Education Quality and Accountability Office

EQAO

Junior Division

Understanding Levels of Achievement

Using EQAO Information to Improve Student Learning

2012

Ontario conducts province-wide tests of students' literacy and math skills at key stages of their education. This contributes to public accountability and to the continuous improvement of every student in Ontario's publicly funded education system.

These tests are conducted by the Education Quality and Accountability Office (EQAO), an agency of the Government of Ontario.

About the Education Quality and Accountability Office

The Education Quality and Accountability Office (EQAO) is an independent provincial agency funded by the Government of Ontario. EQAO's mandate is to conduct province-wide tests at key points in every student's primary, junior and secondary education and report the results to educators, parents and the public.

EQAO acts as a catalyst for increasing the success of Ontario students by measuring their achievement in reading, writing and mathematics in relation to *Ontario Curriculum* expectations. The resulting data provide a gauge of quality and accountability in the Ontario education system.

The objective and reliable assessment results are evidence that adds to current knowledge about student learning and serves as an important tool for improvement at all levels: for individual students, schools, boards and the province.

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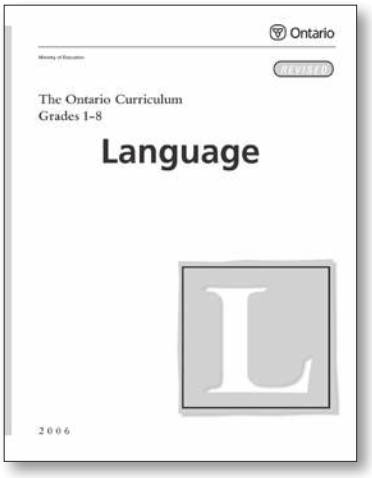
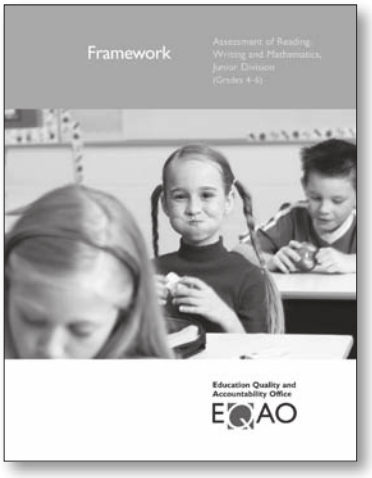
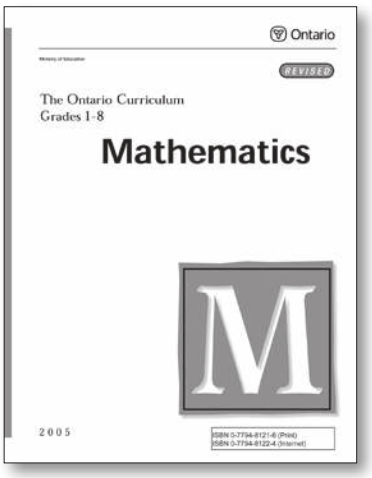
Introduction







EQAO assessments provide information about students as learners. The purpose of this resource is to help classroom teachers to make links between student work on the EQAO Assessments of Reading, Writing and Mathematics, Primary and Junior Divisions and their classroom instruction and assessment.

In its curriculum policy documents, the Ministry of Education of Ontario clearly describes the knowledge and skills students are expected to demonstrate by the end of each grade. EQAO provides assessment information about how well students are achieving key reading, writing and mathematics curriculum expectations by the end of Grade 3 (primary division) and the end of Grade 6 (junior division), two strategic points along the learning continuum. Recent surveys by EQAO indicate that more than 80% of teachers use this summative assessment information to help them plan effective learning and assessment experiences for their students.

EQAO assessments are based on the same reading, writing and mathematics curriculum expectations that teachers use to frame students' classroom experiences; however, not all expectations can be assessed appropriately within the limits of a large-scale pencil-and-paper assessment. The primary and junior *Frameworks,* posted on the EQAO Web site (www.eqao.com), summarize the differences between large-scale and classroom assessment, describe the different EQAO assessments and illustrate how their content aligns with the expectations in *The Ontario Curriculum* for language and mathematics.

Classroom assessments reference a broader range of subjects, expectations, tasks, topics and demonstrations of learning than EQAO's. As the Ministry of Education of Ontario states in its assessment policy document *Growing Success,* classroom assessments "are ongoing, varied in nature, and administered over a period of time to provide multiple opportunities for students to demonstrate the full range of their learning."* Information about a student's performance on an EQAO assessment should always be considered together with classroom assessment information about the student.

As occurs in the classroom, EQAO assessments determine a level of performance based on a body of evidence. All of a student's responses to the multiple-choice and open-response reading, writing or mathematics questions and tasks are used to make this decision for the subject. Since there is often variation in quality across a body of student work, it is important that students have multiple opportunities to show their understanding and skills in relation to the overall expectations assessed.

Looking at a body of student work, or a portfolio, that responds to multiple tasks is an excellent way to observe overall patterns and trends in student performance and track a student's strengths and areas for growth. A portfolio of student work allows teachers to observe the patterns and trends in a student's thinking and learning across tasks and subject areas. This resource may help teachers and administrators find overall patterns and trends in student performances and identify possible areas for improvement.

The descriptions of student performance on EQAO assessments in this resource provide educators with a clearer picture of what an EQAO level designation means practically in terms of a student's performance on the assessments. This resource also identifies some specific strategies that can be used to improve student performance.

* Ministry of Education of Ontario. (2010). *Growing Success: Assessment, evaluation, and reporting in Ontario schools* (p.6).

Background

The descriptions of student work in this resource were developed (from 2007 to 2009) by several groups of Ontario school- and board-based educators who examined a sample of EQAO student booklets in each of the three subject areas (reading, writing and mathematics) in the two elementary divisions (primary and junior).

After categorizing the booklets by level, they examined the booklets for each level and described the qualities of student work they observed. After much discussion, each group then grouped and summarized the descriptions to produce the scales that are central to this resource. The scales describe typical student performance on an EQAO assessment as a whole, with an emphasis on what students are able to do.

A teacher moderation process was used (from 2009 to 2010) with additional groups of classroom educators to check the validity of the descriptions for reading, writing and mathematics using student work from a different assessment and year than those the original panel used. Their task had two parts. The first was to

- examine the bodies of student work holistically;
- use the descriptive scales to categorize a set of EQAO student booklets;
- compare their interpretations of the scales and
- confirm their judgments about a student's level of performance in each subject area.

The various groups of teachers were consistent in using the scale descriptors to sort and categorize student work. The second part was a set of follow-up discussions to refine the language of the scales in order to make them more accessible and useful to teachers, and to explore how they might be used in day-to-day practice as well as in professional development.

The teacher moderation process provided an opportunity for collaborative professional dialogue with student work as the central focus. For information on using a teacher moderation process in your school, refer to the following Ministry resources:

- Literacy and Numeracy Secretariat. (2007, September). *Teacher moderation: Collaborative assessment of student work* (Capacity Building Series: Secretariat Special Edition 2). Retrieved from (http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Teacher_Moderation.pdf)
- Literacy and Numeracy Secretariat. (2007, September 10). *Teacher moderation: Collaborative assessment of student work*. (Webcasts for Educators). [Video webcast]. Retrieved from (http://www.curriculum.org/secretariat/september10.shtml)
- Literacy and Numeracy Secretariat. (2007, October 15). *Developing inquiring minds: Moderation of student work* [Webcast]. Retrieved from (http://www.curriculum.org/secretariat/inquiring/moderation.shtml)

This resource is the result of the classroom educators' work and recommendations. It contains

- scales that describe the qualities of a body of student work on EQAO assessments at each of the four levels
- descriptions of students' typical areas for growth required at each of the levels and suggested strategies to support student improvement at each level
- suggested resources to support and inform classroom instructional practice
- a sample body of student work on an EQAO assessment at each level
- annotated student responses linked to the level descriptions and to the accounts of the typical areas of growth required at each level

How to Use This Document

The Scales

The scales (pages 11 to 17) represent the range of achievement on EQAO's junior Assessment of Reading, Writing and Mathematics. The descriptions of work at each level are based on observable characteristics of student performance from several bodies of work on EQAO assessments at the corresponding level. Each level has a summary statement that captures the performance "at a glance," and several specific statements that describe possible characteristics of student work at the corresponding level.

The statements

- describe the overall performance rather than evaluate it
- are based on multiple-choice and open-response answers and responses to writing tasks
- state what is there, instead of what is not there
- use qualitative rather than quantitative language
- avoid content and technical terms wherever possible

The scales are not intended as checklists but to provide a holistic view, or overall impression, of the EQAO performance level. Some or all of the characteristics of a given level may be evident in a body of student work, and characteristics of several levels of performance may be evident. A teacher's professional judgment will determine which level is the overall best fit.

The scales are one assessment tool that can be used to support teachers in using assessment information to improve student learning (through assessment *for* learning and assessment *as* learning). Teachers can refer to the characteristics described by the scales to help identify, share and clarify the criteria of effective work for students. Involving students in the assessment process and co-constructing criteria can help them develop and deepen their understanding of what a successful performance looks like on EQAO assessments and in the classroom.

There are many possible classroom and whole-school applications for the scales, such as

- examining a body of student work in reading, writing or mathematics from a variety of sources
- engaging in professional dialogue about the scales and student work to find patterns and trends in student performance, and possible next steps
- having students apply the scales, with teacher guidance and independently, to samples of their own and others' work
- having students reflect on a portfolio of their best work, and highlighting key characteristics in the scales that describe their work
- partnering with other teachers in the same grade or division to assess samples of student work
- partnering with other teachers in different divisions to assess samples of student work
- identifying characteristics in the scales that support success criteria developed for classroom assessment

Guiding Questions

When using the scales to assess a body of student work, ask reflective questions, such as

- What words and phrases in the scale best describe the body of student work?
- Which level best captures this body of work?
- How does this information confirm or challenge what I already know about this student as a reader, writer or mathematician?
- How might I use this information to identify next-step learning goals?
- What patterns in characteristics do I notice among students' performances?
- How might I use this information to target small-group instruction?
- How do my findings about student work compare with other teachers' findings?

Support Materials

The support materials (pages 19 to 105) provide a detailed look at the scales to help link each EQAO level of performance to classroom instruction. Samples of student work on an EQAO assessment are included to illustrate the descriptions of the level.

Teachers can use the areas-for-growth and next-steps information and strategies as a starting point for grade and divisional discussions and staff development, to inform their instructional decisions, to support the implementation of teaching and learning critical pathways, or for student-parent-teacher conferences.

Sample responses have been selected from one student's body of work on an EQAO assessment in the strand or subject at the appropriate EQAO level of performance.

Note that all of the student's multiple-choice and open responses were taken into consideration when determining the particular level of performance in reading, writing or mathematics. Individual sample responses may therefore vary in the degree to which they illustrate the characteristics of the level and should *not* be used as exemplars for a particular achievement level. For reading, writing and mathematics exemplars, use those provided in the curriculum documents area of the Ontario Ministry of Education Web site at http://www.edu.gov.on.ca/eng/curriculum/elementary/language.html and http://www.edu.gov.on.ca/eng/curriculum/elementary/math.html.

The sample responses can be used as a starting point for discussions with students about success criteria and the key characteristics of work at each level, with parents before or after EQAO assessments, and with other teachers to highlight the connections between levels and divisions. Examining students' incorrect responses can provide insight into their acquisition and use of reading, writing and mathematics skills and knowledge, their reasoning skills and any gaps or misunderstandings.

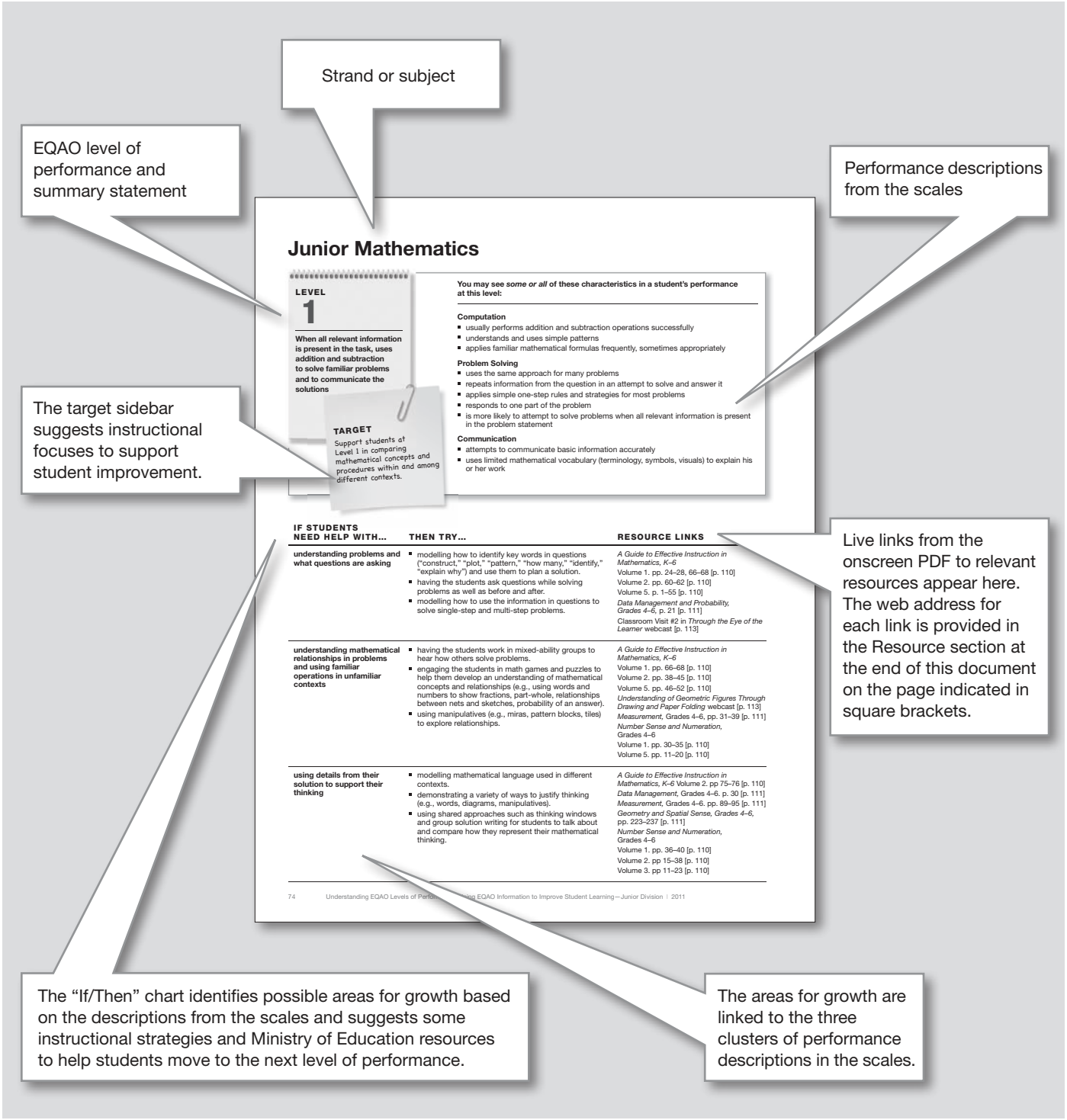
The relevant junior reading selections follow the reading section.

How to Use This Document

The Support Materials Section at a Glance

The support materials section consists of

- the performance descriptions from the scales
- descriptions of typical areas where growth is required by students at each level
- suggested strategies and resources to support student improvement at each level
- sample annotated responses at each level selected from one student's body of work on an EQAO assessment

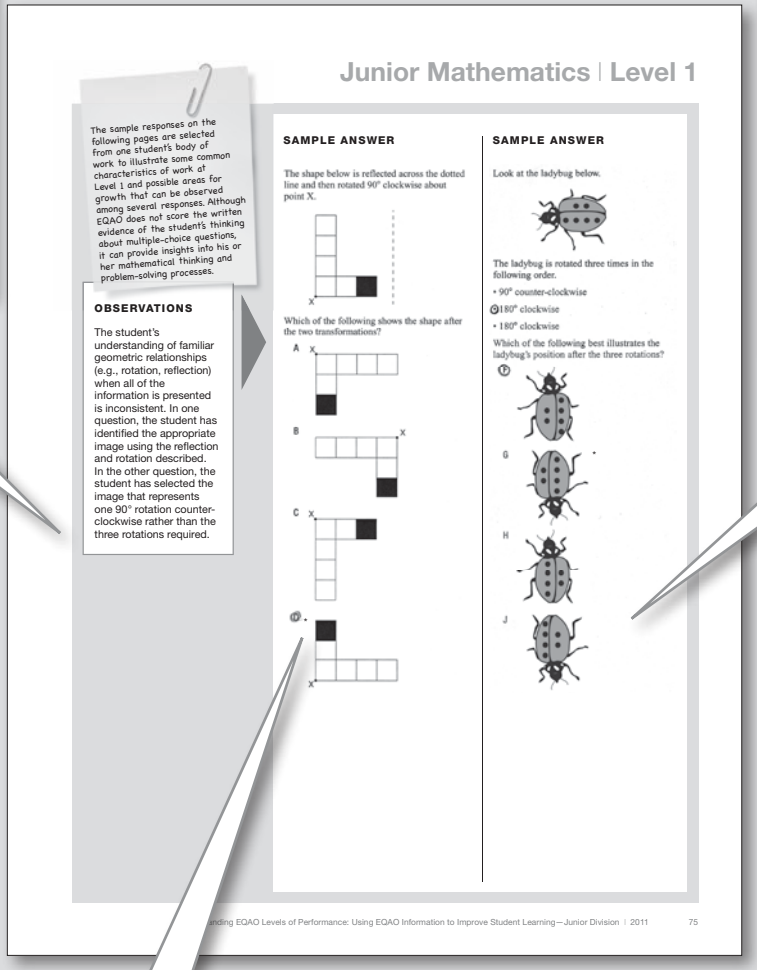


The annotations will identify some of the characteristics of the EQAO level found in the sample responses.

