

B. enforcing zero-tolerance rules for arguing and disrupting others to discourage the children from escalating their behavior

C. providing the children with an alternative to this activity that is less desirable if they cannot resolve their dispute together

D. directing the children to stop the activity and observe other students who have learned how to cooperate in centers

Answer _____

29. Kindergarten students are in their classroom science center exploring and sorting rocks. The teacher notices that the students are demonstrating difficulty sharing space and materials. The teacher can best promote the development of students' interpersonal skills by which of the following methods?

A. redesigning the floor plan of the classroom centers to clearly delineate individual students' work spaces

B. grouping students within centers who have demonstrated success working together

C. pausing the activity to hold a discussion with the students about what the teacher has observed and to brainstorm solutions

D. giving students a signal at frequent intervals to stop activities and review expectations

Answer _____

Competency 005—(The Instructional Setting): Understand how to create positive learning environments that promote the development and learning of young children in prekindergarten to grade 3.

30. A third-grade teacher wants to provide options for equitable perception of information to all students in the class. Based on principles of universal design for learning (UDL), which of the following actions would be most effective for this purpose?

A. defining clear rules and high expectations for students' engagement and effort within the class

B. building opportunities for student collaboration and partner work into the daily schedule

C. focusing on individual student choice and autonomy in classroom lessons and activities

D. providing students with multiple visual, auditory, and physical examples of curricular materials

Answer _____

31. A third-grade teacher has a goal of improving students' ability to transition successfully between activities. The teacher provides advance warning by ringing a bell at five minutes and at two minutes prior to the end of each activity. Which of the following statements best explains the rationale for the teacher's use of this strategy?

A. This practice generally benefits only students who have difficulty with transitions.

B. The teacher has established intervals of time to provide students with direct help in cleaning up.

C. The teacher can observe transitions without having to verbally engage with the students.

D. The practice provides a structure to transitions that can be scaffolded to students' needs.

Answer _____

Domain III—Educating All Learners

Competency 006—(Differentiation Strategies in Planning and Practice): Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

32. At the beginning of the school year, a third-grade teacher designs the layout of the classroom. The teacher considers incorporating a principle of universal design for learning (UDL) into the arrangement of the classroom, such as the placement of students' desks and chairs, work tables, and shelving units. Which of the following would be the most appropriate way for the teacher to incorporate a principle of UDL into the classroom layout?

A. establishing flexible work spaces for students (e.g., places for individual and group work, quiet places)

B. minimizing clutter to maintain an orderly and organized classroom

C. storing work materials (e.g., pencils, notebooks) in areas of the classroom that are easily accessible

D. creating ample space between rows of desks for students to briefly move around in and stretch during class transitions

Answer _____

33. Under the Individuals with Disabilities Education Act (IDEA), Child Find obligations primarily affect young children in which of the following ways?

A. building continuous public awareness, screening, and assessment intended to locate, identify, and evaluate as early as possible all young children with disabilities

B. refining the type of instructional programs young children with unique learning differences receive

C. redefining the terms of specific disabilities to increase the number of young children who qualify for special education services

D. ensuring that all young children partake in an annual evaluation to determine those who are in need of special education or related services

Answer _____

Competency 007—(Culturally Responsive Practices): Understand how to identify and implement culturally responsive, developmentally appropriate practices to effectively teach and engage young children from prekindergarten to grade 3 across all content areas.

34. A prekindergarten child and the child's parents/guardians are English learners (ELs) at a beginning to intermediate level of English acquisition. The parents/guardians report to the child's teacher that they only speak English at home with their child, even though they have strong primary language skills, in order to promote their child's ability to learn English. Which of the following recommendations should the teacher give to advise the parents/guardians about their child's language acquisition?

A. advising the parents/guardians about English learning resources within the community

B. agreeing with the parents'/guardians' decision because it promotes the child's English language development

C. providing information to the parents/guardians that skills in a primary language promote second language and literacy development

D. encouraging the parents/guardians to support late bilingualism for the child to promote English acquisition before introducing a second language

Answer _____

35. A teacher carefully considers ways to recognize and address classroom practices that may contribute to disproportionate participation. The teacher has observed that male students are unintentionally called on more frequently than female students. The teacher also notices that male students are chosen by peers as team captains in cooperative learning groups more often than female students. Which of the following instructional techniques by the teacher would most effectively promote equitable classroom participation?

A. assigning students alternating roles within activities to encourage participation

B. using cold-call techniques to facilitate equal student participation

C. providing incentives to increase students' motivation to participate

D. selecting students who voluntarily participate to minimize discomfort

Answer _____

36. A second-grade teacher works to establish positive family–teacher relationships by engaging in the following actions regularly.

> - greeting and conversing with families during class dismissal
> - sending home notes to families in their home languages to share student successes
> - inviting families to attend various class celebrations

Despite using these strategies to engage families, the teacher feels that some families are still hesitant to participate in school activities and an educational dialogue. When conversing with some families about the concern, the teacher hears from one parent who describes his negative school experiences as a child, and suggests that other parents in the school may have had similar experiences, leaving them anxious about developing a relationship with teachers. The teacher contemplates this reasoning, and devises potential strategies for addressing this issue. Which of the following strategies would best support the teacher's goal to establish a positive family-teacher relationship?

A. sending home a newsletter to families that highlights the benefits of a positive family–teacher relationship

B. inviting families to participate individually in phone calls or classroom visits at times that are convenient for them

C. recommending that families help their child with homework so that they are aware of what content is being covered in the class

D. making a list of ways families can volunteer in the class and using dismissal time to encourage them to sign up

Answer _____

Domain IV—Data-Driven Practice and Formal/Informal Assessment

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

37. **Read a kindergarten teacher's anecdotal record below; then answer the question that follows.**

> - Four kindergarten children, William, Beatrice, Grace, and Jorge, were playing on the play structure during recess.
> - Jorge explained to me that they were restaurant cooks. Grace asked, "What do you want to eat?"
> - After I told them that I wanted pizza, salad, and ice cream, they each climbed up the ladders to the next level of the play structure and turned away from me to prepare their dishes.
> - William was able to climb up the ladder by lifting his right foot from the ground up and onto the next rung of the ladder and then pulling up his left leg, which he did repeatedly until he reached the top, always leading with his right leg.
> - Beatrice climbed the ladder starting with her right foot and then alternated feet up each rung of the ladder—left, right, left, right.
> - William jumped down to the ground to serve my "salad" and then climbed back up on the ladder the same way as he did the first time.

The teacher could most effectively use this observation for which of the following purposes?

A. assessing Jorge's social skills with peers

B. evaluating Beatrice's need for physical therapy

C. determining Grace's oral language development

D. documenting William's climbing and balance skills

Answer _____

38. **Use the excerpt below from a kindergarten science lesson plan to answer the question that follows.**

Texas Essential Knowledge and Skills (TEKS) for Science	Student Learning Objective	Task	Assessment	Documentation/ Data Collection
Science (2) (C) The student is expected to collect data and make observations using simple tools.	Students will look for trends in the weather based on data they observe and record for a month.	Students will observe the weather daily and record findings on a calendar by drawing a sun, cloud, or raindrop symbol.	Students marks the corresponding symbol on an individual calendar to accurately represent each day's weather.	Collect students' calendars and compare entries and sums of each type of weather to master calendar.

Which of the following revisions to the lesson plan is needed to improve alignment with the student learning objective?

A. changing the Assessment to "Students accurately count the total number of days with each type of weather during the month and describe the weather trends observed."

B. changing the Documentation to "Students' calendars reflect an accurate record of the weather observed each day of the month."

C. changing the Task to "Students use tools, including a rain gauge, to measure rainy days."

D. changing the Knowledge/Skills notation to "Science (3) (B) The student will make predictions based on observable patterns in nature."

Answer _____

Competency 009—(Progress Monitoring and Data-Driven Instructional Practice): Understand how to design, implement, and evaluate learning experiences and instruction in order to promote development and learning of all students in prekindergarten to grade 3.

39. **Use the record below of prekindergarten children's activity choices to answer the question that follows.**

Children's Activity-Time Choices

A - Art/Painting B - Blocks C - Computer D - Dramatic Play
E - Engineering/Interlocking Plastic Bricks G - Games/Puzzles at Tables
S - Sand/Water/Media Table

Child Observed	Mon	Tues	Wed	Thurs	Fri	Mon	Tues	Wed	Thurs	Fri
Child #1	B	B	B	D	B	B	B	B	D	B
Child #2	A	A	D	D	A	D	A	A	D	A
Child #3	A	E	E	E	E	E	E	E	E	A
Child #4	G	G	G	G	G	G	E	G	G	G
Child #5	S	D	S	S	S	S	S	D	S	S

The teacher could most effectively use these data to make developmentally appropriate decisions in which of the following ways?

A. developing strategies to encourage children to explore a wider range of activities
B. reporting to children's families the types of activities their child enjoys during various times of the school day
C. sharing information about which children choose to play together and why they choose these peers
D. providing families with evidence that their child is learning through play activities

Answer _____

40. A kindergarten teacher uses an informal checklist assessment to identify students' strengths and needs in relation to their comprehension skills of text they have heard read aloud, in accordance with the Texas Essential Knowledge and Skills (TEKS) for Kindergarten English Language Arts and Reading (ELAR). Below is a completed checklist assessment for a student in the class.

Read-Aloud Comprehension Skills	Skills Attained
Retells important facts in the text.	
Makes connections to the text.	✓
Generates questions about the text.	
Answers questions about the text.	✓
Uses titles and illustrations to make predictions about the text.	✓

Which of the following teacher activities would best address an area of need for the student?

A. modeling for the student how to summarize text with puppets representing characters from the story
B. pre-teaching unknown vocabulary from the text to the student
C. providing the student with sentence frames to relate to the text read aloud
D. posing to the student inferential questions based on picture clues from the text

Answer _____

Domain V—Learning Across the Curriculum

Competency 010—(English Language Arts and Social Studies): Understand the foundational principles, concepts, and methods in English language arts and social studies to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

41. A prekindergarten teacher wants to build children's awareness of the roles and responsibilities of family, school, and community helpers. Which of the following instructional strategies would best support the teacher's goal?

A. assisting children in creating a class book about school and community workers
B. inviting community volunteers and children's families into the class to share about their jobs, customs, and traditions

C. using photographs and illustrations to discuss with children how people are alike and different

D. encouraging children to build a model town (e.g., homes, public buildings) using blocks

Answer _____

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

42. Which of the following learning experiences would best support first-grade students in developing an understanding of the life cycle of animals?

A. researching high-interest animals and comparing animals' resemblance to their offspring

B. going on an outdoor investigation to identify animals in their habitats and discuss how their habitats provide food and shelter

C. reading illustrated books about butterflies migrating south during winter months to ensure survival

D. observing and recording observations of a tadpole hatching and metamorphosing into a frog

Answer _____

43. A kindergarten teacher has been working with students to develop their awareness that animals have basic needs, including food, water, and shelter, in accordance with Texas Essential Knowledge and Skills (TEKS) for Kindergarten Science. The teacher would like to further students' learning by supporting their exploration of real-world issues related to this topic, such as animal endangerment, by using technology, in accordance with TEKS for Kindergarten Technology Applications. Which of the following uses of an educational resource would be most effective for this purpose?

