



Gifted/Talented Programs | Advanced Learning Options

Division of Special Education and Specialized Programs

Schools for Advanced Studies (SAS)

Eligibility Exemplars for SAS Kindergarten Applicants

Four Critical Thinking and Problem-Solving Skills

The following list of exemplars is provided for Kindergarten SAS Eligibility Criteria 2, the **Four Critical Thinking and Problem-Solving Skills**, to assist in clarifying examples of age-appropriate evidence. This list is not comprehensive. Please note that each piece of evidence (e.g., work sample, video recording, photograph, etc.) may demonstrate multiple skills, characteristics and critical thinking/problem-solving skills.

Artifacts reflecting the student's **primary language** are encouraged.

1. Explains meanings or relationships among facts, information or concepts that demonstrate depth and complexity

Has an extensive memory regarding conversations and people (e.g., recalls a detailed conversation from last outing, such as park, zoo, doctor's office, or relative's house)

Analyzes similarities and differences in events, people and things (e.g., determines what belongs and what does not belong in a group, such as classifying dinosaurs according to features)

Displays high level observation skills that frequently detect fallacies and inconsistencies (e.g., is sensitive to and comments on subtle changes in family rules; points out when a person is not following social norms or makes a mistake)

Grasps new concepts easily and moves rapidly from familiar (concrete) to unfamiliar (abstract) (e.g., learned a new vocabulary word yesterday, and uses it correctly in a sentence today; recognizes that an object such as an apple or a cat—concrete, can be represented in letters/print—abstract)

Sees hidden meanings or cause-and-effect relationships that are not obvious (e.g., discusses how bears hibernate because it is winter)

Analyzes and evaluates respective solutions from multiple points of view (e.g., retells a story or movie from different characters' points of view)

Uses logical connectives to argue, question and reason (e.g., uses specific terms such as *if/then*, *or*, *because*, *either*, and *so* when making a point or asking a question).

2. Formulates new ideas or solutions and elaborates on the information

Shows intense curiosity, thinks of and asks provocative questions which involve logical thinking processes (e.g., frequently asks "why" questions and is not satisfied with "I don't know" responses.)

Asks questions focused on relationships (e.g., wants to know why things are related and how, such as, "Where does the moon go at night?")

Initiates unique projects by integrating learning from different areas (e.g., in creating a drawing of a dolphin, wants to find more information about ocean life online)

Produces detailed steps of a solution and sound reasons for them (e.g., wants the world to have a cleaner environment, so creates a solution where everyone needs to participate in a weekly community clean-up)

Invents solutions to established problems and/or addresses problems for which there are no apparent solutions (e.g., has ideas for how to handle climate change, such as creating a plan to help polar bears)

Approaches tasks in different, unusual and original ways (e.g., creates stories starting from the end and working backward; tells stories through the eyes of different imaginary characters)

Locates, selects and uses relevant information and material (e.g., adds interesting details to enhance projects and knows where to seek further information on these topics)

Gives examples of possible outcomes and makes "educated guesses" (e.g., when reading a story, is able to predict the ending; when experimenting with objects that sink or float, gives a rationale for prediction that a feather will float in water)

Uses extensive imagination when engaging in pretend play, creates new games or new rules for games and organizes/leads in group games (e.g., creates original board games using paper and/or toys)



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3. Uses alternative methods in approaching new or unfamiliar mathematical problems.

Uses sophisticated or unique criteria for sorting and classifying toys or other objects (e.g., sorts by size, color, shape, texture, age, number, dates, etc., such as classifying plants as edible or non-edible)

Recognizes and creates simple and complex patterns (e.g., shows dimensions, angles, or perspective in math solutions or problem solving, such as creating patterns with colorful cubes)

Uses number sentences showing understanding of addition and subtraction (e.g., "If I take this apple and put it with this banana, I will have 2 pieces of fruit")

Shows complex skill when completing puzzles or constructing structures with blocks/objects (e.g., creates complex designs using LEGO bricks; completes 100+ piece jigsaw puzzles)

Demonstrates keen awareness of quantitative information in the world around them (e.g., shows interest in the size and weight of things, such as, "The jug of milk holds one gallon;" places family members' shoes in order from largest to smallest to find out who has the biggest feet)

Demonstrates pattern awareness and notices regularities in their environment (e.g., comments on patterns found on an apartment building; points out the daily routines of the household)

Shows advanced understanding of size, shape, pattern, position and direction (e.g., constructs a LEGO model following visual instructions; uses different shapes and patterns when drawing a picture)

Notices quantities and has the ability to compare quantities in real-life situations and use real and created units of measurement (e.g., comments that his piece of chocolate is four squares bigger than his sister's piece)

Counts, compares and uses mathematical operations during play (e.g., wants to make two columns of 7 blocks and notices she needs 3 more blocks to create the second column)

Estimates and uses mental calculation (e.g., shows understanding of quantity when guessing how many dogs are in the park; plays addition and subtraction mental math games)

4. Uses extensive vocabulary easily and accurately to express creative ideas.

Retells stories or conversations with detail (e.g., after listening to a story, recalls several story elements with details about characters and plot)

Rewords own language for younger or less mature children (e.g., when talking to a younger sibling, adjusts vocabulary to match the younger child's vocabulary level)

Demonstrates fluent, concise, and creative self-expression (e.g., uses vocabulary, story elements and rich language when playing with toys such as action figures, dolls or animals; creates original stories)

Says or does something indicating an unexpected, sophisticated humor, uses puns/riddles or catches an adult's subtle humor (e.g., retells jokes to others; creates riddles or jokes; creates comic strips)

Asks questions about words in print or oral language (e.g., when listening to a story, asks the meaning of unfamiliar words)

Explains how unrelated things are similar or different (e.g., when given a set of cars, trucks, and trains, comments that they all can transport people or things)

Explains another's point of view (e.g., retells a story from the point of view of different characters; describes the differences in the character's feelings, emotions or actions)

Demonstrates a vivid imagination in a variety of products (e.g., creates original stories that are highly creative; creates new games or scenarios in pretend play)

Shows a unique and mature ability to express feelings and concepts (e.g., attributes feeling words to characters during play activities; notices emotions in family members; identifies feelings in self and others)

Uses extensive vocabulary in primary language (e.g., adds interesting details and advanced vocabulary when describing a topic of interest, such as, "Koalas are marsupials and all have pouches.")

Shows ability to "code switch" and uses language appropriate to specific disciplines, situations and audiences (e.g., uses math or science terminology when discussing math or science topics; understands when to use formalities, such as when introduced to an unfamiliar adult)

Plans and selects alternative means to demonstrate creative ideas (e.g. creates and performs own puppet shows; creates own maps; composes own songs)