The characteristics will be evident in more than one response. They help link the level descriptions and the typical areas of growth.

The sample responses are from one student's body of work in reading, writing or mathematics at the appropriate EQAO level of performance.

One student's work is used in order to provide a more comprehensive view of the characteristics of a student's overall performance on an EQAO assessment.



For each multiple-choice question, the correct answer will be indicated by an asterisk.

Junior Scales

Reading, Writing and Mathematics

Junior Reading Scale

LEVEL 1

Offers simple answers that may or may not be clearly related to the demands of the question

You may see *some or all* of these characteristics in a student's performance at this level

Answers to Questions

- attempts to answer the question, sometimes with unrelated information and ideas
- demonstrates an inconsistent grasp of the whole question
- gives answers that are simple, partial or based on a misunderstanding of the question
- sometimes repeats or rewords the question rather than answering it

Understanding of Text

- demonstrates a very basic, literal understanding of the text
- demonstrates an inconsistent grasp of the whole text; focuses on details
- understands some important ideas from the text but gaps are evident in his or her understanding
- sometimes retells or restates ideas and events from the text without a clear connection to the question
- expresses simple thoughts and ideas that may or may not be related to the text

Support for Answers

- attempts to use an example or words from the text to answer questions
- attempts to make predictions and inferences, with few or irrelevant details from the text
- sometimes provides unrelated or irrelevant information and ideas in his or her answers
- includes few details from the text or little relevant personal experience

LEVEL 2

Answers indicate some understanding of the directly stated ideas in the text combined with personal experience

You may see *some or all* of these characteristics in a student's performance at this level

Answers to Questions

- understands questions but may answer only part of some questions
- uses words from the question to answer, often inappropriately

Understanding of Text

- shows a straightforward, literal understanding of the text
- identifies some important ideas but may miss or confuse details
- makes weak predictions and connections based on an understanding of the text
- bases his or her understanding on personal experiences
- makes simple inferences but sometimes based on specific details rather than whole text
- makes few connections between the text and the inferences
- retells when asked to interpret the text

Support for Answers

- supports his or her answers by referring directly to the text, but may simply copy words from the text without an explanation of how they provide support for the answer
- offers one piece of information, detail or idea to answer the question when several are possible
- may choose less important or less significant details to support his or her answer
- makes simple inferences about characters or events with little or no supporting evidence from the text
- uses background knowledge and personal ideas that are somewhat relevant to the text to support answers

LEVEL 3

Answers demonstrate an understanding of the ideas directly stated and implied by the text and include relevant support from both the text and prior knowledge and personal experience

You may see *some or all* of these characteristics in a student's performance at this level

Answers to Questions

- understands questions and generally responds correctly to them
- answers questions using relevant ideas and information directly stated and implied by the text

Understanding of Text

- makes straightforward inferences and conclusions based on the text
- combines information in the text to make reasonable inferences and reach conclusions
- makes reasonable predictions and connections that relate to the text
- uses background knowledge to identify and explain ideas not directly stated in the text
- misses some context clues in more challenging texts

Support for Answers

- supports his or her answers with relevant information from the text by paraphrasing or using the author's own words
- clearly explains his or her interpretations using relevant evidence from the text as well as personal knowledge and ideas
- elaborates on some ideas and provides reasons and supporting details
- links ideas in the answer

LEVEL 4

Demonstrates a deep understanding of texts by providing clear, complex answers that include thoughtful, detailed support

You may see *some or all* of these characteristics in a student's performance at this level

Answers to Questions

- understands and answers all aspects of the questions
- responds thoroughly to question demands
- provides detailed, articulate answers related to the question

Understanding of Text

- makes interpretations and generalizations based on the whole text and demonstrates understanding
- makes predictions, inferences and connections based on ideas, characters and events in the text
- offers reasonable and creative solutions and responses to problems and situations in the text

Support for Answers

- supports his or her answers with specific, relevant ideas and information found in the text
- provides explanations of ideas that are clear, well-developed and sophisticated
- elaborates on his or her answers by adding relevant personal ideas and connections
- links ideas to form a cohesive, well-developed answer

Junior Writing Scale

LEVEL 1

Briefly responds to the task with a few ideas that may or may not be on topic or connected to the other aspects of the assigned task

You may see *some or all* of these characteristics in a student's performance at this level

Responses to Tasks

- relates the response to the topic, but not necessarily to all parts of the task
- often starts to respond without understanding the assigned task

Ideas/Organization

- includes a few simple ideas with minimal development
- attempts to stay on topic but includes unrelated or irrelevant ideas and information
- uses basic organization, such as simple sequencing or listing, to structure the writing
- uses few transition words
- uses pictures or a few words to brainstorm prior to writing

Conventions (spelling, punctuation, grammar, usage)

- writes with inconsistent grammar, punctuation and usage, which often make the response difficult to read or understand
- uses some simple sentences that may include basic punctuation
- often spells familiar words phonetically

LEVEL 2

Responds to the task with a few ideas on the topic and some organization of the response

You may see *some or all* of these characteristics in a student's performance at this level

Responses to Tasks

- relates the response to most, but not necessarily all, parts of the task

Ideas/Organization

- stays on topic and includes relevant ideas; some ideas may be irrelevant
- provides few details to develop and support ideas
- provides simple explanations or justifications for reasoning
- leaves gaps that require the reader to connect ideas to understand the message fully
- uses simple logical structures for writing (e.g., simple sequence, introduction/conclusion) but may include details that are confusing or sound like a simple list
- repeats some common transition words (e.g., first, next, secondly)
- begins to use the features of different written text forms

Conventions (spelling, punctuation, grammar, usage)

- writes with inconsistent grammar and punctuation, which makes parts of the text difficult to read or understand
- uses simple sentences with some variation of type
- spells familiar words correctly or phonetically

LEVEL 3

Responds to the task with clear and focused ideas stated in a manner that is easy to read and understand

You may see *some or all* of these characteristics in a student's performance at this level

Responses to Tasks

- stays on topic
- clearly responds to all parts of the task with an understanding and awareness of audience, purpose and form
- shows an understanding of different forms of writing

Ideas/Organization

- provides ideas that are appropriate to the task, developed and clearly expressed, but some support may be vague or limited
- includes relevant details from his or her background knowledge and personal experiences to help the reader understand the message
- provides justification for reasoning
- provides an introduction that sets the stage for the reader and draws the reader in
- uses dialogue, quotations and his or her own viewpoint, as appropriate, to advance the writing
- uses connecting and transition words (e.g., however, but) to help the flow of ideas
- shows evidence of having planned and organized ideas to fulfill a clear purpose
- organizes writing into paragraphs and uses a logical but conventional structure

Conventions (spelling, punctuation, grammar, usage)

- makes few errors in spelling, grammar and punctuation
- varies sentence structure
- includes adjectives, adverbs and descriptive language

LEVEL 4

Thoughtfully responds to the task with a personalized, unique and well-organized writing style that captures the reader's interest

You may see *some or all* of these characteristics in a student's performance at this level

Responses to Tasks

- understands the tasks clearly
- demonstrates a clear understanding that writers communicate to a particular audience for a particular purpose in a particular form
- provides well-developed ideas connected to the assigned task in a recognizable written form (e.g., letter, instructions)

Ideas/Organization

- sets the stage for the reader and holds the reader's attention through to the conclusion
- includes relevant details and personal thoughts to make the text interesting and engaging
- ensures the text flows effectively to communicate a clear message
- uses a varied selection of descriptive words
- engages readers so they can visualize what they read
- makes his or her personal voice evident, consistent and distinct
- organizes his or her writing logically into well-developed paragraphs with effective transition words

Conventions (spelling, punctuation, grammar, usage)

- uses conventions, spelling and grammar correctly
- combines sentences in different ways using a variety of connecting words
- uses a varied vocabulary and makes effective word choices

Junior Mathematics Scale

LEVEL 1

When all relevant information is present in the task, uses addition and subtraction to solve familiar problems and to communicate the solutions

You may see *some or all* of these characteristics in a student's performance at this level

Computation

- usually performs addition and subtraction operations successfully
- understands and uses simple patterns
- applies familiar mathematical formulas frequently, sometimes appropriately

Problem Solving

- uses the same approach for many problems
- repeats information from the question in an attempt to solve and answer it
- applies simple one-step rules and strategies for most problems
- responds to one part of the problem
- is more likely to attempt to solve problems when all relevant information is present in the problem statement

Communication

- attempts to communicate basic information accurately
- uses limited mathematical vocabulary (terminology, symbols, visuals) to explain his or her work

LEVEL 2

Uses basic operations (addition, subtraction, multiplication, division) and memorized formulas to solve familiar problems and to communicate the solutions

You may see *some or all* of these characteristics in a student's performance at this level

Computation

- computes using all four basic operations (addition, subtraction, multiplication, division) with some degree of accuracy
- distinguishes how numbers are used in different ways and what they represent (e.g., quantity, measure, fractions)

Problem Solving

- applies simple, familiar formulas mechanically to most problems whether appropriate or not
- may miss or misunderstand key information in the question
- applies the same solutions to problems that look like ones solved before
- focuses on getting the answer even if it is unreasonable rather than analyzing the problem
- uses strategies and procedures that are only partially correct
- recognizes different sources of mathematical information (e.g., graphs, tables, charts)
- checks infrequently for the reasonableness of his or her answers

Communication

- communicates his or her thinking concretely with a few words and representations

LEVEL 3

Approaches problems logically, accurately performs computations using mathematical language and techniques and communicates results appropriately

You may see *some or all* of these characteristics in a student's performance at this level

Computation

- performs calculations and operations accurately, with occasional errors
- understands and uses mathematical language, rules and procedures correctly when solving familiar problems

Problem Solving

- understands what the questions are asking and selects and applies appropriate operations
- approaches problems logically, with mathematical reasoning
- selects appropriate procedures, formulas and strategies to solve multi-step problems, with occasional miscues, especially when solving unfamiliar or more complex problems
- recognizes when problems require more information than provided and fills in gaps where needed to arrive at solutions
- may not check the plausibility of his or her responses

Communication

- uses mathematical terminology and appropriate representations to explain solutions

LEVEL 4

Uses sophisticated approaches to problems, generating comprehensive solutions, which are then communicated in a precise, technical manner

You may see *some or all* of these characteristics in a student's performance at this level

Computation

- makes very few computational errors
- selects and applies operations, vocabulary and units correctly
- generates comprehensive, accurate solutions

Problem Solving

- creates well-designed solutions to problems, showing a high level of mathematical reasoning and expression in a variety of ways
- evaluates his or her answers for reasonableness
- demonstrates an integrated and flexible understanding of mathematics within and across strands

Communication

- communicates mathematical thinking and processes clearly
- uses precise mathematical vocabulary and formats to explain his or her solutions and thinking
- sometimes presents alternative strategies and explanations using words or visual representations
- understands the purpose and audience for his or her explanations

Junior Support Materials

Using EQAO Information to Improve Student Learning

Junior Reading

LEVEL

1

Offers simple answers that may or may not be clearly related to the demands of the question

TARGET

Support students at Level 1 with open-ended questions that draw on their prior knowledge and help them make direct connections to the text.

You may see *some or all* of these characteristics in a student's performance at this level:

Answers to Questions
- attempts to answer the question, sometimes with unrelated information and ideas
- demonstrates an inconsistent grasp of the whole question
- gives answers that are simple, partial or based on a misunderstanding of the question
- sometimes repeats or rewords the question rather than answering it

Understanding of Text
- demonstrates a very basic, literal understanding of the text
- demonstrates an inconsistent grasp of the whole text; focuses on details
- understands some important ideas from the text but gaps are evident in his or her understanding
- sometimes retells or restates ideas and events from the text without a clear connection to the question
- expresses simple thoughts and ideas that may or may not be related to the text

Support for Answers
- attempts to use an example or words from the text to answer questions
- attempts to make predictions and inferences, with few or irrelevant details from the text
- sometimes provides unrelated or irrelevant information and ideas in his or her answers
- includes few details from the text or little relevant personal experience

IF STUDENTS NEED HELP WITH…	THEN TRY…	RESOURCE LINKS
having a clear understanding of what is required by questions	▪ teaching the students how to identify key words in the question (identify, explain why, support, how). ▪ co-creating a class chart of key-word definitions. ▪ using a think-aloud to show how a key word suggests the thinking, ideas and information required to answer a question. ▪ having students ask questions before, during and after reading. ▪ modelling how to use the text to answer student- and teacher-generated questions.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. Part 1, pp. 49–51 [p. 109] Part 2, pp. 143–145 [p. 109] Volume 5. pp. 27–28, 92 [p. 109]
understanding the overall meaning of a text	▪ teaching strategies to make and confirm predictions about texts (e.g., talk about the questions before reading, use the title and graphics to make predictions, think about prior knowledge, pausing and checking predictions during reading). ▪ having the students scan the text for key words and phrases before reading. ▪ teaching unfamiliar and subject-specific vocabulary. ▪ having partners summarize important ideas orally after each paragraph or section.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. Part 1, pp. 51–52, 53 [p. 109] Part 2, pp. 131–132 [p. 109] Volume 5. pp. 25–27, 28–39, 88, 90, 95, 97 [p. 109] Shared Reading: Signal Words in the *High-Yield Strategies to Improve Student Learning* webcast [p. 113]
using ideas and information from a text to support their thinking	▪ providing the students with graphic organizers to record and discuss important information as they read. ▪ modelling how to identify relevant information and details in a text to support an answer. ▪ having the students use a strategy such as "Text says, I think" to link their thinking to specific text references.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. pp. 130, 143 [p. 109] Volume 5. p. 94 [p. 109]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 1 and possible areas for growth that can be observed among several responses.

OBSERVATION

The responses are based on prior knowledge, but indicate basic, literal comprehension only and an inconsistent grasp of the whole text and the questions. Connections to specific, appropriate text details would ensure more accurate answers.

SAMPLE ANSWER

How is Jessica influenced by the work Brandon does? Use specific details from the text and your own ideas to support your answer.

jessica was having fun watching her brother take out the weeds. She was asking why he was doing it and he told her.

SAMPLE ANSWER

Is the title "Digging for Gold" an appropriate choice for this text? Use specific details from the text to support your answer.

yes i think so and i dont bc it is a good book but digging for gold sands like a treser Hunt.

"Digging for Gold"

Junior Reading | Level 1

OBSERVATION

The responses indicate basic, literal comprehension based in part on prior knowledge, but an inability to draw inferences from specific text details. In the second question, the inference may be accurate based on the student's prior knowledge, but it doesn't take into consideration the whole text or Jessica's reply that she wants to buy something.

SAMPLE ANSWER

Paragraph 6 states that the dandelions' yellow flowers

A look very nice.
(B) turn into seeds. *
C are difficult to dig.
D are worth one dollar.

SAMPLE ANSWER

In paragraph 9, Jessica is "blowing and shaking" dandelions because

F she wants them to grow back. *
G they look like white pompoms.
H her grandfather asks her to pick them.
(J) she likes the way the yellow flowers look.

"Digging for Gold"

OBSERVATION

The responses demonstrate a literal understanding of specific details of the text rather than the whole. The responses suggest that the student doesn't read for a main idea or understand the purposes of texts.

SAMPLE ANSWER

The main idea of this text is that two Canadians developed a pump that

A is easy to use and fix. *
B is made of heavy steel.
C holds up in wet weather.
(D) uses a coloured plastic tube.

SAMPLE ANSWER

The purpose of this text is to

(F) tell a story about an inventor.
G celebrate a Canadian invention. *
H create interest in the country of Malawi.
J persuade people to use the Unimade pump.

"Canadian Pump Brings Water to the World"

OBSERVATION

The response shows that the student has attempted to answer the question and has made a tenuous link to the text (sending water to dry countries) but has not identified the characteristics of the pump or how these characteristics are important in the effort to meet the needs of dry countries.