A. allowing students to play an online game in which they can learn vocabulary related to endangered species

B. supporting students in collecting information about endangered species' needs from developmentally appropriate Web sites

C. asking students to draw a picture of an endangered animal to submit to the Web site of an organization that protects endangered species

D. assigning small groups of students an endangered animal to write about using word processing software

Answer _____

Competency 013—(Fine Arts, Physical Education, and Health): Understand foundational skills, concepts, and methods to provide developmentally appropriate instruction for fine arts, physical education, and health to students in prekindergarten to grade 3.

44. A third-grade teacher is developing a lesson to promote students' abilities to identify and categorize musical instruments as brass, string, woodwind, or percussion. Which of the following technology resources would most effectively support students' abilities to categorize instruments by sound?

A. an interactive Web site where different musical instruments can be explored

B. an online video of a concert performed by a full orchestra of musical instruments

C. a multimedia presentation followed by a class discussion about musical instruments

D. an audio recording of musical instruments being played in isolation

Answer _____

Clustered Questions

Use the information below to answer the two questions that follow.

A third-grade teacher conducts the following mathematics activity with students, in accordance with the Texas Essential Knowledge and Skills (TEKS) for Grade 3 Mathematics.

- Announce to the class the need to prepare the classroom to meet with their kindergarten book buddies. Each third grader has two book buddies.
- Ask students to work in pairs to determine how many chairs would be needed to seat their class of 24 third graders, their book buddies, and three teachers.
- Ask student pairs to solve the problem using any method that they want, but remind them that they need to explain to the class how they got their answer.
- As the pairs work, walk around the room to observe their progress and work.

Teacher reflection notes on activity:

I noted that three of the pairs made mistakes. At the end of the activity, I did not call on those three pairs to share their work, because I expected that they would probably realize their mistakes while listening to the explanations the other pairs shared. I randomly called on pairs who got the correct answer. These pairs shared a variety of approaches, including drawing pictures, making tallies, using models, and graphing.

Competency 011—(Mathematics): Understand foundational principles, concepts, and methods in mathematics to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

45. The teacher's actions in this lesson demonstrate a strength related to which of the following instructional principles?

A. basing students' work on a meaningful, real-world problem

B. treating all correct solutions as equally valuable

C. focusing on the strategy that would be most useful

D. assessing students' understanding of classmates' methods

Answer _____

Competency 011—(Mathematics): Understand foundational principles, concepts, and methods in mathematics to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

46. Which of the following actions by the teacher would most effectively strengthen this mathematics activity?

A. encouraging students to work independently instead of in partner groups

B. assessing students' understanding of each of their classmates' methods for solving the problem

C. giving individual attention to student pairs experiencing challenges before turning to the whole-group activity

D. focusing all students to complete the problem using one strategy that would be most useful

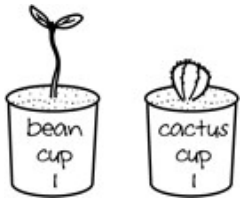
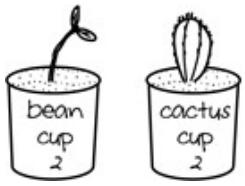
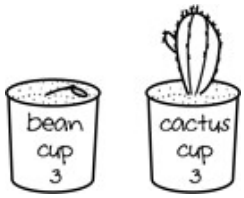
Answer _____

Use the information below to answer the three questions that follow.

A third-grade teacher created a unit focused on organisms and environments in accordance with Texas Essential Knowledge and Skills (TEKS) for Grade 3. The teacher and the students placed six labeled cups, each containing one plant, on a windowsill in direct sunlight for two weeks. Three cups contained bean plants and three cups contained cactus plants. The teacher and the students created three different environments for the plants, and each environment contained one bean plant and one cactus plant. The environments varied based on how often the plants were watered. Students drew pictures of their observations of the plants in each of the three environments at the end of two weeks.

Bean Plants and Cactus Plants After Two Weeks

Name: Jody + Mark

		
Environment 1	**Environment 2**	**Environment 3**
• Sun and water • Watered once daily	• Sun and water • Watered once every other day	• Sun and water • Watered once a week

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

47. Given the results at the end of two weeks, this inquiry best promotes students' understanding of which of the following phenomena?

A. life cycles of organisms in an environment

B. the flow of energy between organisms in an environment

C. physical changes that affect organisms in an environment

D. the structures and functions of organisms that help them survive in an environment

Answer _____

Competency 006—(Differentiation Strategies in Planning and Practice): Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

48. Students' abilities to draw accurate conclusions from the inquiry experience is best supported by their prerequisite knowledge in which of the following areas?

A. types of plants

B. characteristics of healthy plants

C. how plants make food

D. life spans of plants

Answer _____

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

49. At the end of the two-week observation, the teacher plans to use a higher-level questioning technique to encourage students to make conclusions about what they have observed during the activity. Which of the following questions would best support the teacher's goal?

A. Why did environmental conditions lead to different results for the bean and cactus plants?

B. How are the three cactus plants different at the end of the experiment?

C. Which environment was best for the cactus plants and for the bean plants?

D. What were the environmental differences the pairs of cactus and bean plants experienced?

Answer _____

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

50. Which of the following additional student activities would most effectively support the teacher in assessing students' abilities to apply what they have learned from the inquiry?

A. growing a third type of plant in the classroom and comparing its growth to the bean and cactus plants

B. creating a diagram of the cactus and bean plants and labeling the plants' parts

C. planting additional seeds independently at home and observing the outcome

D. predicting and explaining in which environment other types of plants would be most successful

Answer _____

Section 4: Sample Selected-Response Answers and Rationales Early Childhood: PK–3 (292)

This section presents some sample exam questions for you to review as part of your preparation for the exam. To demonstrate how each competency may be assessed, sample questions are accompanied by the competency that they measure. While studying, you may wish to read the competency before and after you consider each sample question. Please note that the competency statements do not appear on the actual exam.

The sample questions are included to illustrate the formats and types of questions you will see on the exam; however, your performance on the sample questions should not be viewed as a predictor of your performance on the actual exam.

Selected-Response Questions with Rationales

Each sample exam question here includes the correct answer and a rationale for each answer option.

Domain I—Child Development

Competency 001—(Foundations of Child Development): Understand foundational concepts of early childhood development from birth to age 8 and factors that influence student development.

1. Kindergarten students have been creating shapes using colorful rubber bands and geoboards. Which of the following instructional activities would promote students' progress with cognitive concepts relating to shapes?

   A. displaying geoboards in the classroom and encouraging students to explain their understandings of shapes
   B. presenting an example of an intricate shape to the students using precise vocabulary terms
   C. comparing students' geoboards during circle time based on characteristics of shapes
   D. providing ongoing shape exploration with additional materials for students to use independently

Answer

Option C is correct because when students are given the opportunity to create and contrast shapes using personal work samples, they are more likely to develop cognitive concepts related to shapes, such as recognizing and comparing shapes, acquiring geometric vocabulary, and developing spatial visualization. **Option A is incorrect** because prompting students to explain their understanding of shapes will not promote students' development of geometric concepts, but would be considered a formative assessment approach to evaluate their understanding of shapes. **Option B is incorrect** because presenting an example of a shape would not encourage students to analyze similarities and differences in shapes. **Option D is incorrect** because engaging students in independent exploration does not scaffold students' cognitive development. For exploration to be successful, it needs to be preplanned by the teacher and purposeful to meet a goal.

2. A prekindergarten teacher is using a shared reading strategy with a three-year-old child who demonstrates an expressive language delay. As the child becomes more responsive to answering knowledge-level questions, which of the following practices should the teacher add to the strategy?

A. playing audiobooks for the child and then asking the child questions about the books to determine listening comprehension skills

B. developing the child's precise vocabulary by encouraging the child to repeat words illustrated on flash cards

C. engaging the child with interactive software designed to develop semantic knowledge and practice age-appropriate syntax

D. promoting dialogue with the child through open-ended questions that relate to areas of the child's interests during read-alouds

Answer

Option D is correct because promoting dialogue with children about their prior knowledge and interests in connection with text is an evidenced-based intervention and a scaffolding strategy that supports reading comprehension as well as verbal expression. When background knowledge is developed and integrated with reading, children are more likely to derive language meaning from text, which promotes children's abilities to think about and express reading content and structure. **Option A is incorrect** because playing audiobooks for the child and asking questions about them would foster the child's receptive comprehension skills but not higher-level expressive language abilities. **Option B is incorrect** because encouraging the child to repeat words illustrated on flash cards would support the child's ability to say specific words but is not an effective strategy for supporting the child's ability to derive meaning from the text or express text connections. **Option C is incorrect** because engaging the child in interactive software focusing on semantic knowledge and syntax would promote the child's knowledge about the content, but would not foster responses beyond a knowledge level.

Competency 002—(The Early Learning Process): Understand the developmental processes and characteristics of learning of young children from birth to age 8.

3. A four-year-old child is building towers using wooden blocks of different shapes and colors. The yellow blocks are long and wide and the green blocks are short and narrow. The child builds a tower made with yellow blocks at the bottom and green blocks on the top and says, "Look, my tower is so tall, and the green blocks are all on top!" The teacher responds, "Wow, your tower is so straight and tall! What do you think would happen if you make another tower using the green blocks on the bottom this time?" This scenario demonstrates the teacher's awareness of how incidental learning experiences can be used to:

A. deepen children's knowledge through exploration and hypothesis testing.

B. establish trust by responding to children's appropriate expression of needs.

C. evaluate children's ability to develop hypothesis and prediction skills.

D. facilitate activities that promote children's ability to sustain attention to tasks.

Answer

Option A is correct because the teacher's actions foster the child's motivation and interest in learning. In the scenario, the teacher encourages the child to generate and test a hypothesis while engaging in a preferred activity that is highly motivating. **Option B is incorrect** because the scenario demonstrates that the teacher is conversing with the child about what is happening with the blocks and additional actions the child could take with the blocks, not establishing trust by responding to the child's needs. **Option C is incorrect** because the teacher's actions do not indicate that the child's ability to develop a hypothesis or generate a prediction is being evaluated, instead that this skill is being developed. **Option D is incorrect** because although the child's sustained attention is likely to be facilitated when engaging in preferred activities, incidental teaching involves instruction and engagement that is child-directed, which is not present in this scenario.

4. Which of the following scenarios exemplifies a situation in which a child's separation anxiety behaviors signify the need to intervene and provide a developmentally appropriate response and support?

