



## Gifted/Talented Programs | Advanced Learning Options

Office of the Chief of Special Education, Equity 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, audio recording, etc.) may demonstrate multiple skills, characteristics and critical thinking/problem-solving skills.

#### 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)