SAMPLE ANSWER

Explain how the characteristics of the Unimade pump make it an important invention. Use specific details from the text and your own ideas to support your answer.

The pump was made to send water to countries that needed it. Like the dry countries, like Mexico.

"Canadian Pump Brings Water to the World"

OBSERVATION

The response suggests the student is able to respond to a specific prompt and locate information.

SAMPLE ANSWER

Which paragraph in this text describes the challenge facing Professors Plumtree and Rudin?

F Paragraph 1
G Paragraph 3
(H) Paragraph 5 *
J Paragraph 7

"Canadian Pump Brings Water to the World"

Junior Reading | Level 1

OBSERVATION

The responses repeat some information from the questions and attempt an answer but do not respond effectively to what the questions are asking.

SAMPLE ANSWER

What makes the security features easy to use? Use two examples from the text to support your answer.

I think that the security thing is helping with the banks.

SAMPLE ANSWER

In the sentence "Knowing how to recognize counterfeit money just makes cents!" what is the significance of the word "cents"? Use information from the text and your own ideas to support your answer.

Recognizing counterfeit money is really hard to do.

"Funny Money"

OBSERVATION

The responses suggest a reliance on prior knowledge or reference to text details that are irrelevant to the context of the questions, or indicate an inconsistent grasp of the text details.

SAMPLE ANSWER

A "watermark" is most like a

(F) dark stain.
G faint design. *
H metallic image.
J colourful thread.

SAMPLE ANSWER

The images of the individual security features accompany the text boxes to

F provide a closer view. *
G contrast with older bills.
H repeat information in the text boxes.
(J) demonstrate the queen's appearance.

"Funny Money"

Junior Reading

LEVEL

2

Answers indicate some understanding of the directly stated ideas in the text combined with personal experience

TARGET

Support students at Level 2 in identifying and meeting the challenges of a text so that they can find important details and make inferences to engage with its meaning.

You may see *some or all* of these characteristics in a student's performance at this level:

Answers to Questions
- understands questions but may answer only part of some questions
- uses words from the question to answer, often inappropriately

Understanding of Text
- shows a straightforward, literal understanding of the text
- identifies some important ideas but may miss or confuse details
- makes weak predictions and connections based on an understanding of the text
- bases his or her understanding on personal experiences
- makes simple inferences but sometimes based on specific details rather than whole text
- makes few connections between the text and the inferences
- retells when asked to interpret the text

Support for Answers
- supports his or her answers by referring directly to the text, but may simply copy words from the text without an explanation of how they provide support for the answer
- offers one piece of information, detail or idea to answer the question when several are possible
- may choose less important or less significant details to support his or her answer
- makes simple inferences about characters or events, with little or no supporting evidence from the text
- uses background knowledge and personal ideas that are somewhat relevant to the text to support answers

IF STUDENTS NEED HELP WITH...	THEN TRY...	RESOURCE LINKS
monitoring comprehension as they read	▪ modelling for students how to listen to their "inner voice" as they make connections, ask questions, access prior knowledge or encounter challenges. ▪ demonstrating the use of sticky notes to indicate places where meaning breaks down. ▪ having students use a monitoring strategy such as "Does this part look right, sound right, make sense?" ▪ co-creating an anchor chart of "fix-up" strategies for monitoring and repairing understanding.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. pp. 41, 47, 54–55 [p. 109] Volume 4. pp. 57, 59 [p. 109] Volume 5. pp. 26–27 [p. 109] *Effective Instruction in Reading Comprehension* webcast [p. 112]
identifying important and significant details related to the main ideas in texts	▪ modelling the use of jot notes to record main ideas and supporting details. ▪ using think, pair, share to help the students summarize main points after reading a small section of a text. ▪ having the students use concept-mapping strategies to link main ideas and important details in the text.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. pp. 47–48 [p. 109] Volume 5. pp. 35, 95 [p. 109] *Education for All, Kindergarten to Grade 6,* pp. 98–100 [p.109]
making inferences and drawing conclusions from the text	▪ asking students to make predictions and then confirm or reject them during or after reading. ▪ using a think-aloud to show how to combine what they know with details in the text to make an informed guess, using "I think" or "I wonder how" prompts.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 5. pp. 26, 28, 93, 99–105 [p. 109]
explaining answers as fully and clearly as possible	▪ using paired oral rehearsal of answers with partners using the prompt "tell me more." ▪ modelling how to revisit the text to find additional details that support and clarify thinking. ▪ co-creating anchor charts of exemplary responses.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 5. p. 49 [p. 109]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 2 and possible areas for growth that can be observed among several responses.

OBSERVATION

The responses demonstrate a literal understanding that draws on some prior knowledge and some simple inferences from unrelated details of the text, but they suggest a lack of understanding of the main ideas.

SAMPLE ANSWER

How is Jessica influenced by the work Brandon does? Use specific details from the text and your own ideas to support your answer.

Jessica is influenced by the work Brandon does because when Brandon was pulling the weeds out from the ground, Jessica looked very intressted. She also showed him how to pull them out the right way.

SAMPLE ANSWER

Is the title "Digging for Gold" an appropriate choice for this text? Use specific details from the text to support your answer.

No, the title "Digging for Gold" is not an appropriate choice for this text because Digging for Gold sounds like your looking for something under the ground. (Weather than

"Digging for Gold"

Junior Reading | Level 2

OBSERVATION

The responses are partially accurate based on prior knowledge and details of the text but suggest only a straightforward, literal understanding of the text. Although the flowers do look like white pompoms, the student has missed the context of Jessica's actions.

SAMPLE ANSWER

Paragraph 6 states that the dandelions' yellow flowers

A look very nice.
B turn into seeds. *
C are difficult to dig.
D are worth one dollar.

SAMPLE ANSWER

In paragraph 9, Jessica is "blowing and shaking" dandelions because

F she wants them to grow back. *
G they look like white pompoms.
H her grandfather asks her to pick them.
J she likes the way the yellow flowers look.

"Digging for Gold"

OBSERVATION

The responses are accurate and based on explicit details of the text. The selected answers suggest an understanding of the important ideas in the text.

SAMPLE ANSWER

The main idea of this text is that two Canadians developed a pump that

A is easy to use and fix. *
B is made of heavy steel.
C holds up in wet weather.
D uses a coloured plastic tube.

SAMPLE ANSWER

Which paragraph in this text describes the challenge facing Professors Plumtree and Rudin?

F Paragraph 1
G Paragraph 3
H Paragraph 5 *
J Paragraph 7

"Canadian Pump Brings Water to the World"

OBSERVATION

The responses are accurate and based on explicit details from the text but miss key words in the question. The first response doesn't identify characteristics of the pump or how these characteristics link to the pump's importance. The second response describes what Canada does but not the implied benefit of the project to Canada.

SAMPLE ANSWER

Explain how the characteristics of the Unimade pump make it an important invention. Use specific details from the text and your own ideas to support your answer.

The Characteristics of the Unimade pump make it an important invention because other countries like Africa, India etc get a chance to really drink clean water.

SAMPLE ANSWER

Explain whether this project is a good one for Canada to support. Use specific details from the text and your own ideas to support your answer.

This project is a good one for Canada to support because Canada is giving the less fortunet countries like Africa, India, Malawi etc. clean pure water to drink for a charge.

"Canadian Pump Brings Water to the World"

Junior Reading | Level 2

OBSERVATION

The response indicates a simple inference, because the reader seems to be aware of the play on words, but it doesn't link back to the text.

SAMPLE ANSWER

In the sentence "Knowing how to recognize counterfeit money just makes cents!" what is the significance of the word "cents"? Use information from the text and your own ideas to support your answer.

The significance of the word ("cents") was to tricks you because their talking about money.

"Funny Money"

OBSERVATION

The responses are accurate based on explicit details of the text and the visuals.

SAMPLE ANSWER

A "watermark" is most like a

F dark stain.
(G) faint design. *
H metallic image.
J colourful thread.

SAMPLE ANSWER

Which feature can you see only if you hold the bill up to the light?

A the hologram
(B) the perfect 20 *
C the raised printing
D the changes in the security thread

"Funny Money"

Junior Reading

LEVEL

3

Answers demonstrate an understanding of the ideas directly stated and implied by the text and include relevant support from both the text and prior knowledge and personal experience

TARGET

Support students at Level 3 with many opportunities for conversations about text to help them combine their prior knowledge with textual details to reach interpretations of what they read.

You may see *some or all* of these characteristics in a student's performance at this level:

Answers to Questions

- understands questions and generally responds correctly to them
- answers questions using relevant ideas and information directly stated and implied by the text

Understanding of Text

- makes straightforward inferences and conclusions based on the text
- combines information in the text to make reasonable inferences and reach conclusions
- makes reasonable predictions and connections that relate to the text
- uses background knowledge to identify and explain ideas not directly stated in the text
- misses some context clues in more challenging texts

Support for Answers

- supports his or her answers with relevant information from the text by paraphrasing or using the author's own words
- clearly explains his or her interpretations using relevant evidence from the text as well as personal knowledge and ideas
- elaborates on some ideas and provides reasons and supporting details
- links ideas in the answer

IF STUDENTS NEED HELP WITH…	THEN TRY…	RESOURCE LINKS
noticing important details and clarifications in texts that affect meaning	▪ modelling how to revisit and reread texts, using skimming and scanning to find important details. ▪ co-creating an anchor chart of words or phrases that indicate elaboration or clarification (e.g., for example, in addition, and also). ▪ having small groups examine visual texts (e.g., photographs, posters, magazine ads) and identify the details that help communicate different messages.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 5. p. 94 [p. 109] Volume 1. pp. 47–48 [p. 109]
using implicit information in the text to interpret the overall meanings of the text	▪ using reader's theatre or hot-seating to have students make inferences about characters and events based on information and details in the text. ▪ using response journals to help students track how their prior knowledge influences their inferences and interpretations of texts. ▪ using visual texts such as wordless picture books, or comics and cartoons without speech bubbles for students to infer what is happening and what people are saying.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. Part 1, pp. 52–54 [p. 109] Part 2, p. 93 [p. 109] Volume 5. pp. 54–55 [p. 109] *Effective Instruction in Reading Comprehension* webcast [p. 112]
using prior knowledge and experience to check the validity of interpretations of texts	▪ using "quick write" or "place mat" strategies for students to record and share prior knowledge. ▪ modelling the use of a "text says, I say, and so" response chart. ▪ using literature circle discussions during which the students can share and compare interpretations.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. pp. 143–145 [p. 109] Volume 5. pp. 52, 88, 94, 98 [p. 109] *Literature Circles* webcast [p. 112]
fully explaining and justifying interpretations	▪ asking groups to rank effective and less effective exemplar responses to text and explain their reasoning to other groups. ▪ using literature circle discussions to have all students share, compare and justify their interpretations.	*A Guide to Effective Literacy Instruction, Grades 4 to 6,* Volume 5. pp. 52, 54–55, 98 [p. 109]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 3 and possible areas for growth that can be observed among several responses.

OBSERVATION

The responses indicate accurate inferences and conclusions based on an understanding of both explicit details and implicit ideas in the text. The support the student has offered doesn't elaborate on connections between the inferences and the text.

SAMPLE ANSWER

How is Jessica influenced by the work Brandon does? Use specific details from the text and your own ideas to support your answer.

Jessica is influenced by the work Brandon does in a way in wich Jessica notices that you can make money from doing simple jobs like picking dandilions or other weeds for money.

SAMPLE ANSWER

Is the title "Digging for Gold" an appropriate choice for this text? Use specific details from the text to support your answer.

I think this title is a very appropriate use of text for this artical. I think this because it relates back to how picking (digging) dandilions for moeny (gold) is just like digging for gold.

"Digging for Gold"

Junior Reading | Level 3

OBSERVATION

The responses are accurate and based on prior knowledge and a close reading of details in the text, suggesting an understanding of the important ideas implied by it.

SAMPLE ANSWER

Paragraph 6 states that the dandelions' yellow flowers

A look very nice.
B turn into seeds. *
C are difficult to dig.
D are worth one dollar.

SAMPLE ANSWER

In paragraph 9, Jessica is "blowing and shaking" dandelions because

F she wants them to grow back. *
G they look like white pompoms.
H her grandfather asks her to pick them.
J she likes the way the yellow flowers look.

"Digging for Gold"

OBSERVATION

The responses demonstrate an understanding of the whole text but miss some specific details. The student may not have revisited or reread the text when choosing an answer to the first question. Paragraph 7 describes a solution to the challenges rather than the challenges themselves.

SAMPLE ANSWER

Which paragraph in this text describes the challenge facing Professors Plumtree and Rudin?

F Paragraph 1
G Paragraph 3
H Paragraph 5 *
J Paragraph 7

SAMPLE ANSWER

The purpose of this text is to

F tell a story about an inventor.
G celebrate a Canadian invention. *
H create interest in the country of Malawi.
J persuade people to use the Unimade pump.

"Canadian Pump Brings Water to the World"

OBSERVATION

The responses are accurate and supported but are based on limited references to text details. The student has expressed a personal opinion, but the selected details are repetitive or are not elaborated on. Although the first response states that the pump is useful and well used (implying importance), it doesn't mention the characteristics that make it useful. The second response doesn't elaborate on how a better social name is good for Canada and is not supported with relevant details.

SAMPLE ANSWER

Explain how the characteristics of the Unimade pump make it an important invention. Use specific details from the text and your own ideas to support your answer.

The charictaristics make the pump a very important invention. The make the pump important and well used. The charictaristics show this because it is a good pump it helps people and it is usefull.

SAMPLE ANSWER

Explain whether this project is a good one for Canada to support. Use specific details from the text and your own ideas to support your answer.

I think think this project is great because it giving the people of malawi clean water and gives canada a better social name.

"Canadian Pump Brings Water to the World"

Junior Reading | Level 3

OBSERVATION

The responses indicate reasonable inferences and conclusions based on details of the text as well as prior knowledge ("sense" and "cents") to explain a link between the features and ease of use or to explain the play on words.

SAMPLE ANSWER

What makes the security features easy to use? Use two examples from the text to support your answer.

One thing that makes the features easy to use is that if you would try to make a fake bill it wont be the same. Seconly they are simple tittle things that could change the way you look at money. If you don't see a shadow you know it is fake.

SAMPLE ANSWER

In the sentence "Knowing how to recognize counterfeit money just makes cents!" what is the significance of the word "cents"? Use information from the text and your own ideas to support your answer.

I think the signi ficance is that it makes sense to reconize money that is real or fake. And money is like cents/change. Cents as in a penny.

"Funny Money"

OBSERVATION

The responses suggest an understanding of the whole text. The student has used prior knowledge and text details and visuals to make appropriate inferences and draw conclusions.

SAMPLE ANSWER

A "watermark" is most like a

F dark stain.
G faint design. *
H metallic image.
J colourful thread.

SAMPLE ANSWER

The word "specimen" appears on the image of the 20-dollar bill to indicate that the bill is

A a fake.
B illegal.
C a sample. *
D protected.

"Funny Money"

Junior Reading

LEVEL

4

Demonstrates a deep understanding of texts by providing clear, complex answers that include thoughtful, detailed support

TARGET

Support students at Level 4 with technical vocabulary to enable them to have deep conversations about their interpretations of text.

You may see *some or all* of these characteristics in a student's performance at this level:

Answers to Questions

- understands and answers all aspects of the questions
- responds thoroughly to question demands
- provides detailed, articulate answers related to the question

Understanding of Text

- makes accurate interpretations and generalizations based on the whole text and demonstrates understanding
- makes predictions, inferences and connections based on ideas, characters and events in the text
- offers reasonable and creative solutions and responses to problems and situations in the text

Support for Answers

- supports his or her answers with specific, relevant ideas and information found in the text
- provides explanations of ideas that are clear, well-developed and sophisticated
- elaborates on his or her answers by adding relevant personal ideas and connections
- links ideas to form a cohesive, well-developed answer

IF STUDENTS NEED HELP WITH…	THEN TRY…	RESOURCE LINKS
evaluating the ideas in texts	▪ using a two-column "important/interesting chart" to separate big ideas from smaller ones. ▪ using a "ranking ladder" for themes or ideas in the text to encourage the student to make judgments about the ideas presented. ▪ modelling how to read and draw conclusions about the ideas and messages presented in different print advertisements. ▪ using a three-column chart with the headings "I noticed," "This means" and "So what" for students to examine and challenge the ideas and information in texts.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. Part 1, pp. 63–64 [p. 109] Part 2, p. 145 [p. 109] Volume 5. pp. 28–30, 98 [p. 109] *Critical Literacy* webcast [p. 112]
using textual elements (e.g., point of view, figurative language) to support interpretations	▪ using role play strategies such as "character conversations," in which students assume the roles of different characters in real or imagined situations to examine topics through different points of view, motivations and uses of language. ▪ having students use reader's theatre to make interpretations based on the characters, events and language in fictional and informational texts. ▪ using modelled and guided writing to structure and discuss effective written interpretations of texts.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 5. pp. 52–54 [p. 109] *Effective Instruction in Reading Comprehension* webcast [p. 112]
using technical terminology related to the features and form of texts	▪ modelling the use of technical terminology to describe the features and form of texts. ▪ using guided reading to deconstruct text forms, and co-creating anchor charts of key features and elements. ▪ having small groups create posters defining and illustrating technical terminology with pictures and examples from different texts.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. Part 1, pp. 36–39 [p. 109] Part 2, p. 117 [p. 109] Volume 5. pp. 115–128, 130 [p. 109]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 4 and possible areas for growth that can be observed among several responses.