A. a four-year-old hides behind her parent's/guardian's leg at prekindergarten drop-off while waiting for the teacher to greet her

B. a five-year-old repeatedly bites his nails and appears quiet at the start of the kindergarten school year

C. a seven-year-old pleads for his father to stay with him in his first-grade classroom and complains of stomachaches daily at school

D. an eight-year-old prefers to work alone rather than in small groups in her second-grade classroom

Answer

Option C is correct because typically by age seven, students have developed the ability to separate from parents/guardians and demonstrate the ability to stay in the classroom without them. Daily stomachaches are a sign that something is wrong with a child's health. Anxiety often manifests as physical symptoms, such as a stomachache, in a child. A first-grade student who presents with excessive fear and exhibits somatic symptoms due to parent/guardian separation requires an intervention to manage anxiety and develop emotional skills. **Options A and B are incorrect** because the behaviors exhibited by both students in the scenarios are developmentally appropriate. **Option D is incorrect** because a student who prefers to work alone does not require an intervention for separation anxiety but may require some social skills supports.

Competency 003—(Family Engagement): Understand the role and importance of the family in supporting the learning and development of young children from prekindergarten to grade 3.

5. A kindergarten teacher is preparing for the first conferences of the school year. The teacher plans to provide parents/guardians with an overview of the grade-level Texas Essential Knowledge and Skills (TEKS) and information about classroom procedures and schoolwide expectations. Which of the following additional actions by the teacher would best support the teacher in developing a positive relationship with families?

A. ensuring that parents/guardians understand the best way to schedule a meeting with the teacher

B. reminding parents/guardians of their specific responsibilities to support their children's learning

C. encouraging parents/guardians to share insights that would help the teacher promote their children's learning

D. providing parents/guardians with examples of research to support the teacher's instructional approaches

Answer

Option C is correct because when teachers view parents/guardians as experts on their children and invite them to share their insights in collaborative discussions, they are creating an atmosphere of trust, positive regard, and respect. For this reason, establishing communication with parents/guardians has been shown to increase the educational outcomes of students. **Option A is incorrect** because ensuring parents/guardians know how to schedule a meeting with the teacher provides information about communication but does not foster or sustain communication. **Option B is incorrect** because reminding s/guardians about their responsibilities regarding their children's learning does not promote a shared dialogue between the parents/guardians and the teacher and does not contribute to the development of a relationship. **Option D is incorrect** because providing parents/guardians with research about instructional approaches is informative but does not contribute to the development of a relationship between parent/guardian and teacher.

6. The parents/guardians of incoming prekindergarten children are provided with handbooks to support their understanding of what the children will learn each school year. An excerpt of the handbook is shown below.

Understanding What Your Child Will Learn in Prekindergarten—Three-Year-Olds
Reading and Literacy
Listening Goals: • Follow two- or three-step directions during activities, playing, or cleaning up. • Have short conversations with expected words and phrases.
Reading Goals: • Enjoy being read to and exploring books. • Name familiar characters or events from books.
Writing Goals: • Make scribbles, line marks, and letter-like forms when asked to write.

Which of the following principles does the practice of providing these handbooks most effectively promote?

A. developing parents'/guardians' knowledge of how teachers accommodate individual children's learning needs

B. engaging parents/guardians in understanding the expectations for their children's academic development

C. ensuring parents'/guardians' acceptance of what the school believes is best for their children's learning

D. supporting parents'/guardians' involvement in decision making for the school's academic curriculum

Answer

Option B is correct because it is important that schools communicate learning expectations to parents/guardians. One method is to provide information outlining what children are learning in the classroom and what they can be expected to learn during the school year. When parents/guardians are knowledgeable about what their children are learning, they are more likely to feel included in their children's education. **Option A is incorrect** because this practice would not develop parents'/guardians' knowledge of how teachers accommodate individual children's learning needs, which is information that is based on individual children's strengths and needs. **Option C is incorrect** because the goal of this practice would be to educate parents/guardians about their children's learning, not to assert the beliefs of the school on parents/guardians. **Option D is incorrect** because the intention for this practice would be an informative sharing of information and would be separate from encouraging parents'/guardians' involvement in future decision making for the school's academic curriculum.

Domain II—The Instructional Setting

Competency 004—(Social Skills, Emotional Development, and Behavior Support): Understand how to create positive environments and relationships that help develop interpersonal skills, autonomy, and initiative to explore and learn in young children from prekindergarten to grade 3.

7. Considering the developmental stages of brain growth and cognitive development of young children, which of the following teacher activities would most effectively promote development of executive function in four-year-olds?

A. providing children with challenging puzzles and riddles that foster thinking skills in mathematics

B. modeling organizational routines for children and practicing these routines with them often

C. asking children to choose their favorite game in the classroom and during outdoor play

D. allowing children to spend most of the prekindergarten day participating in self-directed activities

Answer

Option B is correct because as executive function develops, children increasingly gain skills in their ability to attend, regulate emotions, and engage in goal-directed behavior. Modeling and practicing organizational routines promotes children's abilities to organize, plan, and self-monitor while engaging in daily classroom activity. Executive function is a cognitive domain which includes working memory, flexible thinking, and inhibitory control. **Option A is incorrect** because providing children with mathematics puzzles and riddles would be beneficial for children's development of mathematics skills, but not necessarily their development of executive function. **Option C is incorrect** because asking children to choose their favorite game would work to increase children's autonomy and motivation but is unlikely to improve executive function. **Option D is incorrect** because allowing children to spend most of the day in self-directed activities would likely promote curiosity and exploration, but not executive function. It is also is not best practice to focus most of the day on self-directed activities.

8. A third-grade teacher notices that a few students who are highly motivated during science instruction appear disinterested when learning social studies content. The teacher could best use developmentally responsive strategies to promote the students' participation in social studies in which of the following ways?

A. providing opportunities to develop study skills tailored to support students' achievement in social studies

B. defining social studies learning outcomes to be more qualitative, including interactive features for students to study topics independently

C. creating cross-curricular learning modules for students designed to support connections to social studies

D. setting a predetermined time requirement for students to complete work during social studies to earn an incentive

Answer

Option C is correct because cross-curricular instruction supports students' broader understanding of content and develops their awareness of the ways in which subject areas are integrated. The teacher could use the students' motivation for science to encourage motivation in social students by integrating the two subjects using similar approaches to content. **Option A is incorrect** because developing study skills tailored to social studies may improve students' progress in this subject area but may not necessarily improve students' interest or motivation. **Option B is incorrect** because defining learning outcomes to be more qualitative may provide the teacher with more specific information about students' progress but will not provide students with motivation to participate. Additionally, as the students are disinterested in social studies in a group setting, working independently will likely lead to more student distraction and off-task behaviors. **Option D is incorrect** because providing incentives for sustained work in the subject area is unlikely to promote students' intrinsic motivation to learn social studies content and, as a result, will not likely result in long-term active engagement.

Competency 005—(The Instructional Setting): Understand how to create positive learning environments that promote the development and learning of young children in prekindergarten to grade 3.

9. A first-grade teacher notices that a number of students have been frequently off-task and demonstrating difficulty completing projects in learning center environments within the classroom. The teacher would like to increase student engagement during these activities. After determining that the center activities do not align with student interests, which of the following approaches should the teacher take *first* to promote this goal?

A. creating a separate work area of the classroom where students who cannot finish projects during center time can work

B. providing opportunities for student choice in assignments and learning materials within the centers

C. encouraging students to partner with classmates with whom they enjoy working during center activities

D. implementing direct whole-group instruction instead of center activities until students demonstrate focused learning

Answer

Option B is correct because offering students choices of activities and materials is likely to increase their intrinsic motivation to engage in activities, thus promoting student learning. When students are given choice-making opportunities, they are more likely to explore, engage, and demonstrate their learning. **Option A is incorrect** because this approach will not foster curiosity, exploration, or engagement which are necessary for learning. **Option C is incorrect** because although flexible student groupings are likely to increase social engagement, allowing students to select their group members may lead to increased off-task behaviors as students often choose their friends who are not necessarily the classmates with whom they can focus most effectively. **Option D is incorrect** because students who have difficulty attending during center-based learning activities are likely to have difficulty attending to whole-group instruction as well.

10. A second-grade teacher notices that at certain times of the day, students in the class become easily distracted and display outbursts of excitable energy. Which of the following supports would be most appropriate to address the needs of the students?

A. dividing the class into small groups and assigning students independent group work projects

B. incorporating learning opportunities for students that promote purposeful and vigorous movement

C. playing soothing music for students and allowing them to take a short break to rest

D. providing rewards of extra recess for students who are able to focus on their work

Answer

Option B is correct because movement breaks have been proven to increase students' productivity by increasing attention, which impacts behavior and the ability to remain on task. In addition, movement breaks have been shown to boost neural connectivity, promoting attention and memory, cognitive functioning, and the ability to cope with stress. **Option A is incorrect** because dividing the class into groups to complete independent projects will not address the students' distractibility and their needs to exert physical energy. **Option C is incorrect** because playing soothing music also will not meet students' needs to exert physical energy, and may contribute to increased distractibility for some students. **Option D is incorrect** because withholding recess opportunities for students who have difficulty attending will not meet their need for physical activity, and will likely have the opposite outcome of causing students to be more restless.

Domain III—Educating All Learners

Competency 006—(Differentiation Strategies in Planning and Practice)—Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

11. A second-grade teacher is planning an end-of-unit assessment. The teacher has a goal of incorporating universal design for learning (UDL) principles throughout the unit's lesson design and assessments. Which of the following strategies would be the most effective application of UDL for the teacher to use to assess student knowledge?

A. pairing students and having them cooperate on a take-home written assessment

B. allowing students to choose from a list of project activities that allow for a variety of means of expression

C. creating a class game that allows students to demonstrate their knowledge by answering questions orally

D. designing a short-answer assessment that students can complete at any point within a set time period

Answer

Option B is correct because one of the central components of universal design for learning (UDL) is providing multiple means of representation, either in methodology of instruction or assessment of students. This is based on the premise that learners differ in the ways in which they perceive, comprehend, and transfer information. Projects that allow for a variety of means of expression, such as media, illustrations, images, interactive graphics, oral language, or writing, provides students with more than one way to transfer or demonstrate their knowledge. **Options A, C, and D are incorrect** because these options only demonstrate a single means of assessing students' knowledge, rather than a variety of assessment methods.

12. A kindergarten teacher observes a student investigating the balance scales in the simple machines learning center. The teacher watches as the student adds the entire collection of pennies to one side of the balance scale, where the full pan is already resting on the tabletop. The teacher says, "When you added pennies to the full side, it stayed down. I wonder about the other side. What can you do to the empty side to make it go down?" The teacher's interaction with the student is an example of which of the following techniques?

A. explaining the scientific method

B. scaffolding conceptual understanding

C. facilitating interdisciplinary content connections

D. differentiating learning experiences

Answer

Option B is correct because the teacher's observations and question encourage the student to engage in problem solving using exploration and observation to develop a basic understanding of measurement. **Option A is incorrect** because the teacher does not explain the scientific method, which would include a number of systematic steps to test a hypothesis. **Option C is incorrect** because the teacher does not facilitate interdisciplinary content connections; the teacher focuses solely on the balance scale. **Option D is incorrect** because there is no evidence that the teacher has modified the activity to support the student's needs.

Competency 007—(Culturally Responsive Practices)—Understand how to identify and implement culturally responsive, developmentally appropriate practices to effectively teach and engage young children from prekindergarten to grade 3 across all content areas.

13. A third-grade teacher considers practices to use during the first week of school that will foster the students' sense of a culturally inclusive classroom. Which of the following practices would best support the teacher's goal?

A. adapting classroom lessons based on students' preferred learning styles

B. asking students to bring in an item that represents their cultural background

C. creating activities that encourage students to share interest in the cultural backgrounds of peers

D. emphasizing relatable books from a variety of cultural perspectives in the classroom library that students may select

Answer

Option C is correct because creating activities that encourage all students to share interest in the cultural backgrounds of all peers would effectively facilitate a culturally inclusive classroom. This teaching strategy is likely to promote a shared understanding of each other's perspectives, experiences, values, strengths, and needs. **Option A is incorrect** because varying lessons based on learning styles, such as through auditory, visual, and tactile/kinesthetic means, does not necessarily lead to a culturally inclusive classroom. **Option B is incorrect** because show and tell practices are less likely to encourage student inquiry, whereas interactive activities and discussion encourage students to share their experiences, which is likely to instill a deeper understanding of cultural identity. In addition, students may not have an item that represents their cultural background, since objects are unlikely to communicate social belonging. **Option D is incorrect** because including diverse books in a classroom library is not a culturally responsive teaching strategy, but a culturally responsive practice. Culturally response strategies are those that combine content teaching with students' cultural background to promote inclusion by encouraging personal connections, enhancing meaning by establishing relevance, and fostering positive disposition towards learning.

Domain IV—Data-Driven Practice and Formal/Informal Assessment

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

14. **Use the excerpts below to answer the question that follows.**

National Oral Reading Fluency Norms

Grade	Percentile	Winter WCPM	Spring WCPM
1	90	81	111
	75	47	82
	50	23	53
	25	12	28
	10	6	15
Key: Words Correct Per Minute = WCPM			

Classroom Teacher's Progress-Monitoring Data

Student: WW Grade: 1	
Concern addressed with progress monitoring: Reading Fluency	
Intervention: Timed repeated readings on Mondays, Wednesdays, and Fridays. Record progress data on Fridays.	
Goal: 53 words correct per minute (WCPM)	Assessment: Oral Reading Fluency weekly

Monday	Wednesday	Friday	Data (WCPM)
3/2	3/4	3/6	34 WCPM
3/9	3/11	3/13	36 WCPM
3/16	3/18	3/20	40 WCPM
3/23	3/25 (absent)	3/27	40 WCPM

Which of the following statements best describes the intervention for student WW?

A. The goal for WW's intervention is set too high considering the student's grade and time of year.

B. The intervention is not working and the teacher needs to try a different intervention.

C. The intervention appears to be working and should be continued.

D. WW falls into the 50th percentile of students in the same grade; therefore, no intervention is needed.

Answer

Option C is correct because the student's data indicates that the student is making progress. In approximately three weeks, the student's word count per minute (WCPM) increased from 34 to 40. As a result, the teacher should continue using this intervention. **Option A is incorrect** because a goal of 53 WCPM is an appropriate instructional match for the student. When a student's reading fluency is at grade-level but below benchmark standards, best practice suggests establishing a goal at the 25th percentile. Given the student's baseline performance was slightly above the 25th percentile, establishing a goal between the 25th and 50th percentiles would be considered a good instructional match. **Option B is incorrect** because there is no evidence to support the claim that the intervention is not working. **Option D is incorrect** because the student's WCPM is not at the 50th percentile according to the National Oral Reading Fluency Norms.

Competency 009—(Progress Monitoring and Data-Driven Instructional Practice): Understand how to design, implement, and evaluate learning experiences and instruction in order to promote development and learning of all students in prekindergarten to grade 3.

15. A second-grade teacher plans to embed developmentally appropriate activities into classroom routines to support students' application of skills in capitalization and punctuation. Which of the following approaches would be most effective for this purpose?

A. asking students to identify and correct omitted punctuation and capitalization errors in morning messages and discussing the findings as a group

B. encouraging students to include appropriate capitalization and punctuation during freewriting time

C. creating opportunities for students to engage with peers to share the importance of using accurate capitalization and punctuation

D. developing assignments for students to edit peers' writing for capitalization and punctuation and provide corrections as needed

Answer

Option A is correct because identifying mechanical errors in meaningful messages in the context of a daily, group activity would be considered a developmentally appropriate practice to explicitly model for students an authentic application of capitalization and punctuation skills. Also, the practice of group analysis and discussion is likely to

promote students' motivation to engage in learning. **Options B and D are incorrect** because encouraging students to include capitalization and punctuation during freewriting and editing the writing mechanics of peers are not instructional practices embedded in the context of a classroom routine. **Option C is incorrect** because creating opportunities for students to share the importance of using accurate capitalization and punctuation would not be a developmentally appropriate practice given that second-grade students only have emerging metalinguistic knowledge of writing mechanics.

Domain V—Learning Across the Curriculum

Competency 010—(English Language Arts and Social Studies): Understand the foundational principles, concepts, and methods in English language arts and social studies to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

16. A third-grade teacher assigns students several newspaper articles to read that have differing opinions about a proposal to build a new park in the community. After reading the articles, students work in small groups to complete a T-chart listing the pros and cons of building the park. Each group then presents its results to the class. This activity is likely to be most effective in helping develop the students':

A. ability to comprehend and analyze key information found in their reading.

B. knowledge of the appropriate use of metacognitive strategies.

C. understanding of inferential questioning to expand their knowledge.

D. recall of key events and vocabulary presented in content-area readings.

Answer

Option A is correct because creating an activity in which students compare different perspectives of a community issue would most effectively develop their ability to identify and analyze key information and would scaffold students' writing abilities. **Option B is incorrect** because this activity does not promote students' use of metacognitive strategies, which include methods used to support students' understanding of how they learn. **Option C is incorrect** because the teacher is not promoting students' understanding of inferential questions in this activity, which would include developing understanding of hints and clues in text instead of clearly stated information. **Option D is incorrect** because this activity does not involve students recalling key events or vocabulary, it is instead focused on the pros and cons involved in this issue.

17. A first-grade teacher supports students' language development by regularly modeling storytelling. For example, the teacher tells the following brief story to students as part of introducing a science unit on living things.

> "First, I dug a very small hole and put a sunflower seed in it. Next, I covered the seed with dirt and gently watered it. For the past five days I have gone outside to check to see whether the seed has sprouted, and all I have seen is a dirt mound! And guess what? This morning, when I went to check on it, I finally saw a tiny sprout coming through the dirt. I was elated!"

In addition to modeling storytelling, the teacher provides students with opportunities to tell their own stories. The teacher's use of these storytelling strategies best exemplifies which of the following approaches to supporting students' language development?

A. infusing meaningful communication with students into multiple areas of the curriculum

B. demonstrating developmentally appropriate use of figurative language for students

C. teaching students explicit linguistic functions and form

D. instructing students on the use of academic language in whole-class discussions

Answer

Option A is correct because the teacher uses storytelling to communicate about the life cycle of a plant while using key vocabulary, such as *seed*, *sprouted*, and *sprout*, and words indicating a sequence of events. The teacher also uses words that are likely unfamiliar to students, such as *elated*, in the context of a story to promote understanding of higher-level vocabulary. **Option B is incorrect** because the teacher does not use figurative language, which would include literary devices such as similes, metaphors, or personification. **Option C is incorrect** because the teacher does not explicitly teach linguistic functions (e.g., giving instructions, making requests) and form (e.g., language structures, vocabulary). **Option D is incorrect** because the teacher is not providing students with instruction on the use of academic language, although the teacher is modeling key vocabulary.

Competency 011—(Mathematics): Understand foundational principles, concepts, and methods in mathematics to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

18. A kindergarten student recognizes that five pencils represent the same quantity as five desks, even though desks are much larger and heavier than pencils. The knowledge of this fundamental mathematical concept demonstrates that the student:

A. can determine the approximate values of numbers from one to ten.

B. has acquired an understanding of conservation.

C. is able to demonstrate the concept of subitizing.

D. will understand the relationship between numerals and ordinal numbers.

Answer

Option B is correct because number conservation understanding is a developmental milestone in which the student understands that a given number or quantity remains the same even though it may be arranged in different ways or through representation by different objects. **Option A is incorrect** because the student is not demonstrating understanding of approximate values of numbers, instead the focus of the scenario is just on the number five. **Option C is incorrect** because the student in the scenario is not subitizing, which is the ability to recognize the sum of a small group of objects without counting them. **Option D is incorrect** because the student is not demonstrating an understanding of the relationship between numerals (e.g., symbols denoting numbers) and ordinal numbers (e.g., first, second, third).

19. A third-grade math teacher collects the following data from 20 students after a mathematics quiz. The teacher plans to adjust instruction as needed based in part on these results.

Results from Quiz on Adding and Subtracting Fractions

Problem	Solution 1 (correct)	Number of Students with Solution 1 Response	Solution 2 (incorrect)	Number of Students with Solution 2 Response	Solution 3 (incorrect)	Number of Students with Solution 3 Response
$\frac{1}{3}+\frac{4}{3}$	$=\frac{5}{3}$ (or $1\frac{2}{3}$)	7	$=\frac{5}{6}$	11	$=\frac{5}{0}$	2

$\frac{3}{5} - \frac{1}{2}$	$= \frac{1}{10}$	3	$= \frac{2}{3}$	12	$= \frac{4}{7}$	5
$\frac{4}{5} + \frac{4}{10}$	$= \frac{12}{10}$ (or $\frac{6}{5}$ or $1\frac{2}{10}$ or $1\frac{1}{5}$)	4	$= \frac{8}{15}$	11	$= \frac{8}{10}$	5

These results show that the teacher should address students' misconceptions related to which of the following errors?

A. changing the denominator of a mixed fraction and keeping the numerator the same

B. using the largest denominator in the answer when fractions have different denominators

C. treating numerators and denominators as separate whole numbers

D. applying the invert-and-multiply procedure to fractions with different denominators

Answer

Option C is correct because after analyzing the students' incorrect solutions, the teacher should address the misconception that the numerator and the denominator are separate whole numbers. In many of the incorrect responses, students added or subtracted the numerator and denominator, rather than recognizing that the fraction is part of a whole. **Option A is incorrect** because although many of the problems include fraction problems that require a common denominator, simply changing the denominator of mixed fractions would not address the students' misconception. **Option B is incorrect** because the students would need to determine the common denominator, not use the largest denominator which would be an erroneous solution. **Option D is incorrect** because the invert-and-multiply algorithm is used to divide fractions.

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

20. Teachers in the early elementary grades can best promote students' use of digital technology as tools for learning by emphasizing which of the following approaches?