OBSERVATION

The responses indicate the student has made accurate inferences and interpretations with multiple references to specific relevant details of the text.

SAMPLE ANSWER

How is Jessica influenced by the work Brandon does? Use specific details from the text and your own ideas to support your answer.

Jessica is influenced by Brandon's work because her Grandpa is paying her brother 1 dollar for every 25 dandelions and she was influenced to spread more seeds around, so that she would be able to pick them and make a profit.

SAMPLE ANSWER

Is the title "Digging for Gold" an appropriate choice for this text? Use specific details from the text to support your answer.

I think that "Digging for Gold" is an appropriate title because "Digging" refers to digging up the dandelions and "for Gold" refers to making a profit (Money).

"Digging for Gold"

Junior Reading | Level 4

OBSERVATION

The responses suggest that the student has used prior knowledge and relevant details to make inferences and understand the whole text.

SAMPLE ANSWER

Which word would best replace the word "method" as used in paragraph 5?

F root
G order
(H) procedure *
J experiment

SAMPLE ANSWER

In paragraph 9, Jessica is "blowing and shaking" dandelions because

(F) she wants them to grow back. *
G they look like white pompoms.
H her grandfather asks her to pick them.
J she likes the way the yellow flowers look.

"Digging for Gold"

OBSERVATION

The responses indicate the student has made accurate inferences using the whole text. The student has used relevant information from the text to draw conclusions about its main idea and purpose.

SAMPLE ANSWER

The main idea of this text is that two Canadians developed a pump that

(A) is easy to use and fix. *
B is made of heavy steel.
C holds up in wet weather.
D uses a coloured plastic tube.

SAMPLE ANSWER

The purpose of this text is to

F tell a story about an inventor.
(G) celebrate a Canadian invention. *
H create interest in the country of Malawi.
J persuade people to use the Unimade pump.

"Canadian Pump Brings Water to the World"

OBSERVATION

The responses indicate the student has made reasonable inferences and conclusions with clear connections to specific and relevant information in the text, and has used multiple details from the text as support.

SAMPLE ANSWER

Explain how the characteristics of the Unimade pump make it an important invention. Use specific details from the text and your own ideas to support your answer.

The unimade pump is an important invention because it is light, easy to move, easy to install and repair. It isn't expensive, easy to use and realy simple. If is used in is contries around the world and can draw water from very deep down and most inportanty its canadian.

SAMPLE ANSWER

Explain whether this project is a good one for Canada to support. Use specific details from the text and your own ideas to support your answer.

I think that this would be a good project for canada to support because it would give all the second world countries a chance for clean water. It would give them all the benefits of clean water and plus its a simple pump.

"Canadian Pump Brings Water to the World"

Junior Reading | Level 4

OBSERVATION

The responses take into consideration all aspects of the questions and provide detailed and articulate answers. The logical conclusions and generalizations are well supported and based on the whole text.

SAMPLE ANSWER

What makes the security features easy to use? Use two examples from the text to support your answer.

The security features are easy to use because they are easy to find on the bill. All you have to do is hold it up to the light or look very closely for the fetures. So that anybody who knows all the fetures can esely identefy if it is fake or not.

SAMPLE ANSWER

In the sentence "Knowing how to recognize counterfeit money just makes cents!" what is the significance of the word "cents"? Use information from the text and your own ideas to support your answer.

In that Sentence they do a play with words. Instead of actually saying the word "sence" they said "cents" as in money So that they can say two things in one. That it makes sence and saves cents.

"Funny Money"

OBSERVATION

The responses are accurate and are based on inferences drawn from text details and prior knowledge.

SAMPLE ANSWER

A "watermark" is most like a

F dark stain.
G faint design. *
H metallic image.
J colourful thread.

SAMPLE ANSWER

The images of the individual security features accompany the text boxes to

F provide a closer view. *
G contrast with older bills.
H repeat information in the text boxes.
J demonstrate the queen's appearance.

"Funny Money"

Reading Selections

Assessment of Reading, Writing and Mathematics, Junior Division, 2009

Digging for Gold

"What are you doing?" Jessica asked her older brother when she saw him kneeling in Grandma and Grandpa's yard. 1

"I'm digging dandelions out of Grandpa's lawn, and I'm earning money at the same time," replied Brandon. 2

When their grandfather had heard that Brandon was saving money to buy an official-type soccer ball to practise with at home, Grandpa had made him an offer. If Brandon helped remove the weeds, Grandpa would pay him a dollar for every 25 dandelions he dug up. But they must have most of the root still attached. 3

"Can you show me how to do that?" asked Jessica. 4

"It's not too hard, once you know how," said Brandon. "You shove the weed-digging tool into the grass beside the dandelion, and then bend it so the root snaps off below the ground. Then the whole dandelion can be pulled up, root and all." He found a big dandelion and demonstrated the weeding method for his sister. 5

"Grandpa says that you have to get the root, or else the dandelion will grow back, maybe double," Brandon explained. "Grandpa also says that you have to get the dandelions before the yellow flowers turn into those white pompoms or fluff-balls. Each one of those has hundreds of seeds that can blow back into the lawn and start more dandelions." 6

By the end of the day, Grandpa's lawn didn't have a dandelion left in it. Grandpa and Brandon counted out the pulled dandelions with roots, and Grandpa paid him $8.50. 7

"Cool!" said Brandon. "When I add this to my own money, I can buy a new soccer ball and have some left over." 8

Two weeks later, Grandma was surprised to see Jessica dancing in the yard with an armful of white dandelion pompoms. She was blowing and shaking them all over the grass. "Where did you get those?" Grandma asked. "And why are you doing that?" 9

"I picked them in the field down the street," replied Jessica. "And I'll probably want to buy something next summer!" 10

"Well, Jessica," said Grandpa, "you'll have to find another job, because you'll be picking the dandelions that you're planting for free." 11

"Oh!" said Jessica, as she began to race around the yard trying to collect all the seeds. 12

Assessment of Reading, Writing and Mathematics, Junior Division, 2009

Canadian Pump Brings Water to the World

Millions of people in dry countries around the world have fresh water because of two Canadian inventors. 1

The Canadian government wanted someone to invent a hand-operated water pump for use in arid lands. 2

Professor Alan Plumtree and Professor Alfred Rudin of the University of Waterloo began to work on their design in the late 1970s. 3

Their challenge was to make a pump that didn't cost very much. It also had to be light and easy to move, install and repair. 4

The problem: Standard water pumps used in villages in places such as Africa and Malaysia were very heavy. They were made of iron or steel. The pumps were difficult to repair. Spare parts were expensive and hard to find. As a result, many old pumps broke down. Sometimes they were never repaired. 5

The professors designed a simple pump. It was able to draw the water from deep in the ground. It was made out of plastic so it could be glued together and wouldn't rust. 6

"We made the pump as simple as possible, so it would be easily understood and easily repaired by anyone," Professor Plumtree said. 7

Some of the parts that need replacing can be made from plastic pipe, rope or carved from a piece of wood. This has allowed local people to look after their own water supply. 8

It is now called the Unimade pump and is being used around the world. The pump supplies clean water to more than one million people in about 15 countries. 9

In one country, Malawi, part of the pump was made of white coloured plastic instead of the usual blue. It had to be changed because the plastic was being eaten by hyenas who thought it was a large bone. 10

Now, people are saying, "Thank you, Canada!" when they take a drink of pure, cold water. 11

Reading Selections

Assessment of Reading, Writing and Mathematics, Junior Division, 2009

Funny Money

Knowing how to recognize counterfeit money just makes cents! So in 2004, the Bank of Canada began to print bills with new, easy-to-use security features.

The Fine Print
In the tiny microprinting next to the Parliament Building pictures are the words THE CENTRE BLOCK OF PARLIAMENT • L'ÉDIFICE DU CENTRE DU PARLEMENT. With each line, the printing gets smaller and smaller.

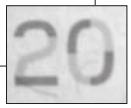
Now You See It
A watermark showing a ghostly image of the Queen appears when you hold a bill up to the light.

Cool Threads
The security thread changes from gold to green when you tilt the bill. On the thread, you can see 20 CAN.

Nice Touch
Intaglio or raised printing is featured on the large number in the right-hand corner, on the coat of arms, and on the words BANK OF CANADA • BANQUE DU CANADA.

On the Move
A hologram in the tiny metallic strip seems to move and change colour. Numerals and maple leaves seem to dance up the side of the bill.

See the Light
When you hold the bill up to the light, the lines on the front and back form a perfect 20.



Adapted from *Owl* magazine, "Funny Money," by Janice Weaver, May 2005 Owl. Used with permission of Bayard Presse Canada Inc.
Photos © Bank of Canada

Junior Writing

LEVEL 1

Briefly responds to the task with a few ideas that may or may not be on topic or connected to the other aspects of the assigned task

TARGET

Support students at Level 1 with structured brainstorming strategies to develop ideas for writing, and with graphic organizers to group and link ideas.

You may see *some or all* of these characteristics in a student's performance at this level:

Responses to Tasks

- relates the response to the topic, but not necessarily to all parts of the task
- often starts to respond without understanding the assigned task

Ideas/Organization

- includes a few simple ideas with minimal development
- attempts to stay on topic but includes unrelated or irrelevant ideas and information
- uses basic organization, such as simple sequencing or listing, to structure the writing
- uses few transition words
- uses pictures or a few words to brainstorm prior to writing

Conventions (spelling, punctuation, grammar, usage)

- writes with inconsistent grammar, punctuation and usage, which often make the response difficult to read or understand
- uses some simple sentences that may include basic punctuation
- often spells familiar words phonetically

IF STUDENTS NEED HELP WITH…	THEN TRY…	RESOURCE LINKS
understanding the requirements of the task	▪ modelling how to identify and define the key words in different writing tasks. ▪ providing oral and written instructions (on paper, Smart Board) and underlining or highlighting key words. ▪ activating the students' prior knowledge of the writing topic by inviting and recording their initial responses to different prompts. ▪ having partners explain the task to each other.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. p. 46 [p. 109] *Education for All, Kindergarten to Grade 6,* pp. 108–109 [p. 109]
developing content	▪ using shared writing to illustrate how to ask questions about the task and topic before writing. ▪ modelling a "quick write" strategy to activate prior knowledge and generate ideas. ▪ using graphic organizers such as webs and mind maps to generate and group ideas about a topic. ▪ having students use an oral rehearsal strategy to verbalize their content before writing it.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. Part 1, p. 43 [p. 109] Part 2, pp. 120, 133, 145 [p. 109] Volume 6. pp. 27, 46 [p. 110] *Story Telling and Story Writing* [p. 111]
ordering and linking ideas into sentences and paragraphs	▪ modelling how to sort and group ideas and information into sentences and paragraphs. ▪ having small groups recreate a paragraph from sentence strips and compare their result to the original text. ▪ using shared reading to identify and record how different texts use transition words to link ideas.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. p. 136 [p. 109] Volume 6. pp. 24, 50, 73–75 [p. 110] *Education for All, Kindergarten to Grade 6,* p. 109 [p. 109]
using punctuation	▪ modelling strategies for finding and correcting errors. ▪ co-creating punctuation anchor charts. ▪ having students correct a transparency of a writing draft of yours to discuss how punctuation affects meaning. ▪ having partners add punctuation to sample paragraphs and compare their decisions to the original text.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 6. pp. 43–44 [p. 110]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 1 and possible areas for growth that can be observed among several responses. Although EQAO does not score the content in the ideas box, the student's prewriting can provide insights into his or her writing process.

OBSERVATION

The responses indicate difficulties in structuring sentences and paragraphs coherently. The student has relied on personal experience and hasn't used the context provided to select the best answer.

SAMPLE ANSWER

Choose the words that best complete the sentence.

The athlete was on the front page of the newspaper _in the morning_ she set new records in relay _whath_ distance running.

A that, or

B still, and

C (circled) however, or

D because, and *

SAMPLE ANSWER

Choose the best closing sentence for the following paragraph.

The most important meal of the day is breakfast. Research shows that students who eat a well-balanced breakfast every morning do better in school than students who skip breakfast. Eating a breakfast of fruit and cheese, for example, provides your body with energy. Skipping breakfast can leave you feeling tired in class.

____

A (circled) You need to eat three healthy meals every day.

B If you skip breakfast, be sure to take your vitamins.

C You can learn more effectively if you eat breakfast daily. *

D Include foods from all of the food groups in your breakfast.

OBSERVATION

The response indicates that the student recognizes correct sentence structure.

SAMPLE ANSWER

Which is the best way to combine the information in the following sentences?

It was late at night.
The raccoon woke up.
The full harvest moon rose in the black sky.

A It was late at night, the full harvest moon rose in the black sky but the raccoon woke up.

B (circled) Late at night, the raccoon woke up as the full harvest moon rose in the black sky. *

C It was late at night, the raccoon woke up, the full harvest moon rose in the black sky.

D It was late at night when the raccoon woke up, the full harvest moon rose in the black sky.

Junior Writing | Level 1

OBSERVATION

The student has responded to the prompt without indicating the topic or developing organized, coherent ideas and details. The student has not included the additional details recorded in the brainstorming "ideas" box in the final draft.

SAMPLE ANSWER

You have been named principal for the day. Describe what you would do during your day as the principal.

Ideas for My Description I would Lik to make a fue change Lik more time tests and more Detention Because kid Don't Like iht

Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

Write your description here.

for my first thing to Do i would Lik the School yard to Be Bigger.

OBSERVATION

The response begins on topic ("start recycling") but includes irrelevant ideas ("be kind to another"). The student has not developed the main idea with details about why recycling is important. Problems with conventions do not interfere with the reader's understanding of the response.

SAMPLE ANSWER

Write an announcement that you would read at a school assembly to convince everyone in your school that recycling is important.

Ideas for My Announcement
recyd! Please Every one

Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

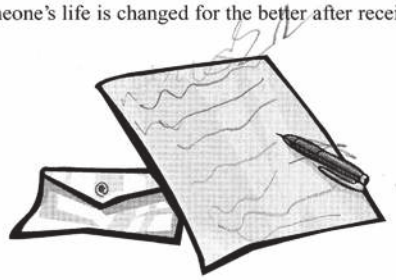
Write your announcement here.

I wolld like you kids to start recyd and de kind to ahother kid on and off the play ground

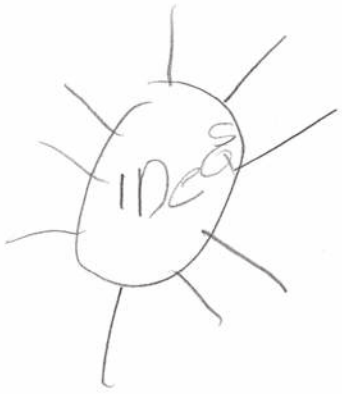
Junior Writing | Level 1

SAMPLE ANSWER

Write a story in which someone's life is changed for the better after receiving a letter in the mail.



Ideas for My Story



Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

OBSERVATIONS

The student begins a story without addressing the assigned task. There is evidence of a few story elements (e.g., opening, sequencing) in what appears to be a personal anecdote rather than a story based on the context provided by the prompt.

The response indicates a limited sense of sentence structure. Inconsistent spelling and punctuation do not interfere with the reader's understanding of the response.

SAMPLE ANSWER (continued)

Write your story here.

One Day there was a Boy named [name] and he went to [school's name] School and one day he got so up set he puched the Boy that was pull[illegible] him

Junior Writing

LEVEL

2

Responds to the task with a few ideas on the topic and some organization of the response

TARGET

Assist students at Level 2 in developing a sense of writing forms and choosing and using them deliberately in consideration of the purpose and audience.