A. providing students with instruction in basic digital technology skills such as keyboarding

B. integrating a variety of lessons for students linked to curriculum topics that can be supported using technology applications as appropriate and that promote attainment of the learning goal

C. assigning every student a specific learning task that must be completed using digital technology and requesting that proficient students provide assistance to students experiencing difficulty with the task

D. creating bookmarks on classroom digital technology that students can use to access approved online games

Answer

Option B is correct because best practice recommends integrating digital technology across the curriculum in a variety of activities to engage students in student-centered, project-based learning opportunities. This approach is developmentally appropriate because it promotes students' use of technology in beneficial ways that enrich existing learning opportunities and do not detract from learning with unnecessary screen usage. **Option A is incorrect** because instruction in basic digital technology is important for students to learn but would not provide

students with information about or experiences in digital technology enhancing their education. **Option C is incorrect** because targeting a specific task using technology and then asking proficient students to help others would be a narrower approach only succeeding in familiarizing students with one element of technology, and would not promote students' general use of digital technology. **Option D is incorrect** because effective implementation of digital technology should include more than online games and software, and should represent a structural change to support and expand students' learning experiences.

21. **Use the third-grade student science center activity sheet below to answer the question that follows.**

Science Center Activity Sheet

Texas Essential Knowledge and Skills (TEKS):

§112.14. Science, Grade 3

(2) Scientific investigation and reasoning. The student uses scientific practices during laboratory and outdoor investigations. The student is expected to:

A. plan and implement descriptive investigations, including asking and answering questions, making inferences, and selecting and using equipment or technology needed, to solve a specific problem in the natural world;

B. collect and record data by observing and measuring using the metric system and recognize differences between observed and measured data.

Materials: magnifying glasses, balance scales, flashlights, bowl of eggs, bowl of water, pencils, activity sheets

Directions: There are hard-boiled and raw eggs in the bowl. Taking care not to break the eggs, answer the following questions in your science notebook.

1. Do the eggs all look alike?
2. What other factors are similar?
3. What are some characteristics that are different?

Which of the following phases of the 5-E plan is implemented at the science center?

A. Exploration
B. Explanation
C. Elaboration
D. Evaluation

Answer

Option A is correct because the purpose of exploration is to encourage discovery so that students can learn more about a concept in a hands-on way. For students to answer the questions in the scenario, they must explore the properties of the hard-boiled and raw eggs. **Options B, C, and D are incorrect** because the scenario does not require students to explain (e.g., share what they learned about the activity), elaborate (e.g., apply what they've learned), or evaluate (e.g., demonstrate what they've learned in the form of an assessment). Explanation, elaboration, and evaluation are all important components of learning but would take place after exploration.

Competency 013—(Fine Arts, Physical Education, and Health): Understand foundational skills, concepts, and methods to provide developmentally appropriate instruction for fine arts, physical education, and health to students in prekindergarten to grade 3.

22. A prekindergarten teacher presents various flowers for children to explore. Following their observations, the children are given art materials, including markers, construction paper, cotton balls, pipe cleaners, and tissue paper, to design their own creation. Which of the following concepts from the *Fine Arts Texas Prekindergarten Guidelines* is best exemplified by the activity?

A. teaching children to notice the similarities and differences of objects in the environment and replicating the objects in their creations

B. encouraging children to focus on the process of creating rather than the product that is created

C. providing children with high-quality art materials to promote higher-order thinking skills

D. supporting children in understanding the principles of design (e.g., repetition, balance) in their artwork

Answer

Option B is correct because by giving children a number of materials to use to design their own creation, the teacher has designed an activity in which they are encouraged to focus on the process of creating, rather than the product that is created. **Option A is incorrect** because the children are not asked to observe similarities and differences or to replicate a teacher design or an example of a flower. **Option C is incorrect** because simply providing children with high-quality art materials will not promote the development of higher-order thinking skills. **Option D is incorrect** because the children are not given explicit instruction about principles of design.

Clustered Questions

Use the information below to answer the two questions that follow.

A prekindergarten teacher assesses children's social skills while observing their interactions during play activities by using the teacher-developed rating scale shown below.

Teacher Rating Scale—Social Skills

Child: Lena					
Prekindergarten Guideline	**Target Skills**	**September: Child's Age: 3 years, 3 months**		**December: Child's Age: 3 years, 6 months**	
Key: E = Emerging, D = Developed		Skill Level:		Skill Level:	
		E	D	E	D

Relationship with Others: I.C.I. Child increasingly interacts and communicates with peers to initiate pretend-play scenarios that share a common plan and goal.	Plays with two or three children in a group	✓			✓
	Takes turns while playing	✓			✓
	Negotiates with peers during play routines	✓		✓	
	Acts out pretend play with others	✓			✓
	Plays more than one role		✓		✓
	Acts out roles/themes that are less familiar (e.g., firefighter, veterinarian)	✓			✓

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

23. The teacher's assessment method is effective for which of the following purposes?

A. measuring children's abilities within an authentic context using a tool that aligns with learning standards
B. collecting specific data on children's abilities across a variety of content areas
C. quantifying children's abilities and progress toward developmental milestones
D. comparing children's abilities to same-aged peers using norm-referenced developmental criteria

Answer

Option A is correct because the teacher-developed rating scale is based on the learning outcomes established in the *Texas Prekindergarten Guidelines*. The teacher measures the child's social development using the rating scale while observing the child within an authentic context. **Options B and C are incorrect** because the data collected does not measure the child's content area knowledge or progress toward developmental milestones. **Option D is incorrect** because the child's abilities are not compared to same-aged peers using norm-referenced criteria.

Competency 009—(Progress Monitoring and Data-Driven Instructional Practice): Understand how to design, implement, and evaluate learning experiences and instruction in order to promote development and learning of all students in prekindergarten to grade 3.

24. After analyzing the data, which of the following instructional strategies should the teacher implement to most effectively promote Lena's social development?

A. telling Lena to let other children go first and to take turns using classroom materials
B. modeling appropriate interactions for Lena while interacting with other children
C. leading discussions about friendships with Lena centered on children's literature
D. asking Lena to emulate children in the class who are working together productively

Answer

Option B is correct because based on the data, Lena made progress towards developing all the social and emotional skills identified on the rating scale except for negotiating with peers during play routines. Modeling appropriate interactions while engaging socially with other children is an instructional strategy that would effectively promote her area of need. **Option A is incorrect** because directing Lena to take turns would not build social awareness or social language skills. **Option C is incorrect** because discussing friendships in a general way is unlikely to provide Lena with concrete strategies to use or to promote Lena's ability to solve conflicts with peers. **Option D is incorrect** because asking Lena to emulate other children is not an effective strategy for teaching specific social skills or for promoting social development in prekindergarten-age children.

Additional Selected-Response Questions

This section includes additional sample selected-response questions for you to review in preparation for the exam. The correct answer is provided for each question below.

Domain I—Child Development

Competency 001—(Foundations of Child Development): Understand foundational concepts of early childhood development from birth to age 8 and factors that influence student development.

25. Research suggests a strong correlation between effective, direct instruction in key components of reading and the development of literacy skills by English learners (ELs). Which of the following additional instructional strategies would be most effective for promoting the development of English vocabulary skills for ELs?

A. following loosely structured lesson formats that allow more time to process English

B. modeling how to use a digital English language dictionary

C. using English exclusively to describe common actions when introducing new concepts

D. providing frequent opportunities for the use of academic and social English in the classroom

Answer

Option D is correct.

26. A prekindergarten teacher plans to support the development of children's language skills during group story time. The class includes children who are at a beginning level of speaking and understanding English. Which of the following actions should the teacher take to attend to the language needs of English learners (ELs) in the group?

A. calling on proficient English speakers to answer comprehension questions about the story

B. using nonverbal cues to support ELs, such as pointing to an object or an illustration, while reading the story

C. substituting synonyms for unfamiliar words during read-alouds to improve ELs' engagement with stories

D. avoiding reading aloud stories that include English vocabulary with which the ELs are not familiar

Answer

Option B is correct.

Competency 003—(Family Engagement): Understand the role and importance of the family in supporting the learning and development of young children from prekindergarten to grade 3.

27. A first-grade teacher uses a home survey to learn more about how students like to spend their time outside of school with their families. The teacher finds that students and their families value and appreciate a wide range of activities. The teacher could best use this information to support effective teaching of students from all families by taking which of the following approaches?

A. asking students and their families to learn about and develop interests in activities unfamiliar to them

B. requesting that members of each family visit during the school day to share interests with the class

C. grouping students from similar family backgrounds together for interactive play and activities

D. creating differentiated learning groups based on students' individual interests and strengths

Answer

Option D is correct.

Domain II—The Instructional Setting

Competency 004—(Social Skills, Emotional Development, and Behavior Support): Understand how to create positive environments and relationships that help develop interpersonal skills, autonomy, and initiative to explore and learn in young children from prekindergarten to grade 3.

28. Four-year-olds Jessie and Simone have been quietly engaged in a center activity for a short time when the prekindergarten teacher observes the following interaction.

> *Jessie:* (*Exasperated*) You have all the red cubes. I want some, too.
>
> *Simone:* I'm making a red fire truck. You don't need them.
>
> *Jessie:* It can have other colors, too. I want some red or I'm telling.
>
> *Simone:* (*Defiantly*) Go ahead, I don't care.

The teacher walks over to the children in the center area. Which of the following actions would be most effective for the teacher to use to resolve this conflict?

A. modeling active listening and relevant questioning to engage the children's participation in resolving the dispute equitably

B. enforcing zero-tolerance rules for arguing and disrupting others to discourage the children from escalating their behavior

C. providing the children with an alternative to this activity that is less desirable if they cannot resolve their dispute together

D. directing the children to stop the activity and observe other students who have learned how to cooperate in centers

Answer

Option A is correct.

29. Kindergarten students are in their classroom science center exploring and sorting rocks. The teacher notices that the students are demonstrating difficulty sharing space and materials. The teacher can best promote the development of students' interpersonal skills by which of the following methods?

A. redesigning the floor plan of the classroom centers to clearly delineate individual students' work spaces

B. grouping students within centers who have demonstrated success working together

C. pausing the activity to hold a discussion with the students about what the teacher has observed and to brainstorm solutions

D. giving students a signal at frequent intervals to stop activities and review expectations

Answer

Option C is correct.

Competency 005—(The Instructional Setting): Understand how to create positive learning environments that promote the development and learning of young children in prekindergarten to grade 3.

30. A third-grade teacher wants to provide options for equitable perception of information to all students in the class. Based on principles of universal design for learning (UDL), which of the following actions would be most effective for this purpose?

A. defining clear rules and high expectations for students' engagement and effort within the class

B. building opportunities for student collaboration and partner work into the daily schedule

C. focusing on individual student choice and autonomy in classroom lessons and activities

D. providing students with multiple visual, auditory, and physical examples of curricular materials

Answer

Option D is correct.

31. A third-grade teacher has a goal of improving students' ability to transition successfully between activities. The teacher provides advance warning by ringing a bell at five minutes and at two minutes prior to the end of each activity. Which of the following statements best explains the rationale for the teacher's use of this strategy?

A. This practice generally benefits only students who have difficulty with transitions.

B. The teacher has established intervals of time to provide students with direct help in cleaning up.

C. The teacher can observe transitions without having to verbally engage with the students.

D. The practice provides a structure to transitions that can be scaffolded to students' needs.

Answer

Option D is correct.

Domain III—Educating All Learners

Competency 006—(Differentiation Strategies in Planning and Practice): Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

32. At the beginning of the school year, a third-grade teacher designs the layout of the classroom. The teacher considers incorporating a principle of universal design for learning (UDL) into the arrangement of the classroom, such as the placement of students' desks and chairs, work tables, and shelving units. Which of the following would be the most appropriate way for the teacher to incorporate a principle of UDL into the classroom layout?

A. establishing flexible work spaces for students (e.g., places for individual and group work, quiet places)

B. minimizing clutter to maintain an orderly and organized classroom

C. storing work materials (e.g., pencils, notebooks) in areas of the classroom that are easily accessible

D. creating ample space between rows of desks for students to briefly move around in and stretch during class transitions

Answer

Option A is correct.

33. Under the Individuals with Disabilities Education Act (IDEA), Child Find obligations primarily affect young children in which of the following ways?

A. building continuous public awareness, screening, and assessment intended to locate, identify, and evaluate as early as possible all young children with disabilities

B. refining the type of instructional programs young children with unique learning differences receive

C. redefining the terms of specific disabilities to increase the number of young children who qualify for special education services

D. ensuring that all young children partake in an annual evaluation to determine those who are in need of special education or related services

Answer

Option A is correct.

Competency 007—(Culturally Responsive Practices): Understand how to identify and implement culturally responsive, developmentally appropriate practices to effectively teach and engage young children from prekindergarten to grade 3 across all content areas.

34. A prekindergarten child and the child's parents/guardians are English learners (ELs) at a beginning to intermediate level of English acquisition. The parents/guardians report to the child's teacher that they only speak English at home with their child, even though they have strong primary language skills, in order to promote their child's ability to learn English. Which of the following recommendations should the teacher give to advise the parents/guardians about their child's language acquisition?

A. advising the parents/guardians about English learning resources within the community

B. agreeing with the parents'/guardians' decision because it promotes the child's English language development

C. providing information to the parents/guardians that skills in a primary language promote second language and literacy development

D. encouraging the parents/guardians to support late bilingualism for the child to promote English acquisition before introducing a second language

Answer

Option C is correct.

35. A teacher carefully considers ways to recognize and address classroom practices that may contribute to disproportionate participation. The teacher has observed that male students are unintentionally called on more frequently than female students. The teacher also notices that male students are chosen by peers as team captains in cooperative learning groups more often than female students. Which of the following instructional techniques by the teacher would most effectively promote equitable classroom participation?

A. assigning students alternating roles within activities to encourage participation

B. using cold-call techniques to facilitate equal student participation

C. providing incentives to increase students' motivation to participate

D. selecting students who voluntarily participate to minimize discomfort

Answer

Option A is correct.

36. A second-grade teacher works to establish positive family–teacher relationships by engaging in the following actions regularly.

> - greeting and conversing with families during class dismissal
> - sending home notes to families in their home languages to share student successes
> - inviting families to attend various class celebrations

Despite using these strategies to engage families, the teacher feels that some families are still hesitant to participate in school activities and an educational dialogue. When conversing with some families about the concern, the teacher hears from one parent who describes his negative school experiences as a child, and suggests that other parents in the school may have had similar experiences, leaving them anxious about developing a relationship with teachers. The teacher contemplates this reasoning, and devises potential strategies for addressing this issue. Which of the following strategies would best support the teacher's goal to establish a positive family-teacher relationship?

A. sending home a newsletter to families that highlights the benefits of a positive family–teacher relationship

B. inviting families to participate individually in phone calls or classroom visits at times that are convenient for them

C. recommending that families help their child with homework so that they are aware of what content is being covered in the class

D. making a list of ways families can volunteer in the class and using dismissal time to encourage them to sign up

Answer

Option B is correct.

Domain IV—Data-Driven Practice and Formal/Informal Assessment

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

37. **Read a kindergarten teacher's anecdotal record below; then answer the question that follows.**

> - Four kindergarten children, William, Beatrice, Grace, and Jorge, were playing on the play structure during recess.
> - Jorge explained to me that they were restaurant cooks. Grace asked, "What do you want to eat?"
> - After I told them that I wanted pizza, salad, and ice cream, they each climbed up the ladders to the next level of the play structure and turned away from me to prepare their dishes.
> - William was able to climb up the ladder by lifting his right foot from the ground up and onto the next rung of the ladder and then pulling up his left leg, which he did repeatedly until he reached the top, always leading with his right leg.
> - Beatrice climbed the ladder starting with her right foot and then alternated feet up each rung of the ladder—left, right, left, right.
> - William jumped down to the ground to serve my "salad" and then climbed back up on the ladder the same way as he did the first time.

The teacher could most effectively use this observation for which of the following purposes?

A. assessing Jorge's social skills with peers
B. evaluating Beatrice's need for physical therapy
C. determining Grace's oral language development
D. documenting William's climbing and balance skills

Answer

Option D is correct.

38. **Use the excerpt below from a kindergarten science lesson plan to answer the question that follows.**

Texas Essential Knowledge and Skills (TEKS) for Science	Student Learning Objective	Task	Assessment	Documentation/ Data Collection
Science (2) (C) The student is expected to collect data and make observations using simple tools.	Students will look for trends in the weather based on data they observe and record for a month.	Students will observe the weather daily and record findings on a calendar by drawing a sun, cloud, or raindrop symbol.	Students marks the corresponding symbol on an individual calendar to accurately represent each day's weather.	Collect students' calendars and compare entries and sums of each type of weather to master calendar.

Which of the following revisions to the lesson plan is needed to improve alignment with the student learning objective?

A. changing the Assessment to "Students accurately count the total number of days with each type of weather during the month and describe the weather trends observed."

B. changing the Documentation to "Students' calendars reflect an accurate record of the weather observed each day of the month."

C. changing the Task to "Students use tools, including a rain gauge, to measure rainy days."

D. changing the Knowledge/Skills notation to "Science (3) (B) The student will make predictions based on observable patterns in nature."

Answer

Option A is correct.

Competency 009—(Progress Monitoring and Data-Driven Instructional Practice): Understand how to design, implement, and evaluate learning experiences and instruction in order to promote development and learning of all students in prekindergarten to grade 3.

39. **Use the record below of prekindergarten children's activity choices to answer the question that follows.**

Children's Activity-Time Choices										
A - Art/Painting B - Blocks C - Computer D - Dramatic Play E - Engineering/Interlocking Plastic Bricks G - Games/Puzzles at Tables S - Sand/Water/Media Table										
Child Observed	**Mon**	**Tues**	**Wed**	**Thurs**	**Fri**	**Mon**	**Tues**	**Wed**	**Thurs**	**Fri**
Child #1	B	B	B	D	B	B	B	B	D	B
Child #2	A	A	D	D	A	D	A	A	D	A
Child #3	A	E	E	E	E	E	E	E	E	A
Child #4	G	G	G	G	G	G	E	G	G	G
Child #5	S	D	S	S	S	S	S	D	S	S

The teacher could most effectively use these data to make developmentally appropriate decisions in which of the following ways?

A. developing strategies to encourage children to explore a wider range of activities

B. reporting to children's families the types of activities their child enjoys during various times of the school day

C. sharing information about which children choose to play together and why they choose these peers

D. providing families with evidence that their child is learning through play activities

Answer

Option A is correct.

40. A kindergarten teacher uses an informal checklist assessment to identify students' strengths and needs in relation to their comprehension skills of text they have heard read aloud, in accordance with the Texas Essential Knowledge and Skills (TEKS) for Kindergarten English Language Arts and Reading (ELAR). Below is a completed checklist assessment for a student in the class.

Read-Aloud Comprehension Skills	Skills Attained
Retells important facts in the text.	
Makes connections to the text.	✓
Generates questions about the text.	
Answers questions about the text.	✓
Uses titles and illustrations to make predictions about the text.	✓

Which of the following teacher activities would best address an area of need for the student?

A. modeling for the student how to summarize text with puppets representing characters from the story
B. pre-teaching unknown vocabulary from the text to the student
C. providing the student with sentence frames to relate to the text read aloud
D. posing to the student inferential questions based on picture clues from the text

Answer

Option A is correct.

Domain V—Learning Across the Curriculum

Competency 010—(English Language Arts and Social Studies): Understand the foundational principles, concepts, and methods in English language arts and social studies to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

41. A prekindergarten teacher wants to build children's awareness of the roles and responsibilities of family, school, and community helpers. Which of the following instructional strategies would best support the teacher's goal?

A. assisting children in creating a class book about school and community workers
B. inviting community volunteers and children's families into the class to share about their jobs, customs, and traditions
C. using photographs and illustrations to discuss with children how people are alike and different
D. encouraging children to build a model town (e.g., homes, public buildings) using blocks

Answer

Option B is correct.

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

42. Which of the following learning experiences would best support first-grade students in developing an understanding of the life cycle of animals?

A. researching high-interest animals and comparing animals' resemblance to their offspring

B. going on an outdoor investigation to identify animals in their habitats and discuss how their habitats provide food and shelter

C. reading illustrated books about butterflies migrating south during winter months to ensure survival

D. observing and recording observations of a tadpole hatching and metamorphosing into a frog

Answer

Option D is correct.

43. A kindergarten teacher has been working with students to develop their awareness that animals have basic needs, including food, water, and shelter, in accordance with Texas Essential Knowledge and Skills (TEKS) for Kindergarten Science. The teacher would like to further students' learning by supporting their exploration of real-world issues related to this topic, such as animal endangerment, by using technology, in accordance with TEKS for Kindergarten Technology Applications. Which of the following uses of an educational resource would be most effective for this purpose?

A. allowing students to play an online game in which they can learn vocabulary related to endangered species

B. supporting students in collecting information about endangered species' needs from developmentally appropriate Web sites

C. asking students to draw a picture of an endangered animal to submit to the Web site of an organization that protects endangered species

D. assigning small groups of students an endangered animal to write about using word processing software

Answer

Option B is correct.

Competency 013—(Fine Arts, Physical Education, and Health): Understand foundational skills, concepts, and methods to provide developmentally appropriate instruction for fine arts, physical education, and health to students in prekindergarten to grade 3.

44. A third-grade teacher is developing a lesson to promote students' abilities to identify and categorize musical instruments as brass, string, woodwind, or percussion. Which of the following technology resources would most effectively support students' abilities to categorize instruments by sound?

A. an interactive Web site where different musical instruments can be explored

B. an online video of a concert performed by a full orchestra of musical instruments

C. a multimedia presentation followed by a class discussion about musical instruments

D. an audio recording of musical instruments being played in isolation

Answer

Option A is correct.

Clustered Questions

Use the information below to answer the two questions that follow.