You may see *some or all* of these characteristics in a student's performance at this level:

Responses to Tasks

- relates the response to most, but not necessarily all, parts of the task

Ideas/Organization

- stays on topic and includes relevant ideas; some ideas may be irrelevant
- provides few details to develop and support ideas
- provides simple explanations or justifications for reasoning
- leaves gaps that require the reader to connect ideas to understand the message fully
- uses simple logical structures for writing (e.g., simple sequence, introduction/conclusion) but may include details that are confusing or sound like a simple list
- repeats some common transition words (e.g., first, next, secondly)
- begins to use the features of different written text forms

Conventions (spelling, punctuation, grammar, usage)

- writes with inconsistent grammar and punctuation, which makes parts of the text difficult to read or understand
- uses simple sentences with some variation of type
- spells familiar words correctly or phonetically

IF STUDENTS NEED HELP WITH…	THEN TRY…	RESOURCE LINKS
knowing and using the features of expected written forms	▪ deconstructing a sample in the form to note the different features. ▪ having the students use a template in the form, with labelled sections, to draft their writing. ▪ using mentor texts to consolidate the students' understanding of the form and illustrate how similar features are used in different texts.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. pp. 36–40 [p. 109] Volume 6. pp. 11–13 [p. 110] *Non-Fiction Writing* webcast [p. 113]
developing ideas with relevant supporting details	▪ having partners record their brainstorming to talk about ideas and explore them in detail. ▪ using graphic organizers (e.g., concept maps, thought webs) to link ideas and details. ▪ having the students list questions about the topic they think their audience might want answered.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. pp. 120, 136 [p. 109] Volume 6. pp. 37–38 [p. 110] *Non-Fiction Writing* webcast, segment ii [p. 113]
using different organizational patterns to suit the form, purpose and audience	▪ modelling the revision process, especially deciding about the order of sentences and paragraphs for emphasis. ▪ asking the students to examine writing exemplars, choose the least and most effective examples that match their purpose and audience and explain their choices.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 6. pp. 37, 39, 41 [p. 110] *Non-Fiction Writing* webcast, segment iv [p. 113]
using transition words to mark shifts within and between paragraphs	▪ creating a class chart of transition words showing how they are used to link sentences. ▪ having groups reinsert transition words into paragraphs on the same topic and compare the impact on meaning.	*Education for All, Kindergarten to Grade 6,* p. 109 [p. 109]
using the conventions of language appropriately in different contexts	▪ modelling the appropriate use of conventions to transform texts, daily and deliberately. ▪ modelling strategies for checking the use of conventions in writing (e.g., reading backward, highlighting confusing parts, rereading for one convention at a time, reading aloud).	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 6. pp. 43–44, 52–58 [p. 110] *Education for All, Kindergarten to Grade 6,* p. 110 [p. 109]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 2 and possible areas for growth that can be observed among several responses. Although EQAO does not score the content in the ideas box, the student's prewriting can provide insights into his or her writing process.

OBSERVATIONS

Although some responses indicate that the student is able to recognize and construct coherent sentences, other responses suggest difficulty in structuring coherent sentences and paragraphs to show relationships. This is also evident in his or her short- and long-writing responses.

The third response suggests that the student has used prior knowledge but has not connected it to the main idea of the paragraph to select an appropriate closing sentence.

The fourth response suggests a lack of understanding of the correct use of commas to support the meaning of a sentence.

SAMPLE ANSWER

Choose the words that best complete the sentence.

The athlete was on the front page of the newspaper Still and she set new records in relay that on distance running.

(A) that, or
B still, and
C however, or
D because, and *

SAMPLE ANSWER

Choose the words that best complete the sentence below.

Teachers _____ students' skills through _____ work _____.

(F) measure, their, habits *
G measure, there, habits
H messure, there, habbits
J measure, their, habbets

SAMPLE ANSWER

Choose the sentence that is written correctly.

(A) Sara, went home to find her brother eating.
B In the morning, Michael walked to the store. *
C Connie wandered around the mall until, her mother arrived.
D Jamal fed the birds, in the bird feeder just outside his house.

SAMPLE ANSWER

Choose the best closing sentence for the following paragraph.

The most important meal of the day is breakfast. Research shows that students who eat a well-balanced breakfast every morning do better in school than students who skip breakfast. Eating a breakfast of fruit and cheese, for example, provides your body with energy. Skipping breakfast can leave you feeling tired in class.

_____

(A) You need to eat three healthy meals every day.
B If you skip breakfast, be sure to take your vitamins.
C You can learn more effectively if you eat breakfast daily. *
D Include foods from all of the food groups in your breakfast.

Junior Writing | Level 2

OBSERVATION

The student responds in part to the topic, listing multiple details about what students, rather than the principal, would be able to do. The development of ideas is limited. Problems with sentence structure and punctuation do not make the response difficult to understand.

SAMPLE ANSWER

You have been named principal for the day. Describe what you would do during your day as the principal.

Ideas for My Description

Free Freezies, Gatorade, Pizza
Fun day
everyone can play
The regame of choice

Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

Write your description here.

if i was principal for a day the Whole School would have a fun day every one would be out Side all day There would be activities every where, there would be a giant air filled Slide, tables covered in Free Pizza, gatorade and Freezies and every one would go home with a lolipop

OBSERVATION

The response indicates an attempt to consider the context of the prompt and includes content related to the topic (what the student would announce) but doesn't use elements of the form required by the task of persuading an audience, other than listing prizes for recycling. The response includes relevant details but doesn't develop the main idea that recycling is important. Problems with capitalization and punctuation do not interfere with reading, and familiar words are spelled correctly.

SAMPLE ANSWER

Write an announcement that you would read at a school assembly to convince everyone in your school that recycling is important.

Ideas for My Announcement

Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

Write your announcement here.

i would announce that the School Needs to recycle More and there would be a Prize for the two winning classes a basket filled with Soccer balls, basketballs, Tennis balls, etc and ya can bring recycling From home.

SAMPLE ANSWER

Write a story in which someone's life is changed for the better after receiving a letter in the mail.

Ideas for My Story

Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

OBSERVATION

The response is imaginative and includes vivid details suitable to the story form. The story is sequenced logically, with some connecting words; however, problems with sentence structure and punctuation require the reader to decide where some sentences begin and end. The writing indicates an awareness of simple story elements (opening, sequence of events) and includes relevant details. Although the story is related to the context of the task (Mrs. Andrews receives a shocking letter about Jake's near death and never yells at him again), it doesn't develop the main idea that the life of the person who receives the letter changes for the better.

SAMPLE ANSWER (continued)

Write your story here.

Once there Was an old lady Named MRS. Andrews She Was old grouche She didnt care about anythige except for her Pet cat Named Noodle Noodle liked toget Mrs. ANdrews Son Jake introuble She always Put her tail under his feet When he was walking So When he Stepped on her tail She would Screech out a loud Meow and Mrs Andrew Would yell at him WAtch were your walking until oned Jake got the Swine flu and was in the hospital and Mrs Andrews got a letter Saying that he almost died She was shocked that Jake got out of the hospital Mrs. ANdrews Never yell at him instead She yelled at Noodel to watch were Shes walking

Junior Writing

LEVEL

3

Responds to the task with clear and focused ideas stated in a manner that is easy to read and understand

TARGET

Support students at Level 3 in using details to clarify ideas and in developing coherent paragraphs to communicate precise meaning.

You may see *some or all* of these characteristics in a student's performance at this level:

Responses to Tasks

- stays on topic
- clearly responds to all parts of the task with an understanding and awareness of audience, purpose and form
- shows an understanding of different forms of writing

Ideas/Organization

- provides ideas that are appropriate to the task, clearly expressed and developed, but support may be vague or limited
- includes relevant details from his or her background knowledge and personal experiences to help the reader understand the message
- provides justification for reasoning
- provides an introduction that sets the stage for the reader and draws the reader in
- uses dialogue, quotations and his or her own viewpoint, as appropriate, to advance the writing
- uses connecting and transition words (e.g., however, but) to help the flow of ideas
- shows evidence of having planned and organized ideas to fulfill a clear purpose
- organizes writing into paragraphs and uses a logical but conventional structure

Conventions (spelling, punctuation, grammar, usage)

- makes few errors in spelling, grammar and punctuation
- varies sentence structure
- includes adjectives, adverbs and descriptive language

IF STUDENTS NEED HELP WITH…	THEN TRY…	RESOURCE LINKS
using specific supporting information and details to define, clarify and develop ideas	▪ using peer conference groups in which students share and clarify ideas. ▪ using modelled- and shared-writing mini-lessons to demonstrate how to locate information in a variety of sources and then record and cluster it. ▪ co-developing a writing template with paragraph starters such as "there are several reasons for."	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 6. pp. 25–28, 33–34, 50 [p. 110] *Content Literacy,* monograph #13 [p. 112]
organizing paragraphs to develop a logical and cohesive text	▪ having groups sort paragraphs from a mentor text into a logical order and share their decisions with other groups to compare. ▪ providing students with specific feedback prompts to use during peer conferences. ▪ providing students with a sample text with no paragraphs, and have partners indicate appropriate breaks and provide reasons for their decisions.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 6. pp. 25–28 [p. 110] Differentiated Writing Instruction in *High-Yield Strategies to Improve Student Learning* webcast [p. 113]
expanding writing vocabulary to clearly and precisely communicate meaning	▪ examining mentor texts (e.g., advertisements, newspaper articles) for precise, vivid vocabulary. ▪ creating an anchor chart of vocabulary used to support meaning. ▪ having the students maintain a personal thesaurus. ▪ creating a word wall of subject-specific language.	*Non-Fiction Writing* webcast [p. 113] *A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 6. pp. 41, 49 [p. 110]
using literary techniques to develop a personal style appropriate to the assigned task	▪ examining mentor texts to illustrate style elements such as imagery and voice. ▪ having students adapt familiar texts by changing the setting, characters and/or events. ▪ creating a display of student-collected examples of effective techniques.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 6. pp. 42, 49 [p. 110]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 3 and possible areas for growth that can be observed among several responses. Although EQAO does not score the content in the ideas box, the student's prewriting can provide insights into his or her writing process.

OBSERVATIONS

The responses demonstrate a clear sense of how to link and organize ideas by structuring coherent, and in some cases complex, sentences and paragraphs.

SAMPLE ANSWER

Choose the words that best complete the sentence.

The athlete was on the front page of the newspaper _____ she set new records in relay _____ distance running.

A that, or

B still, and

C however, or

(D) because, and *

SAMPLE ANSWER

Which is the best way to combine the information in the following sentences?

It was late at night.
The raccoon woke up.
The full harvest moon rose in the black sky.

A It was late at night, the full harvest moon rose in the black sky but the raccoon woke up.

(B) Late at night, the raccoon woke up as the full harvest moon rose in the black sky. *

C It was late at night, the raccoon woke up, the full harvest moon rose in the black sky.

D It was late at night when the raccoon woke up, the full harvest moon rose in the black sky.

SAMPLE ANSWER

Choose the best closing sentence for the following paragraph.

The most important meal of the day is breakfast. Research shows that students who eat a well-balanced breakfast every morning do better in school than students who skip breakfast. Eating a breakfast of fruit and cheese, for example, provides your body with energy. Skipping breakfast can leave you feeling tired in class.

_____

A You need to eat three healthy meals every day.

B If you skip breakfast, be sure to take your vitamins.

(C) You can learn more effectively if you eat breakfast daily. *

D Include foods from all of the food groups in your breakfast.

Junior Writing | Level 3

SAMPLE ANSWER

You have been named principal for the day. Describe what you would do during your day as the principal.

Ideas for My Description

- Sports
- Fun
- Partys
- Suit
- Students
- Gym
- Recess
- lunch
- office
- P.A System
- Movie
- Nice
- Shoes
- Candy

Remember:

- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

OBSERVATION

The student has responded to the topic with multiple descriptive details. However, the focus is on being named principal for the day rather than on what the student would do as principal. The ideas are appropriate and develop the story, revealing the student's humorous viewpoint. The organization is logical, with introductory and concluding sentences that provide unity. Problems with verb tenses and punctuation do not impede the reader's understanding of the story.

SAMPLE ANSWER (continued)

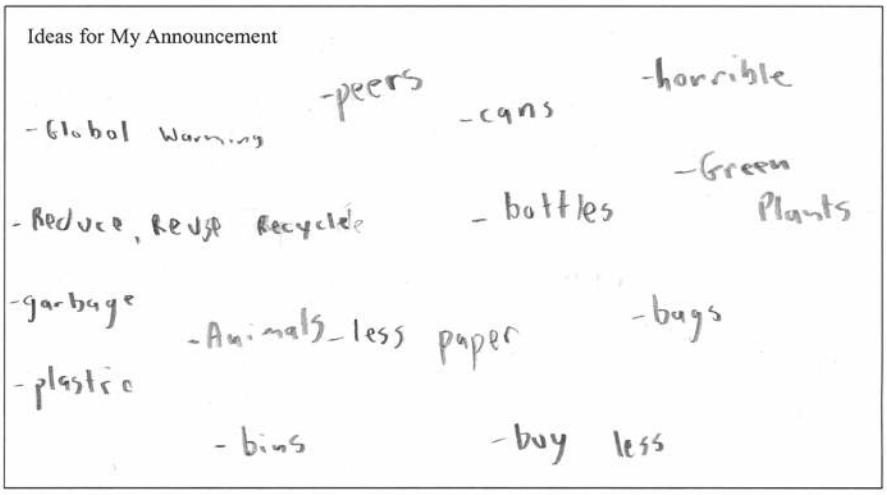
Write your description here.

On May 18 2006 I Jupiter was voted principal for the day. I was so surprised that I had tripped over my untied blue and black Nikes, I had got back up to show my happiness to the students who were at there lockers trying to reach towards the new principal me Jupiter. As I walked in my principal office all I smelled was the smell of brand new leather. I walked towards the tar black leather seat and made my announcement. to thank the people who had voted for me. That day the school had lunch hours for 2 hours and I had given them some freedoms to do what they wanted. As I walked in the white hallways wearing my black and red suit students thanking me. It felt great being principal of the day.

Junior Writing | Level 3

SAMPLE ANSWER

Write an announcement that you would read at a school assembly to convince everyone in your school that recycling is important.



Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

OBSERVATION

The student has responded using appropriate formal conventions and with vivid details that indicate an understanding of the purpose of the task and engage the audience. The organization of ideas is confusing at times and suggests that recycling, rather than a lack of recycling, is the "crisis" causing "plants, animals and other living sources" to die.

SAMPLE ANSWER (continued)

Write your announcement here.

Good afternoon my fellow peers. Today I am here to talk about a horrible nature crisis, you all probably know about it "Recycling". Plants, animals and other living Sources are dieing because of this disgusting, horrible nature crisis. I think that our humanity is the problem "Why you wonder"? because we are throughing renewable sources in the GARBAGE when it could be going towards recycling. I say that our school Green Plants Public School should have a Clean Up Day once a weeks to keep our school and planet clean. You can tell your friends and family to do the same and they can tell others. Do you know how clean and how much recycling we would do. This was my announcement about recycling.

THANK YOU my fellow peers.

SAMPLE ANSWER

Write a story in which someone's life is changed for the better after receiving a letter in the mail.

Ideas for My Story

Soccer
- slums
- poor
- scholarships
- ronaldinho
- family
- Brazil
- rich
- Barcelona
- famous
- team
- fans

Remember:
- Check over your work.
- Check your spelling, grammar and punctuation.

Write your story here.

One day as little Ronaldinho was playing Soccer near a garbage dumb by his old broken house. Little Ronaldinho's poor mother had yelled his name out "Ronaldo" his real name. He had rushed to his mother "Yes Ma Ma" said Ronaldo. She had called him over because he had got a mail. Ronaldo and his mother were very surprised because they never got mail. Ronald decided to open the mail to read it. He could

OBSERVATION

The response portrays an imaginative sequence of events. Relevant, colourful details support the story development but there are some gaps in the story line (reason the man sent the scholarship, the sequence of events at the end) that disrupt coherence. Any errors or inconsistencies with spelling, punctuation and sentence structure do not interfere with the overall meaning or detract from the story.

SAMPLE ANSWER (continued)

not read it, his mom had to because he didn't go to school. Poor Ronaldo didn't have the education to learn how to read, so when his mom opened it, she read and what it was... a scholarship to go and play Proffessional soccer. The family was very happy.

TWO DAYS LATER...

Two days later a man dressed in a nice leather suit, had appear on their front door. He was the man who sent him the scholarship to pay off his expensive school education. Every day at 5:00 p.m and a.m Ronaldo had to work and practise soccer for about 9 and a half months. As Ronaldo grew the better he got in soccer and in school.

A FEW YEARS LATER...

A few years later Ronaldo was asked to play on the National FIFA "Brazil" team his home country team. Ronaldo had tried out and made it. He had rushed home to tell his family and they were stunned. Ronaldo had made a lot of fans, a lot of money and made his family and him-self proud.

THE END!

Junior Writing

LEVEL

4

Thoughtfully responds to the task with a personalized, unique and well-organized writing style that captures the reader's interest

TARGET

Support students at Level 4 in developing an engaging personal style in a variety of text forms to suit different purposes and audiences.