A third-grade teacher conducts the following mathematics activity with students, in accordance with the Texas Essential Knowledge and Skills (TEKS) for Grade 3 Mathematics.

- Announce to the class the need to prepare the classroom to meet with their kindergarten book buddies. Each third grader has two book buddies.
- Ask students to work in pairs to determine how many chairs would be needed to seat their class of 24 third graders, their book buddies, and three teachers.
- Ask student pairs to solve the problem using any method that they want, but remind them that they need to explain to the class how they got their answer.
- As the pairs work, walk around the room to observe their progress and work.

Teacher reflection notes on activity:

I noted that three of the pairs made mistakes. At the end of the activity, I did not call on those three pairs to share their work, because I expected that they would probably realize their mistakes while listening to the explanations the other pairs shared. I randomly called on pairs who got the correct answer. These pairs shared a variety of approaches, including drawing pictures, making tallies, using models, and graphing.

Competency 011—(Mathematics): Understand foundational principles, concepts, and methods in mathematics to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

45. The teacher's actions in this lesson demonstrate a strength related to which of the following instructional principles?

A. basing students' work on a meaningful, real-world problem

B. treating all correct solutions as equally valuable

C. focusing on the strategy that would be most useful

D. assessing students' understanding of classmates' methods

Answer

Option A is correct.

Competency 011—(Mathematics): Understand foundational principles, concepts, and methods in mathematics to provide developmentally appropriate instruction for students in prekindergarten to grade 3.

46. Which of the following actions by the teacher would most effectively strengthen this mathematics activity?

A. encouraging students to work independently instead of in partner groups

B. assessing students' understanding of each of their classmates' methods for solving the problem

C. giving individual attention to student pairs experiencing challenges before turning to the whole-group activity

D. focusing all students to complete the problem using one strategy that would be most useful

Answer

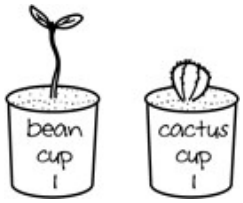
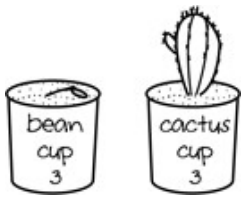
Option C is correct.

Use the information below to answer the three questions that follow.

A third-grade teacher created a unit focused on organisms and environments in accordance with Texas Essential Knowledge and Skills (TEKS) for Grade 3. The teacher and the students placed six labeled cups, each containing one plant, on a windowsill in direct sunlight for two weeks. Three cups contained bean plants and three cups contained cactus plants. The teacher and the students created three different environments for the plants, and each environment contained one bean plant and one cactus plant. The environments varied based on how often the plants were watered. Students drew pictures of their observations of the plants in each of the three environments at the end of two weeks.

Bean Plants and Cactus Plants After Two Weeks

Name: Jody + Mark

		
Environment 1	**Environment 2**	**Environment 3**
• Sun and water • Watered once daily	• Sun and water • Watered once every other day	• Sun and water • Watered once a week

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

47. Given the results at the end of two weeks, this inquiry best promotes students' understanding of which of the following phenomena?

A. life cycles of organisms in an environment

B. the flow of energy between organisms in an environment

C. physical changes that affect organisms in an environment

D. the structures and functions of organisms that help them survive in an environment

Answer

Option D is correct.

Competency 006—(Differentiation Strategies in Planning and Practice): Understand how to identify and implement developmentally appropriate strategies and practices to effectively teach and engage young children from prekindergarten to grade 3.

48. Students' abilities to draw accurate conclusions from the inquiry experience is best supported by their prerequisite knowledge in which of the following areas?

A. types of plants

B. characteristics of healthy plants

C. how plants make food

D. life spans of plants

Answer

Option B is correct.

Competency 012—(Science and Technology Applications): Understand the foundational principles, concepts, and methods of teaching science and technology applications to provide developmentally appropriate instruction to students in prekindergarten to grade 3.

49. At the end of the two-week observation, the teacher plans to use a higher-level questioning technique to encourage students to make conclusions about what they have observed during the activity. Which of the following questions would best support the teacher's goal?

A. Why did environmental conditions lead to different results for the bean and cactus plants?

B. How are the three cactus plants different at the end of the experiment?

C. Which environment was best for the cactus plants and for the bean plants?

D. What were the environmental differences the pairs of cactus and bean plants experienced?

Answer

Option A is correct.

Competency 008—(Developmentally Appropriate Assessment and Practice): Understand the types, selection, and uses of developmentally appropriate assessments and assessment practices to effectively support young children's learning in prekindergarten to grade 3.

50. Which of the following additional student activities would most effectively support the teacher in assessing students' abilities to apply what they have learned from the inquiry?

A. growing a third type of plant in the classroom and comparing its growth to the bean and cactus plants

B. creating a diagram of the cactus and bean plants and labeling the plants' parts

C. planting additional seeds independently at home and observing the outcome

D. predicting and explaining in which environment other types of plants would be most successful

Answer

Option D is correct because asking students to generate and explain predictions based on evidence from observations would be the assessment practice that would most effectively evaluate acquisition, application, and integration of concepts. **Options A and C are incorrect** because growing an additional plant or growing additional seeds at home would not require students to apply or integrate learned concepts, although these activities may expand their knowledge. **Option B is incorrect** because creating a labeled diagram of the plants would address different learning objectives than the inquire activity and therefore would not support the teacher in assessing students' learning.

Section 5: Sample Constructed-Response Question Early Childhood: PK–3 (292)

General Directions

This question requires you to demonstrate your knowledge of the subject area by providing an in-depth written response. Read the question carefully before you begin to write your response to ensure that you address all components. Think about how you will organize what you plan to write.

The final version of your response should conform to the conventions of standard English. Your written response should be your original work, written in your own words, and not copied or paraphrased from some other work. You may, however, use citations when appropriate.

Exhibits for the constructed-response question will be presented in a tabbed format on the computer-administered test. You will have the ability to move between exhibits by clicking on the tab labels at the top of the screen.

An on-screen answer box will be provided on the computer-administered test. The answer box includes a white response area for typing your response, as well as tools along the top of the box for editing your response. A word counter that counts the number of words entered for the response is also provided in the lower left corner of the box. Note that the size, shape, and placement of the answer box will depend on the content of the assignment.

Sample Assignment

Use the information in the exhibits to complete the assignment that follows.

Using your knowledge of mathematics content and pedagogy, analyze the information provided and write a response of approximately 400–600 words in which you:

- describe one area of academic need that the student demonstrates related to the foundational mathematics skill or objective specified;
- identify and describe a developmentally appropriate, effective instructional strategy or intervention to address the student's identified need in the mathematics skill or objective;
- explain why this instructional strategy or intervention would be effective, using sound reasoning and knowledge of foundational mathematics skills;
- describe a developmentally appropriate method of informal assessment to effectively monitor the student's progress toward the identified skill or objective; and
- describe one cross-curricular activity that could be integrated into the curriculum to support learning or extension of the identified foundational mathematics skill or objective.

Lesson Description

In the middle of the school year, a third-grade class has developed an understanding of multiplication facts. The class is currently working on a lesson objective of applying multiplication knowledge to solve and explain the solution for one- and two-step word problems using numbers and pictures, in

accordance with the following standards from the Texas Essential Knowledge and Skills (TEKS) for Grade 3 Mathematics.

§111.5 Mathematics Grade 3 number and operations.

4. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy. The student is expected to: (K) solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts.

During the independent practice portion of the teacher's lesson, students solve differentiated word problems based on real-world scenarios, according to their level of understanding of multiplication facts. Students have been instructed to share how they solved the problems with a partner who is working on the same set of differentiated problems and draw a picture to represent their work. After 10 minutes, the teacher notices that one student, Benjamin, has finished and is waiting for his partner to finish.

Mathematics Fact Timed Test

Name: Benjamin	**Score: 100%**	
5 × 5 = 25	1 × 2 = 2	9 × 6 = 54
6 × 7 = 42	3 × 3 = 9	4 × 8 = 32
7 × 6 = 42	8 × 0 = 0	3 × 3 = 9
4 × 1 = 4	7 × 7 = 49	5 × 6 = 30
0 × 9 = 0	6 × 3 = 18	2 × 2 = 4
9 × 9 = 81	5 × 1 = 5	7 × 3 = 21
8 × 3 = 24	4 × 7 = 28	6 × 6 = 36
2 × 4 = 8	5 × 9 = 45	8 × 6 = 48
7 × 8 = 56	0 × 1 = 0	7 × 6 = 42
3 × 9 = 27	8 × 4 = 32	2 × 7 = 14

Classwork: Independent Practice Activity

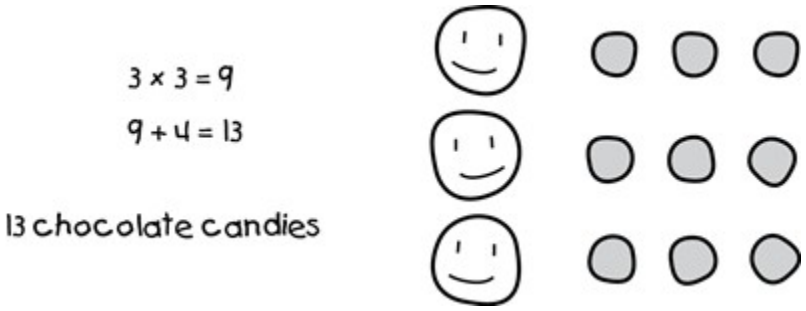
1. Tashina is setting up rows of chairs for a school concert. She makes 8 rows, and puts 5 chairs in each row. How many chairs does she set up?

X X X X X X X X
X X X X X

8 + 5 = 13

13 chairs

2. Naomi has a bag of cookies she wants to share with 3 friends. She wants each friend to get 3 cookies. Each cookie has 4 chocolate candies on top. How many chocolate candies are there in all?



3. Rosie has 8 boxes with 7 crayons in each box. Ethan has 7 boxes with 8 crayons in each. Who has more crayons, Rosie or Ethan? Why?

Rosie has more crayons because she has more boxes.

Excerpt of Conversation

Teacher: Now you won't have to wait so long to talk about how you found your answers. Can you tell me how you came up with your equation for the first problem?

Benjamin: (*points to the first problem*) In the problem I saw that there was an 8 in the first row, and 5 in the second row, so I added 8 and 5, which is 13. That must mean Tashina has 13 chairs.

Teacher: And for the second problem?

Benjamin: Well, here I saw that Naomi has cookies to give to 3 friends, and each friend gets 3 cookies. This sounds like equal sharing, so I multiplied 3 times 3 to get 9. Then, she sees that there are 4 chocolate candies on top of each cookie. 9 + 4 is 13. So, there are 13 chocolate candies.

Teacher: You said sharing cookies with friends sounds like equal sharing. Can you explain what you mean by that?

Benjamin: This sounds like when we were practicing multiplication by adding over and over, so it made me think I should multiply.

Teacher: That's a good connection. What happened when you went to solve the last problem?

Benjamin: Oh, I saw right away that Rosie has more boxes of crayons than Ethan does, so she has more crayons!

Sample Responses and Rationales

Score Point 4

Benjamin demonstrates a lack of foundational skills for applying multiplication concepts in word problems as specified in the objective and the TEKS (Exhibit 4). He has demonstrated mastery of automaticity in multiplication facts, as shown in the "Mathematics Fact Timed Test" (Exhibit 5), where he scored 100%. However, Benjamin was unable to give evidence of his understanding of multiplication concepts when solving one- and two-step word problems in the Independent Practice Activity (Exhibit 6). In the first problem, Benjamin created an addition equation rather than a multiplication equation. He did not identify the mathematics vocabulary necessary to solve the word problem. Therefore, he struggled with creating an array to fully illustrate how to solve the problem. In the second problem, he created an array, but again used an addition equation to illustrate one of the steps rather than multiplication, which resulted in an incorrect answer. In the third problem, Benjamin did not create a picture, array, or an equation. He relied on an incorrect interpretation of vocabulary and solved the problem incorrectly.

A developmentally appropriate instructional strategy the teacher could implement would be a "Think Aloud," verbalizing thoughts while teaching a logical process, using the mnemonic device "CUBES." The teacher would read the problem with Benjamin, circle the numbers, underline the question, box the key words, evaluate and draw, then solve and check (circle, underline, box, evaluate, solve). In the first problem, while thinking aloud, they would circle 8 and 5 and underline the question. They would box "chairs in each row". Next, the teacher would demonstrate using manipulatives to create an array, which is a concrete representation of the multiplication problem. They would create 8 rows of 5 using manipulatives and a drawing. Lastly, they would determine the correct operation to solve the problem. They could discuss that addition could be used, but it would need to be a multi-step problem. They could also discuss how multiplication is a way to do addition more quickly. They would then write the equation to solve the problem. The teacher would model additional word problems, guiding Benjamin in the steps. Finally, Benjamin will solve problems on his own.

This strategy is effective because direct, explicit instruction in the use of step-by-step problem-solving with manipulatives, pictures, and writing the equation is a progressive process, moving from the concrete to the abstract. The teacher is modeling the process which will provide Benjamin the opportunity to understand the steps involved in solving the problem successfully. Practicing solving word problems using this strategy consistently, Benjamin will begin to see similarities in other problems. This practice illustrates the Gradual Release of Responsibility model (I do, we do, you do).

The teacher can monitor Benjamin's progress with a checklist and anecdotal notes based on regular observation of Benjamin's work. The checklist should include specific steps for Benjamin to follow to solve word problems using CUBES. The teacher's observations of and discussions with Benjamin about his problem-solving approach will allow the teacher to verify mastery and make necessary adjustments to instruction.

To support and extend learning, the teacher could ask Benjamin to write his own mathematics story problems. The teacher could provide a template with characters, conflict, and resolution. This activity could strengthen Benjamin's problem-solving skills by giving him an opportunity to apply mathematics vocabulary and apply his knowledge of multiplication concepts through the story elements of a mathematics word problem. He could share the story with peers and ask them to solve the problem. He can verbalize how to use the steps to solve the equation; thus, providing more reinforcement. This extension lesson integrates math vocabulary, reading, writing, and speaking.

Rationale for the Score of 4

This response reflects a thorough understanding of the relevant content knowledge and skills. The response fully addresses all parts of the assignment and demonstrates an accurate, highly effective application of the relevant content knowledge and skills. The response provides strong, relevant evidence; specific examples; and well-reasoned explanations.

Completion: Notice that each of the five tasks presented in the assignment are answered completely, and in the order presented in the prompt. The response fully described and explained Benjamin's academic need citing relevant evidence from the exhibits provided. The candidate fully described a developmentally appropriate instructional strategy that effectively targets Benjamin's needs using professional knowledge and in a sequential, logical order. The response then offers a sound rationale of why the strategy will be effective, which reflects appropriate pedagogical knowledge of teaching mathematics to early childhood students. An informal assessment to effectively monitor Benjamin's progress toward the skill is thoroughly described. The candidate described a cross-curricular activity that could be integrated into the curriculum as an extension.

Application of Knowledge: As you read the response, note the accurate, current application of professional knowledge about teaching young children mathematics. The candidate interpreted the data provided accurately to identify Benjamin's need, used that information to design an appropriate strategy to address his needs, explained why the strategy would be effective using professional knowledge pedagogy, and continued the skills into another lesson via cross-curricular integration. The teacher is explicitly modeling each step through the "Think Aloud." Manipulatives, pictorial representation, and sequential learning are developmentally appropriate and relevant to addressing Benjamin's academic need of understanding and applying multiplication concepts to solve word problems. Checklists combined with anecdotal notes are effective progress monitoring tools. The extension strategy incorporates other curricular areas.

Support: The response supports assertions with specific, relevant evidence from the exhibits provided. The strategy, rationale, progress monitoring, and extension activity have specific examples. The response cites evidence from the exhibits provided. The strategy is clearly presented with specific supporting details for each step. The rationale for the strategy's effectiveness reflects sound reasoning. The extension lesson has specific examples.

Score Point 2

One area of academic need that the third grade student, who is working on his math skills, has is how to solve multiplication word problems. On the practice activity, Benjamin didn't answer any of the questions correctly. He substituted addition for multiplication and couldn't explain to his teacher how he solved his problems. He drew some pictures and one array but still was not able to correctly solve the problems. When the teacher was talking with him, it seemed like Benjamin knew how to multiply, but he also seems confused on the difference in multiplying, dividing, adding, and subtracting.

The teacher should instruct Benjamin in drawing pictorial arrays to represent the information he needs to solve each word problem. Benjamin drew eight X's to represent eight rows, but he did not draw five chairs in each row. If the teacher provided manipulatives or some other kind of real world tool, Benjamin would be better able to draw pictorials. She could have even used her classroom to help him understand. How many rows of desks? How many desks in each row? Then Benjamin would have a real world connection.

Exit tickets are a very effective way to formatively assess students' knowledge. The teacher can create exit tickets with word problems and then Benjamin would complete one ticket each day. He could have a chart with each day and then each time he was correct, he could put a sticker or check mark. At the end of the week, the teacher could have an incentive to reward him for getting at least 3 correct. By offering an incentive like station time, Benjamin will definitely increase his effort and ultimately his success. Since the problem he is working on is about cookies, the teacher could use toy cookies or pictures of real cookies to make it more of a real world math problem.

The teacher can work with other teachers on her team to create cross curricular activities. This could be in science, art, language arts and physical education. The PE teacher could have the students make life size arrays, in art they could create pictures of arrays with paints, and so forth. There are so many ways to make real world connections for our students. Creating real world activities to help Benjamin understand the math problems will increase his success rate.

Rationale for the Score of 2

The "2" response reflects a limited understanding of the relevant content knowledge and skills. The response partially addresses some of the parts of the assignment and demonstrates a limited application of the relevant content knowledge and skills. The response provides limited evidence and examples or explanations, when provided, are only partially appropriate.

Completion: Notice that the response does not fully respond to each portion of the assignment. The response describes an academic need, but unlike a score point "4" or "3" response, the evidence cited is presented in a less specific manner with partial evidence from the exhibits. The response provides an instructional strategy without the specifics of how to implement the strategy reflecting limited pedagogical knowledge of teaching mathematics to early childhood students. The response partially describes an informal assessment and a cross-curricular activity. This differs from the score point "4" or "3", which would have fully responded to each part of the assignment with more specificity and strong pedagogical knowledge.

Application of Knowledge: As you read the response, note the lack of accurate, current application of professional knowledge about teaching young children mathematics. The response demonstrates a partially accurate, limited application of the relevant content knowledge and skills. The response identifies a need related to multiplication, but the response does not explain why the strategy would be effective. This response begins with some information from the exhibits to determine an academic need. The academic need is partially identified. A strategy to address the need is provided, however, the response lacks a clear description of how the strategy would be implemented, the steps the teacher would take, and the order of how the instruction would be presented. It focuses on helping Benjamin make real-world connections, which is important, but does not address how the teacher will specifically instruct Benjamin to draw the arrays and then apply that knowledge to solve multiplication word problems. The informal assessment focuses on rewards and incentives for motivation and real-world connections and not on the more relevant, important information. The response demonstrates limited content knowledge regarding creating appropriate assessments to monitor student progress. This differs from the score point "4" or "3" response, which demonstrate an accurate, highly effective application of the relevant content knowledge and skills.

Support: Notice how the response provides limited evidence and examples or explanations, when provided, may be only partially appropriate. The response supports assertions with limited evidence from the exhibits provided. The strategy, rationale, progress monitoring, and extension activity are partially described. The explanations contain little or no evidence from the text or of relevant pedagogical knowledge. The explanation for the strategy's effectiveness is limited and reflects weak reasoning. The focus is not directly linked to Benjamin's specific academic need. It discusses motivation strategies without supporting that need with any evidence from the exhibits. The cross-curricular activity primarily focuses on real-world connections and not on how the activity specifically relates to extending Benjamin's knowledge of using multiplication to solve word problems. This differs from the score point "4" or "3" responses that provide relevant evidence, a higher degree of specific examples, and well-reasoned explanations supporting the major points in the assignment.

Performance Characteristics

The rubric created to evaluate your response to the constructed-response question is based on the following criteria:

Completion	The degree to which the candidate completes the assignment by responding to each specific task in the assignment.
Application of Content	The degree to which the candidate applies the relevant knowledge and skills to the response accurately and effectively.
Support	The degree to which the candidate supports the response with appropriate evidence, examples, and explanations based on the relevant content knowledge and skills.

Score Scale

The four points of the scoring scale correspond to varying degrees of performance.

Score Point	Score Point Description
4	**The "4" response reflects a thorough understanding of the relevant content knowledge and skills.** • The response fully addresses all parts of the assignment. • The response demonstrates an accurate, highly effective application of the relevant content knowledge and skills. • The response provides strong, relevant evidence, specific examples, and well-reasoned explanations.
3	**The "3" response reflects a general understanding of the relevant content knowledge and skills.** • The response addresses most or all parts of the assignment. • The response demonstrates a generally accurate, effective application of the relevant content knowledge and skills. • The response provides sufficient evidence, some examples, and generally sound explanations.
2	**The "2" response reflects a limited understanding of the relevant content knowledge and skills.** • The response addresses at least some of the parts of the assignment. • The response demonstrates a partially accurate, partially effective application of the relevant content knowledge and skills. • The response provides limited evidence, and examples or explanations, when provided, may be only partially appropriate.
1	**The "1" response reflects little or no understanding of the relevant content knowledge and skills.** • The response addresses, few, if any, parts of the assignment. • The response demonstrates a largely inaccurate, ineffective application of the relevant content knowledge and skills. • The response provides little to no evidence, and if provided, examples or explanations are weak or inappropriate.
U	The response is unscorable because it is unreadable, not written to the assigned topic, written in a language other than English, or does not contain a sufficient amount of original work to score.
B	There is no response to the assignment.