You may see *some or all* of these characteristics in a student's performance at this level:

Responses to Tasks

- understands the tasks clearly
- demonstrates a clear understanding that writers communicate to a particular audience for a particular purpose in a particular form
- provides well-developed ideas connected to the assigned task in a recognizable written form (e.g., letter, instructions)

Ideas/Organization

- sets the stage for the reader and holds the reader's attention through to the conclusion
- includes relevant details and personal thoughts to make the text interesting and engaging
- ensures the text flows effectively to communicate a clear message
- uses a varied selection of descriptive words
- engages readers so they can visualize what they read
- makes his or her personal voice evident, consistent and distinct
- organizes his or her writing logically into well-developed paragraphs with effective transition words

Conventions (spelling, punctuation, grammar, usage)

- uses conventions, spelling and grammar correctly
- combines sentences in different ways using a variety of connecting words
- uses a varied vocabulary and makes effective word choices

IF STUDENTS NEED HELP WITH…	THEN TRY…	RESOURCE LINKS
manipulating different text forms to suit a variety of purposes	▪ asking the students to rewrite an informational text for a different audience and purpose (e.g., change a written explanation of tornadoes to a poster for Grade 1 students). ▪ modelling how changing language and paragraph sequence can affect meaning (e.g., make an informal piece more formal, change description to persuasion). ▪ co-creating text frames. ▪ having the students collect text form examples to illustrate elements that are common and elements that vary in a form.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. p. 43 [p. 109] Volume 6. pp. 11–13, 39–40 [p. 110] *Non-Fiction Writing for the Junior Student* monograph [p. 111]
synthesizing relevant information and ideas to support an opinion or central idea	▪ providing graphic organizers (e.g., important/interesting chart, concept map) to help the students gather, sort and consolidate information and ideas. ▪ using a "pass it on" peer-editing strategy where students add questions to each other's written work to extend or clarify ideas. ▪ having the students highlight the opinion presented and the supporting ideas and details in their writing drafts.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 1. p. 136 [p. 109] Volume 6. p. 39 [p. 110] *Non-Fiction Writing* webcast, segment ii [p. 113]
developing an engaging, distinctive personal style and using it appropriately given the assigned task	▪ reading aloud mentor texts that illustrate voice and creating an anchor chart that describes the characteristics of different writing voices. ▪ having the students collect samples that illustrate effective styles of writing. ▪ having students create digital poems that link images to support their poetic language and reinforce the message or theme.	*A Guide to Effective Literacy Instruction, Grades 4 to 6* Volume 6. pp. 9, 81–84 [p. 110] *Poetry: A Powerful Medium for Literacy and Technology* monograph [p. 111] *Why Student Voice Matters* [p. 112]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 4 and possible areas for growth that can be observed among several responses. Although EQAO does not score the content in the ideas box, the student's prewriting can provide insights into his or her writing process.

OBSERVATION

The responses indicate an understanding of sentence structure and the correct use of punctuation.

SAMPLE ANSWER

Choose the words that best complete the sentence.

The athlete was on the front page of the newspaper because she set new records in relay and distance running.

A that, or

B still, and

C however, or

D because, and *

SAMPLE ANSWER

Choose the sentence that is written correctly.

F Throughout the day, she had walked over slippery forest trails and snow-covered hilltops. *

G Throughout the day she had walked over slippery, forest, trails and snow, covered hilltops.

H Throughout the day, she had walked over slippery, forest trails and snow-covered, hilltops.

J Throughout the day, she had walked, over slippery forest trails, and snow, covered hilltops.

OBSERVATION

The response indicates understanding of how to organize several ideas into a complex sentence. The mark by option A suggests that the student considered this response but perhaps changed his or her mind after a careful rereading of the choices.

SAMPLE ANSWER

Which is the best way to combine the information in the following sentences?

It was late at night.
The raccoon woke up.
The full harvest moon rose in the black sky.

A **It was late at night, the full harvest moon rose in the black sky but the raccoon woke up.**

B **Late at night, the raccoon woke up as the full harvest moon rose in the black sky.** *

C **It was late at night, the raccoon woke up, the full harvest moon rose in the black sky.**

D **It was late at night when the raccoon woke up, the full harvest moon rose in the black sky.**

Junior Writing | Level 4

OBSERVATION

The response demonstrates a clear understanding of the task. The ideas are well developed with multiple relevant details that are fully connected to the topic. The viewpoint presented supports the principal-for-the-day context. Transition words support the organization of ideas and help create an effective flow to the text.

SAMPLE ANSWER

You have been named principal for the day. Describe what you would do during your day as the principal.

Ideas for My Description
- all day recess
- free time
- huge party
- relax in the office lounge
- order 7000 pizzas
- new gym equipment

Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

Write your description here.

IF I were the principal at [name] P.S, I'd change the schedule of the entire day. First, I'd make the first 3 periods free time so that the kids could party in the morning. Then, for the rest of the school day, I'd schedule recess if they wanted to, with breaks for peanut free ice-cream. Next, while the kids were playing outside, I'd host a party in the teachers lounge for all of the school staff, with 7000 pizzas. Finally, I'd buy new school supplies, gym equipment, and books.

It would be the perfect school day of the year, and if I could keep my job as pricipal, it would be a perfect school year!

OBSERVATION

The student has responded using appropriate features of an announcement, including an initial address and a closing catchphrase. The language is persuasive, and ideas and details are chosen to engage the audience with the message. Minor problems with conventions do not interfere with the reader's understanding.

SAMPLE ANSWER

Write an announcement that you would read at a school assembly to convince everyone in your school that recycling is important.

Ideas for My Announcement
- helps the environment
- recycle

Remember:
- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

Write your announcement here.

Hello, fellow E.Z. tigers! We all love the earth and its beauty, the water, the land, and the life. However, the world is being cluttered by garbage and waste. It is polluting nature and destroying the environment. Think about it! Every time you through something on the ground, an animal could eat it and die. This is harming the earth's life! So think before you litter! Recycle it if possible, Recycling reuses the material to create new products. So remember, Reduse, Reuse, Recycle!

Junior Writing | Level 4

SAMPLE ANSWER

Write a story in which someone's life is changed for the better after receiving a letter in the mail.

Ideas for My Story

- University of Waterloo
- letter allows student in
- celebrates

maybe

[name]

Remember:

- **Check over your work.**
- **Check your spelling, grammar and punctuation.**

OBSERVATION

The opening of this response sets the stage for the reader with a vivid description. The text flows well, with paragraph structure and dialogue moving the story forward. Ideas are well supported with relevant, specific details. Vocabulary choices engage the reader. Conventions are generally used correctly.

SAMPLE ANSWER (continued)

Write your story here.

It was a hot Summers day. The sun was shining as bright as a light bulb at the sky was bluer than the ocean. School was out for most, but down in the city of [city's name], there was a boy hard at work. He was working hard towards getting into university. He had just passed highschool at [school's name] Secondary School, with an average of 91%. He was one of the top students in the school. He loved science, math, and art.

One day, the boy found a peculiar letter in the mail. It was sealed in a beige envelope, signed, "To Mr. [name], The University of Waterloo." This made him anxious.

"Will they accept?" he thought. He quick teared it open. "What if I get rejected? What if I don't go? What if I can't get a job because I don't go?" all these questions were bombarding his mind. He opened it slowly with anticipation. Inside was... was... a certificate!

It said, "Dear Mr. [name], It is our pleasure to accept you into our university. We would be honored to have one of the greatest minds in [city's name] join our student body. You have excellent skills in math, Science, and art and an amazing average! We would like to welcome you to the University of Waterloo. Sincerly, the representative of the University, Gary Pulford."

James was stunned. He was in shock and awe. He couldn't believe it. Minutes later, he had finally realized what just happened.

"I've just been accepted into the University of Waterloo!" he screamed. He realized how his life had changed. "I can get a job, I am smart enough to be accepted, I can have a successful life, and it's going to be great!"

Junior Mathematics

LEVEL 1

When all relevant information is present in the task, uses addition and subtraction to solve familiar problems and to communicate the solutions

TARGET

Support students at Level 1 in comparing mathematical concepts and procedures within and among different contexts.

You may see *some or all* of these characteristics in a student's performance at this level:

Computation

- usually performs addition and subtraction operations successfully
- understands and uses simple patterns
- applies familiar mathematical formulas frequently, sometimes appropriately

Problem Solving

- uses the same approach for many problems
- repeats information from the question in an attempt to solve and answer it
- applies simple one-step rules and strategies for most problems
- responds to one part of the problem
- is more likely to attempt to solve problems when all relevant information is present in the problem statement

Communication

- attempts to communicate basic information accurately
- uses limited mathematical vocabulary (terminology, symbols, visuals) to explain his or her work

IF STUDENTS NEED HELP WITH...	THEN TRY...	RESOURCE LINKS
understanding problems and what questions are asking	▪ modelling how to identify key words in questions ("construct," "plot," "pattern," "how many," "identify," "explain why") and use them to plan a solution. ▪ having the students ask questions while solving problems as well as before and after. ▪ modelling how to use the information in questions to solve single-step and multi-step problems.	*A Guide to Effective Instruction in Mathematics, K–6* Volume 1. pp. 24–28, 66–68 [p. 110] Volume 2. pp. 60–62 [p. 110] Volume 5. p. 1–55 [p. 110] *Data Management and Probability, Grades 4–6,* p. 21 [p. 111] Classroom Visit #2 in *Through the Eye of the Learner* webcast [p. 113]
understanding mathematical relationships in problems and using familiar operations in unfamiliar contexts	▪ having the students work in mixed-ability groups to hear how others solve problems. ▪ engaging the students in math games and puzzles to help them develop an understanding of mathematical concepts and relationships (e.g., using words and numbers to show fractions, part-whole, relationships between nets and sketches, probability of an answer). ▪ using manipulatives (e.g., miras, pattern blocks, tiles) to explore relationships.	*A Guide to Effective Instruction in Mathematics, K–6* Volume 1. pp. 66–68 [p. 110] Volume 2. pp. 38–45 [p. 110] Volume 5. pp. 46–52 [p. 110] *Understanding of Geometric Figures Through Drawing and Paper Folding* webcast [p. 113] *Measurement,* Grades 4–6, pp. 31–39 [p. 111] *Number Sense and Numeration,* Grades 4–6 Volume 1. pp. 30–35 [p. 110] Volume 5. pp. 11–20 [p. 110]
using details from their solution to support their thinking	▪ modelling mathematical language used in different contexts. ▪ demonstrating a variety of ways to justify thinking (e.g., words, diagrams, manipulatives). ▪ using shared approaches such as thinking windows and group solution writing for students to talk about and compare how they represent their mathematical thinking.	*A Guide to Effective Instruction in Mathematics, K–6* Volume 2. pp 75–76 [p. 110] *Data Management,* Grades 4–6. p. 30 [p. 111] *Measurement,* Grades 4–6. pp. 89–95 [p. 111] *Geometry and Spatial Sense, Grades 4–6,* pp. 223–237 [p. 111] *Number Sense and Numeration,* Grades 4–6 Volume 1. pp. 36–40 [p. 110] Volume 2. pp 15–38 [p. 110] Volume 3. pp 11–23 [p. 110]

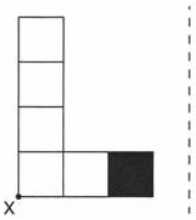
The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 1 and possible areas for growth that can be observed among several responses. Although EQAO does not score the written evidence of the student's thinking about multiple-choice questions, it can provide insights into his or her mathematical thinking and problem-solving processes.

OBSERVATIONS

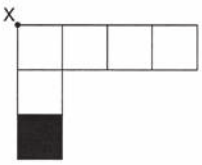
The student's understanding of familiar geometric relationships (e.g., rotation, reflection) when all of the information is presented is inconsistent. In one question, the student has identified the appropriate image using the reflection and rotation described. In the other question, the student has selected the image that represents one 90° rotation counter-clockwise rather than the three rotations required.

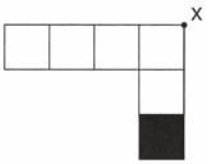
SAMPLE ANSWER

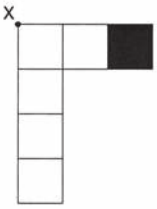
The shape below is reflected across the dotted line and then rotated 90° clockwise about point X.



Which of the following shows the shape after the two transformations?

A


B


C


D *


SAMPLE ANSWER

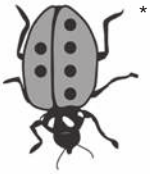
Look at the ladybug below.

The ladybug is rotated three times in the following order.

- 90° counter-clockwise
- 180° clockwise
- 180° clockwise

Which of the following best illustrates the ladybug's position after the three rotations?

F


G *


H


J


Junior Mathematics | Level 1

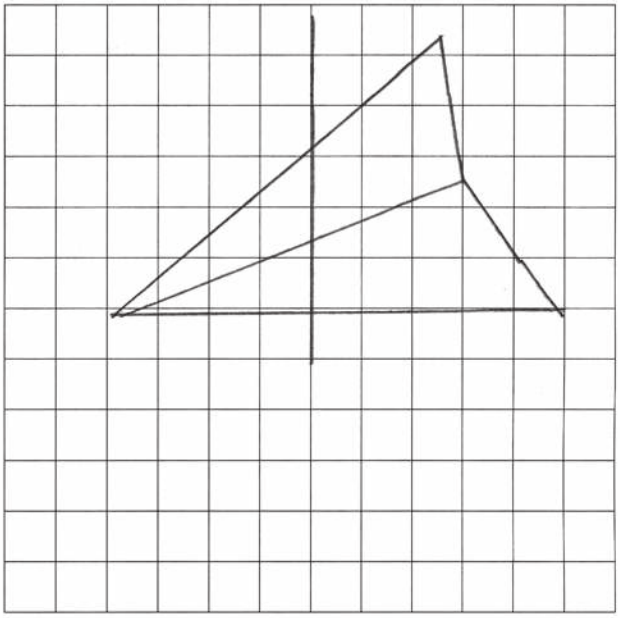
OBSERVATION

The student has attempted to follow a multi-step process to construct a shape. His or her work shows a quadrilateral (i.e., a shape with four sides) rather than a pentagon and some of the required conditions (e.g., two obtuse angles, one acute angle and one line of symmetry). The student has shown no right angles and no sides with a length of three units. It is unclear what conditions or mathematical language the student has understood.

SAMPLE ANSWER

Construct a pentagon on the grid below that meets the following conditions.

- exactly 1 line of symmetry
- 2 obtuse angles
- 2 right angles
- 1 acute angle
- at least 1 side with a length of 3 units



Draw the line of symmetry on your pentagon.

OBSERVATION

The student has read the question literally and missed mathematical cues about relationships and the context of the problem. The student has demonstrated an understanding of the relationships involved in increases and decreases but has indicated which colour is most likely to be chosen.

SAMPLE ANSWER

Keenan places 3 green marbles, 4 yellow marbles and 1 blue marble in a bag.

Keenan then adds 1 green marble and 1 yellow marble to the bag.

Does the probability that Keenan will randomly choose a yellow marble increase, decrease or stay the same?

Circle one: Increases Decreases Stays the same

Justify your answer.

4 green (5) yellow 1 blue

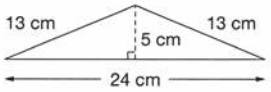
yellow will have the most chance of being picked

OBSERVATION

The student's understanding of familiar measurement relationships when all of the information is presented is inconsistent. In one question, the student has correctly identified the expression $54 \div 2 - 12$, which represents the area of the triangle minus the area of the parallelogram or $\frac{1}{2}(6 \times 9) - (3 \times 4)$. However, in the other question, the student has not determined the area of the triangle, but has chosen numbers and correctly multiplied 5 x 13. The selected numbers suggest an attempt to apply to triangles concepts relating to the area of rectangles (e.g., multiply length and width).

SAMPLE ANSWER

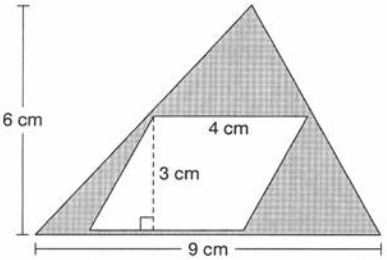
What is the area of the triangle shown below?



A $60\ cm^2$ *
(B) $65\ cm^2$
C $120\ cm^2$
D $156\ cm^2$

SAMPLE ANSWER

Which expression can be used to find the area of the shaded region?



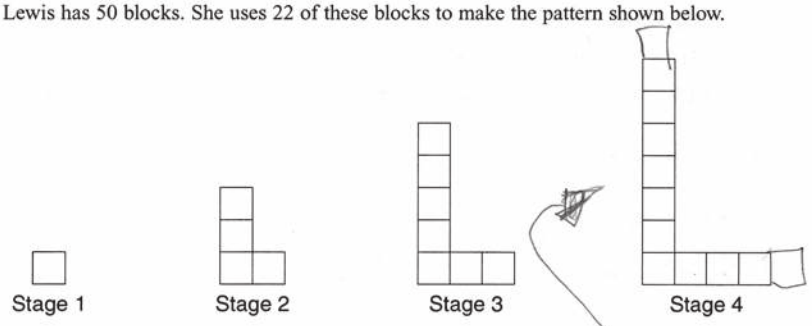
(A) $54 \div 2 - 12$ *
B $54 - 4 \times 12 \div 2$
C $12 \div 2 - 54$
D $12 - 54 \div 2$

OBSERVATION

For this question, the student has attempted a solution, giving 12 as the number of blocks in the next stage, but hasn't considered all of the information in the question to solve the multi-step problem (e.g., maximum of 50 blocks for all stages). The student has attempted to communicate basic information by adding a block onto each leg of the "L" but has not identified the pattern correctly (e.g., add three blocks at each stage, two to the vertical and one to the horizontal).

SAMPLE ANSWER

Ms. Lewis has 50 blocks. She uses 22 of these blocks to make the pattern shown below.



How many stages will Ms. Lewis be able to complete with the 50 blocks?

Justify your answer.

picture

12 stages would be the answer for the question and that is how I got my answer

OBSERVATION

The student has applied simple one-step procedures and responded to one part of the problem (plotting). The student has graphed (*y, x*), indicating a lack of understanding of coordinates even when the axis labels are provided. The work shows a parallelogram, but it is unlabelled and is not rotated as required by the question.

SAMPLE ANSWER

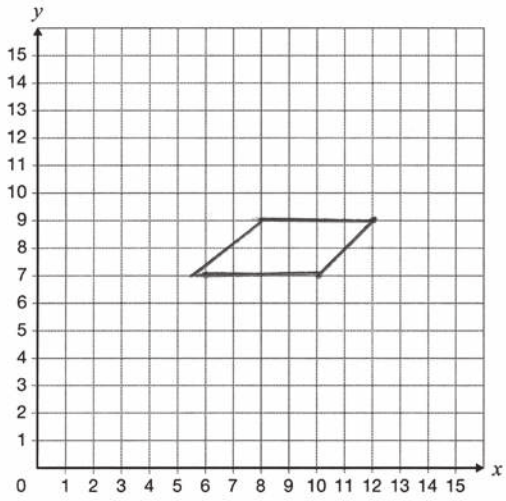
Plot and label the following points to form parallelogram PQRS on the grid below.

P (9, 12)

Q (9, 8)

R (7, 6)

S (7, 10)



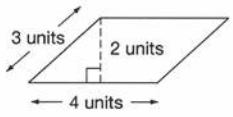
Rotate parallelogram PQRS 90° counter-clockwise about point R. Draw the new parallelogram on the grid above.

OBSERVATION

The student has identified some familiar words in the question and attempted an answer but has missed the relationships among the areas of the shapes. The student has not responded to the part of the question about the area of the given parallelogram (eight square units). The response on the grid shows a triangle with an area of six square units and a rectangle with an area of 24 square units. The student has given no evidence of reasoning, although there is evidence of a vague understanding that area is related to the number of squares inside the shapes.

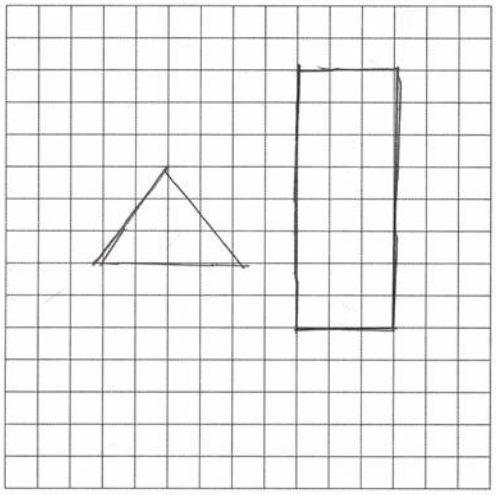
SAMPLE ANSWER

Determine the area of the parallelogram below.



The area of the parallelogram is _____.

Draw a triangle and a rectangle each with the same area as the parallelogram. Use the grid below.



Justify your answers.

triangle is 16 6 | 8 for the Rectangle
I got that by multiplying the
number of squares in the inside

OBSERVATION

The solution suggests that the student has read the chart, but he or she has represented it without attention to conventions (e.g., graph scale, labels). The horizontal scale is accurate and labelled (e.g., weeks), but the vertical scale is inverted and is simply a transcription of the numbers presented in the chart. As a result, the student has graphed a straight line by using the 550, 325, 275, etc., as the vertical scale numbers and has shown increasing sales rather than decreasing, as presented. The explanation shows no use of mathematical vocabulary or understanding of the relationship between the data and this type of graph.

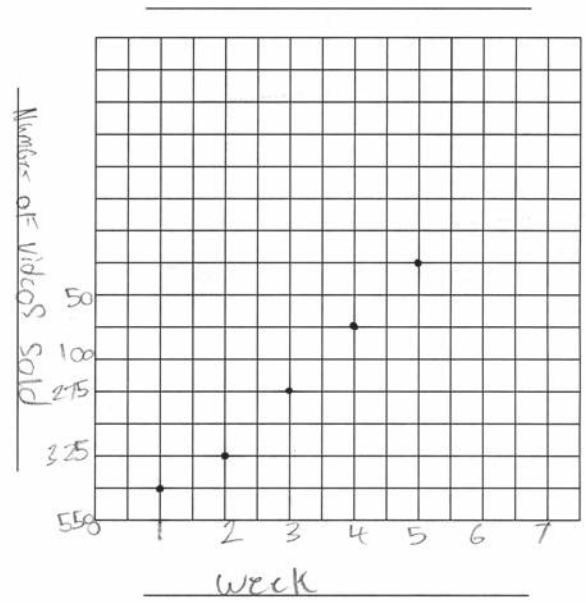
SAMPLE ANSWER

The table below shows the weekly video sales at a store over a five-week period.

Videos Sold

Week	1	2	3	4	5
Number of videos sold	550	325	275	100	50

Draw a broken-line graph to represent this data. Show titles and labels on the graph.



Explain why a broken-line graph is the most appropriate graph to represent this data.

that's the answer

Junior Mathematics

LEVEL

2

Uses basic operations (addition, subtraction, multiplication, division) and memorized formulas to solve familiar problems and to communicate the solutions

TARGET

Support students at Level 2 in developing strategies such as estimating, modelling and mental calculation to make predictions about the reasonableness of a solution.

You may see *some or all* of these characteristics in a student's performance at this level:

Computation

- computes using all four basic operations (addition, subtraction, multiplication, division) with some degree of accuracy
- distinguishes how numbers are used in different ways and what they represent (e.g., quantity, measure, fractions)

Problem Solving

- applies simple, familiar formulas mechanically to most problems whether appropriate or not
- may miss or misunderstand key information in the question
- applies the same solutions to problems that look like ones solved before
- focuses on getting the answer even if it is unreasonable rather than analyzing the problem
- uses strategies and procedures that are only partially correct
- recognizes different sources of mathematical information (e.g., graphs, tables, charts)
- checks infrequently for the reasonableness of his or her answers

Communication

- communicates his or her thinking concretely with a few words and representations

IF STUDENTS NEED HELP WITH...	THEN TRY...	RESOURCE LINKS
determining which information in problems is important	▪ modelling how to use "what if" questions to identify how changing one piece of mathematical information affects another. ▪ having the students pose problems and then collaboratively solve them; ask the students to identify any gaps in mathematical information. ▪ providing partners with problems containing erroneous information. Ask them to catch the mistakes, correct them and explain their corrections to other pairs.	*Data Management and Probability, Grades 4–6,* pp. 24–25 [p. 111] *Patterning and Algebra, Grades 4–6,* pp. 25–30 [p. 111] *A Guide to Effective Instruction in Mathematics, K–6* Volume 2. pp. 46–47; 69 [p. 110]
solving multi-step problems	▪ using shared and guided approaches for the students to learn about and practice a variety of problem-solving strategies (e.g., act it out, solve a similar problem). ▪ building a strategy wall for the students to refer to as they independently and collaboratively solve problems. Update the wall as the students identify additional strategies or adaptations. ▪ having the students use manipulatives to develop algorithms and operational sense. ▪ using a math congress approach to check the students' misconceptions.	*A Guide to Effective Instruction in Mathematics, K–6,* Volume 2. pp. 3–9; 26–29; 34–38; 41–43 [p. 110] Volume 3. p. 15 [p. 110] Volume 5. pp. 68–78 [p. 110] *Number Sense and Numeration, Grades 4–6,* Volume 1. pp. 21–26; 36–40 [p. 110] Volume 2. pp. 15–18 [p. 110] Volume 3. pp. 28–30 [p. 110] *Data Management and Probability, Grades 4–6,* pp. 104–110 [p. 111] *Problem-Based Learning in Mathematics* monograph [p. 112] *What Is Bansho?* [p. 110]
checking solutions for reasonablenes	▪ providing the students with prompts to use as they check their solutions. ▪ having small groups examine several solutions to a problem and verify each solution. ▪ using an interactive strategy such as placemat for students to share and compare solutions. ▪ modelling how to use estimation as a check when investigating a problem.	*A Guide to Effective Instruction in Mathematics, K–6,* Volume 2. pp. 80–82; 70 [p. 110] *Student Interaction in the Mathematics Classroom: Stealing Ideas or Building Understanding* monograph [p. 112] *Number Sense and Numeration, Grades 4–6,* Volume 5. pp. 54–55 [p. 110]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 2 and possible areas for growth that can be observed among several responses. Although EQAO does not score the written evidence of the student's thinking about multiple-choice questions, it can provide insights into his or her mathematical thinking and problem-solving processes.

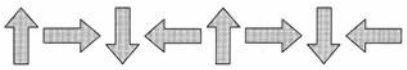
OBSERVATIONS

In the first question, the student has tracked the repeating pattern of rotating 90° clockwise correctly to identify the 16th figure in the pattern.

For the second question, the student has recognized familiar geometric forms, operations and relationships and applied simple, familiar formulas and patterns. The area of the triangle has been calculated using ½ base × height or ½(24 × 5) = 60 cm^2.

SAMPLE ANSWER

A repeating pattern is shown below.



What is the 16th figure in the pattern?

F 

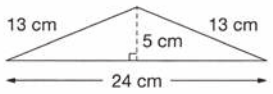
G 

H 

(J)  *

SAMPLE ANSWER

What is the area of the triangle shown below?



(A) 60 cm^2 *

B 65 cm^2

C 120 cm^2

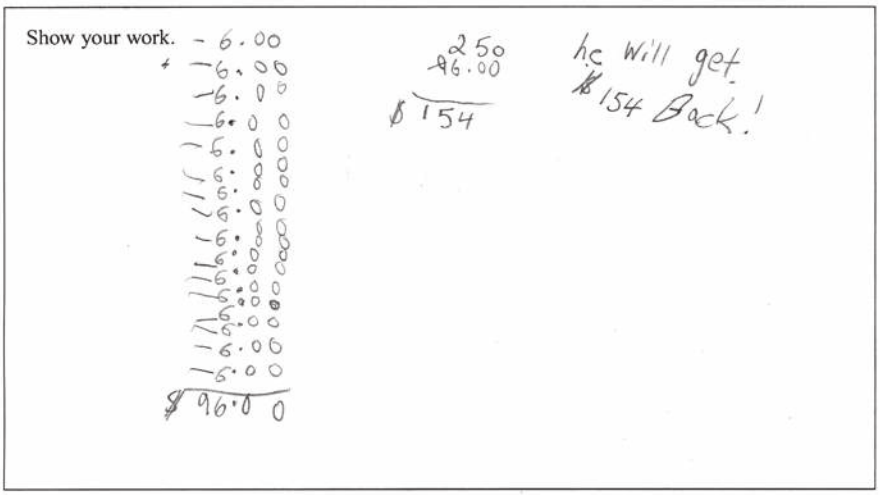
D 156 cm^2

OBSERVATION

The student has made calculations with basic operations (i.e., addition and subtraction) with some accuracy. This solution shows calculations for 16 sections of fence at $6.00 a section. Note that he or she has chosen addition rather than a more efficient computation strategy, such as multiplication. Although the calculations are correct, the student has missed important details in the problem. The cost is $6.00 per metre and one section is 2.4 m long.

SAMPLE ANSWER

Carmen wants to install a fence. Each section of fence is 2.4 metres long and costs $6.00 per metre. Carmen will need 16 sections of fence. How much change should he receive from $250?



OBSERVATIONS

The responses indicate that when reading the question, the student has missed or misunderstood information about contexts and relationships.

In this question, the student has missed the relationship of part to whole. The response and the explanation show that the student has understood the partial relationship (e.g., the number of yellow marbles has increased, and so there are the largest number of yellow marbles).

For this question, the student has used some of the information in the question (e.g., there are 22 blocks to start with and the number of blocks increases by three at each stage) and attempts a solution but is not sure how to interpret the findings. He or she doesn't have a clear understanding of the relationship between the total number of blocks available (50) and the number needed to make stages 1 to 4 *plus* stage 5 (10 + 3 = 13 blocks needed) and stage 6 (13 + 3 = 16 blocks needed).

SAMPLE ANSWER

Keenan places 3 green marbles, 4 yellow marbles and 1 blue marble in a bag.

Keenan then adds 1 green marble and 1 yellow marble to the bag.

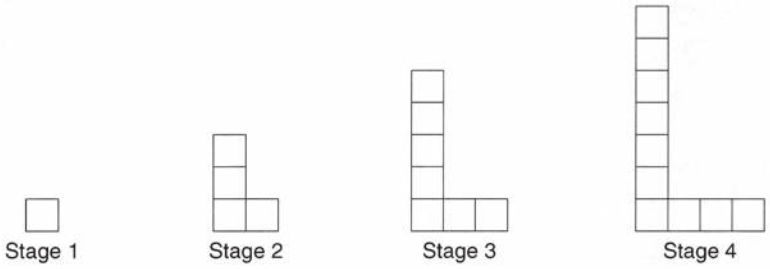
Does the probability that Keenan will randomly choose a yellow marble increase, decrease or stay the same?

Circle one: (Increases) Decreases Stays the same

Justify your answer. it will increases because it has more marbles than before so the yellow marbles have (1) more chance to be pulled out of the marble BAg.

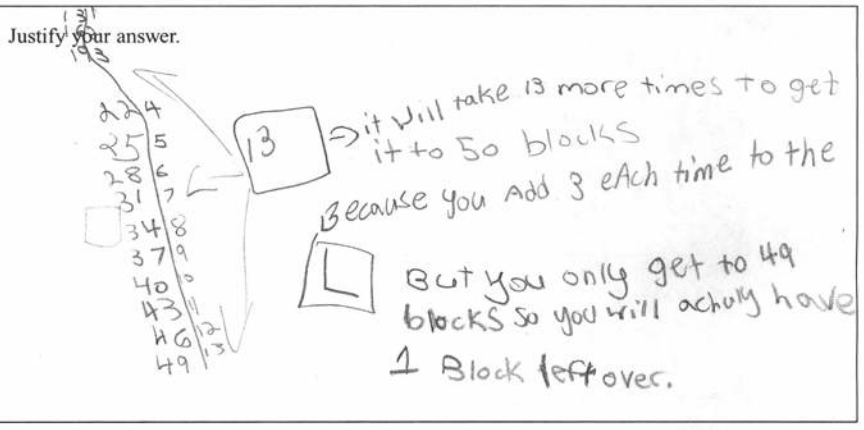
SAMPLE ANSWER

Ms. Lewis has 50 blocks. She uses 22 of these blocks to make the pattern shown below.



How many stages will Ms. Lewis be able to complete with the 50 blocks?

Justify your answer.



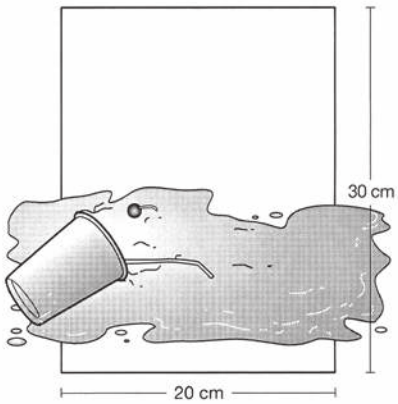
OBSERVATIONS

The response indicates that when reading the question, the student has missed or misunderstood information about contexts and relationships.

The response suggests that the student has not considered the context of the problem (calculating the area of the spill) and has just used the numbers provided to calculate the area of the rectangular piece of paper. The selected answer is unreasonable and indicates that the student has missed the relationship between the size of the spill and the size of the paper.

SAMPLE ANSWER

Samantha spills a milkshake on a rectangular piece of paper as shown below.



Which of the following **best** approximates the area of the entire spill?

A $100\ cm^2$
B $300\ cm^2$ *
C $400\ cm^2$
D $600\ cm^2$

OBSERVATION

For this question, the student has applied simple, familiar formulas and algorithms but has missed information about relationships in the question. The response shows the student has correctly calculated $22 \times 5 = 110$ but has not gone back to the question and identified the appropriate unit of measure (110 minutes vs. two hours). The student has not considered the cue "approximately," which might have been useful.

SAMPLE ANSWER

It takes Nadeem 22 minutes to walk 1 kilometre. At this rate, approximately how long will it take Nadeem to walk 5 kilometres?

A 1 hour
B 2 hours *
C 100 hours
D 110 hours

OBSERVATION

The parallelogram PQRS is plotted correctly, but rather than rotating the figure as required, the student seems to have reflected it through a vertical line at $y = 8$. This indicates only a partial understanding of the concepts required to answer the question.

SAMPLE ANSWER

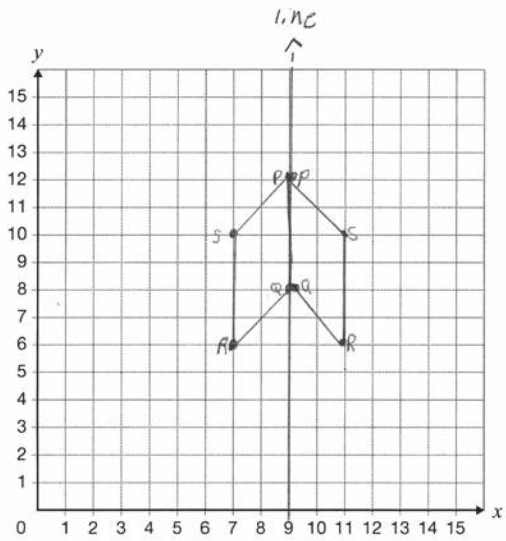
Plot and label the following points to form parallelogram PQRS on the grid below.

P (9, 12)

Q (9, 8)

R (7, 6)

S (7, 10)



Rotate parallelogram PQRS 90° counter-clockwise about point R. Draw the new parallelogram on the grid above.

OBSERVATION

This response indicates that the student understands the relationship between triangles and a parallelogram, and can select the correct answer when all of the information is provided in the question.

SAMPLE ANSWER

A diagonal of a parallelogram is drawn forming 2 triangles. If the area of one of the triangles is 34 cm^2, what is the area of the parallelogram?

A 17 cm^2

B 34 cm^2

(C) 68 cm^2 *

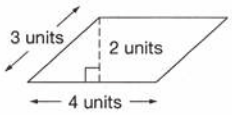
D 136 cm^2

OBSERVATION

The student has applied some mathematical thinking to calculate the areas of three different figures by using the same relationship (A = base $\times$ height). Although the area of the rectangle is consistent with the determined area of the parallelogram, the initial calculation for the area of the parallelogram is incorrect ($l \times w = 12$ units rather than $b \times h = 8$ square units). The student has attempted to show the relationships among the figures by using the numbers three and four, but the conceptual understanding is missing. He or she has represented the shape of a triangle but has not used the grid to show 12 square units accurately.

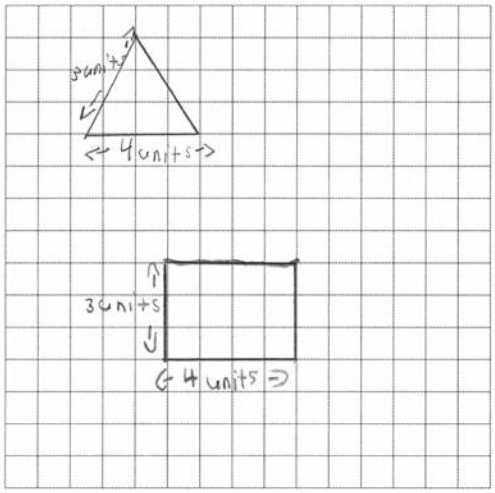
SAMPLE ANSWER

Determine the area of the parallelogram below.



The area of the parallelogram is 12 units.

Draw a triangle and a rectangle each with the same area as the parallelogram. Use the grid below.



Justify your answers. Well the Awnser is 12 Because the Quistion is 3X4(1Xw). So All I hade to do is make the sids 3 units and 4 units then I would get my Triangle and my rectangle.

Junior Mathematics

LEVEL 3

Approaches problems logically, accurately performs computations using mathematical language and techniques and communicates results appropriately

TARGET

Encourage students at Level 3 to reach a logical and reasoned solution by making connections between mathematical problems and their application in everyday life.

You may see *some or all* of these characteristics in a student's performance at this level:

Computation

- performs calculations and operations accurately, with occasional errors
- understands and uses mathematical language, rules and procedures correctly when solving familiar problems

Problem Solving

- understands what the questions are asking and selects and applies appropriate operations
- approaches problems logically, with mathematical reasoning
- selects appropriate procedures, formulas and strategies to solve multi-step problems, with occasional miscues, especially when solving unfamiliar or more complex problems
- recognizes when problems require more information than provided and fills in gaps where needed to arrive at solutions
- may not check the plausibility of his or her responses

Communication

- uses mathematical terminology and appropriate representations to explain solutions

IF STUDENTS NEED HELP WITH...	THEN TRY...	RESOURCE LINKS
identifying relationships among mathematical ideas in problems	▪ using an oral communication strategy such as math reader's theatre for the students to explain a mathematical concept. ▪ modelling "I think" and "I wonder" statements when investigating relationships. ▪ using visual manipulatives such as Geometer's Sketchpad to examine problems and identify implied relationships.	*A Guide to Effective Instruction in Mathematics, K–6,* Volume 2. p. 69 [p. 110] *Number Sense and Numeration, Grades 4–6,* Volume 3. pp. 28–30 [p. 110] Volume 6. pp. 13–23 [p. 111] *Measurement, Grades 4–6,* pp. 101–107 [p. 111] *Geometry and Spatial Sense, Grades 4–6,* pp. 18, 65–68 [p. 111]
connecting problems to a real-life context	▪ asking the students to explain the procedure for finding the solution to a real-life mathematics problem. ▪ providing the students with real-life problem-solving settings or problems related to other subject areas. ▪ having partners solve problems with the method that makes sense to them and then using a math congress to compare methods.	*A Guide to Effective Instruction in Mathematics, K–6,* Volume 2. p. 76 [p. 110] *Measurement, Grades 4–6,* pp. 36–39 *Data Management and Probability, Grades 4–6,* pp. 81–90 [p. 111] *Learning Mathematics vs. Following "Rules": the Value of Student-Generated Methods* monograph [p. 112] *Learning Mathematics Within Contexts* webcast [p. 113]
using mathematical reasoning to solve problems and justify thinking	▪ using a math forum activity for the students to present challenging problems and their solutions. Classmates can ask questions about the concepts and process. ▪ using a class journal to model different strategies for solving problems, explain thinking and compare solutions.	*A Guide to Effective Instruction in Mathematics, K–6* Volume 1. pp 33–34 [p. 110] Volume 2. pp. 55–59, 69, 78 [p. 110] Volume 5. pp. 7–12 [p. 110] *Geometry and Spatial Sense, Grades 4–6,* pp. 18–20 [p. 111] *Number Sense and Numeration, Grades 4–6,* Volume 1. pp 30–35 [p. 110]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 3 and possible areas for growth that can be observed among several responses. Although EQAO does not score the written evidence of the student's thinking about multiple-choice questions, it can provide insights into his or her mathematical thinking and problem-solving processes.

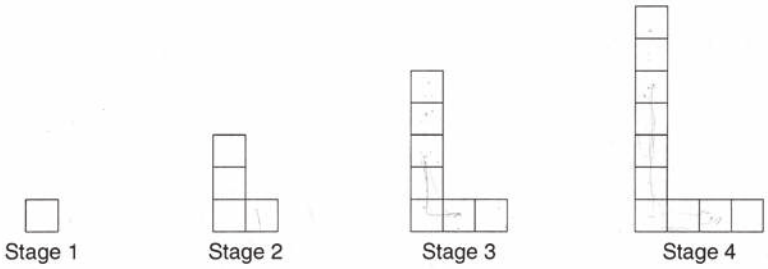
OBSERVATIONS

This response shows that the student has considered the context of the problem and was able to select appropriate procedures, formulas and strategies to solve multi-step problems.

The response shows careful calculation of the number of blocks needed for Stage 5 and subtraction from the cumulative total to determine that 15 blocks are left when 16 are required for the next stage. The student has clearly considered the real-life context.

SAMPLE ANSWER

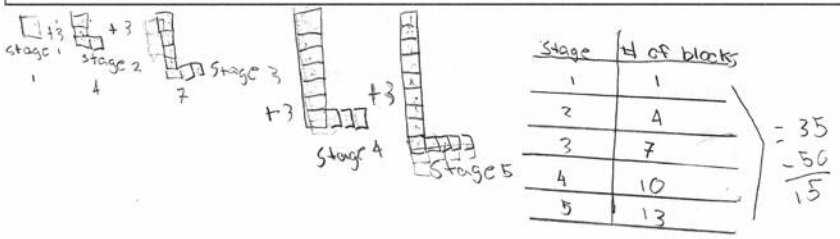
Ms. Lewis has 50 blocks. She uses 22 of these blocks to make the pattern shown below.



How many stages will Ms. Lewis be able to complete with the 50 blocks?

Justify your answer.

There are 5 stages that Ms. Lewis be able to complete with the 50 blocks, Because the equal number of the blocks on Stage 1, 2, 3, 4, 5 is 35 blocks so I check if there are more blocks for Stage 6, I decided to, subtract 35 into 50, I got 15. So Ms. Lewis won't be able to complete the blocks on Stage 6 because there are only 15 blocks left.



Junior Mathematics | Level 3

OBSERVATIONS

The student has approached the problems logically, with mathematical reasoning and perseverance. He or she has performed operations and calculations accurately with occasional errors only. The student has selected appropriate procedures, formulas and strategies to solve multi-step problems.

The construction shows the student has attempted to show all criteria. The symmetry is flawed, however, because the base is three units long, which requires that the vertex at the top of the pentagon be in the middle of a grid square. The precision required by this graphing task is not realized but an understanding of the geometric properties is evident.

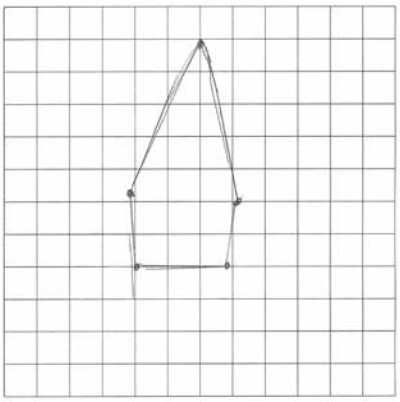
This algebraic substitution question suggests that the student has used logic and perseverance to consider all of the steps of the solution and apply the appropriate operations correctly to determine a response.

The relationships in this question are complicated. Because the response (8), which is correct, is an approximation, it shows a deep understanding of percent and number relationships.

SAMPLE ANSWER

Construct a pentagon on the grid below that meets the following conditions.

- exactly 1 line of symmetry
- 2 obtuse angles
- 2 right angles
- 1 acute angle
- at least 1 side with a length of 3 units



Draw the line of symmetry on your pentagon.

SAMPLE ANSWER

If $6 \times \hat{a} = 54$ and $b - \hat{a} = 14$, what is $a \times b$?

A 32
B 45
C 126
(D) 207 *

SAMPLE ANSWER

Mrs. Evans has 30 students in her class. The class has about 75% girls. What is the **best** estimate of the number of boys in Mrs. Evans's class?

A 3
(B) 8 *
C 15
D 23

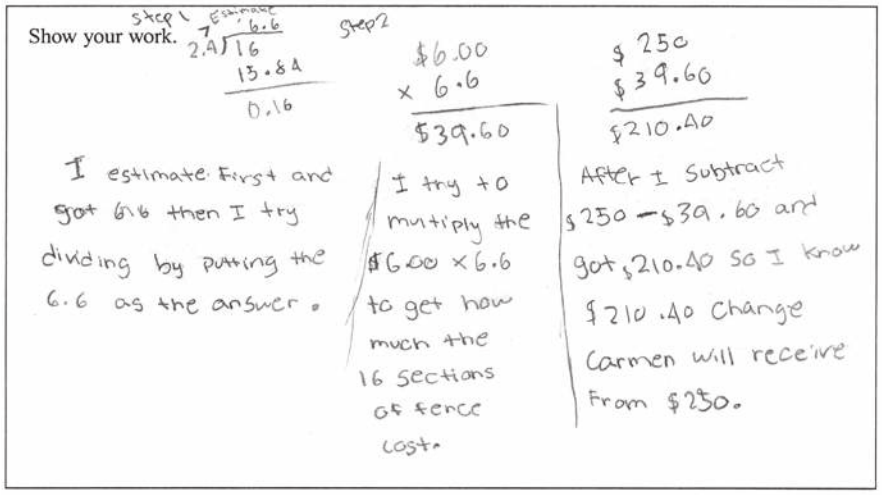
OBSERVATIONS

This response shows that the student has considered the context of the problem and was able to select appropriate procedures, formulas and strategies to solve multi-step problems.

The student has understood most implied relationships in the problem and has usually selected and applied appropriate operations. The student work shows an understanding that this is a multi-step problem. Although the student has misunderstood the relationships in the question (16 sections $\times$ 2.4 metres long $\times$ \$6), which leads to an incorrect answer (16 divided by 2.4) for the first step, the rest of the steps of the solution are appropriately represented. The student may not have checked the plausibility of his or her response—about \$40 for the fence is not reasonable.

SAMPLE ANSWER

Carmen wants to install a fence. Each section of fence is 2.4 metres long and costs \$6.00 per metre. Carmen will need 16 sections of fence. How much change should he receive from \$250?



OBSERVATIONS

This response shows that the student has considered the context of the problem and was able to select appropriate procedures, formulas and strategies to solve multi-step problems.

The graph indicates that the student has read and understood the information in the table but has not applied the information accurately to construct the graph. The title, labels and coordinates are correctly represented, but the horizontal scale is not uniformly labelled, the initial point is inaccurately plotted (1.5, 550) and the broken lines between points are curved. There is evidence of an overall understanding of the construction of a broken-line graph and of the problem (decreasing sales).

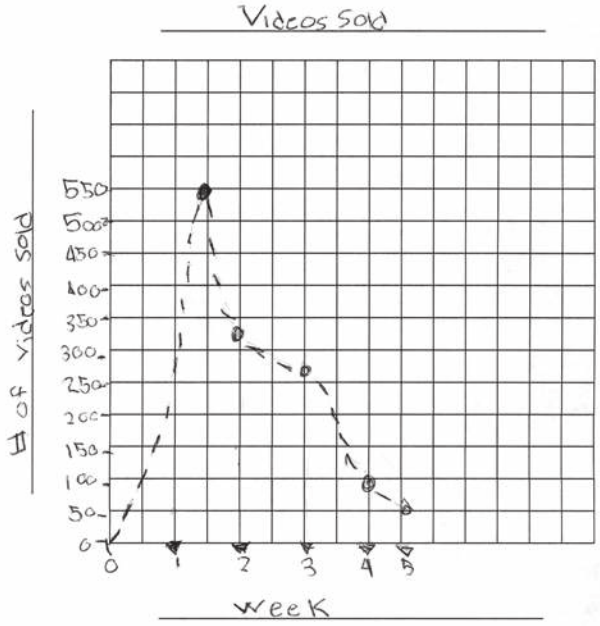
SAMPLE ANSWER

The table below shows the weekly video sales at a store over a five-week period.

Videos Sold

Week	1	2	3	4	5
Number of videos sold	550	325	275	100	50

Draw a broken-line graph to represent this data. Show titles and labels on the graph.



Explain why a broken-line graph is the most appropriate graph to represent this data.

I think that Broken-line graph is the most appropriate graph to represent this data because you can see in this graph how the result decrease or increase.

OBSERVATIONS

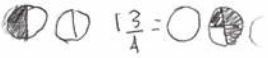
This response indicates that the student has understood most relationships in the problem and approached the solution logically.

The fraction representations the student has drawn show some understanding of the fractions ³⁄₂ and 1 ¾; however, the reasoning doesn't confirm the representation and answer. The second part of the question suggests that the student hasn't fully understood the relationships among ³⁄₂, 1 ½ and 1 ¾.

SAMPLE ANSWER

Consider the fractions $\frac{3}{2}$ and $1\frac{3}{4}$.

• Which of these fractions is larger?

Justify your answer. $\frac{3}{2}$ =  $1\frac{3}{4}$ =

The $1\frac{3}{4}$ is more larger ! First I think that $1\frac{3}{4}$ has more fraction and second I think that the $1\frac{3}{4}$ is more larger because it has whole number.

The larger fraction is $1\frac{3}{4}$.

• Find a fraction between $\frac{3}{2}$ and $1\frac{3}{4}$.

Justify your answer.

I think the fraction between $\frac{3}{2}$ and $1\frac{3}{4}$ is $\frac{1}{3}$ because I think there fraction is somehow has $\frac{1}{3}$.

A fraction between $\frac{3}{2}$ and $1\frac{3}{4}$ is $\frac{1}{3}$.

OBSERVATIONS

These responses indicate that the student has understood most relationships presented in the problems and approached the solutions logically.

The student has plotted the coordinates of the original parallelogram PQRS correctly and understood the meaning of "counter-clockwise." However, it is unclear how the student has performed the rotation (a slide and a rotation?).

In the second question, the student has selected a response that suggests he or she has performed one 90° clockwise rotation rather than a reflection and a rotation.

SAMPLE ANSWER

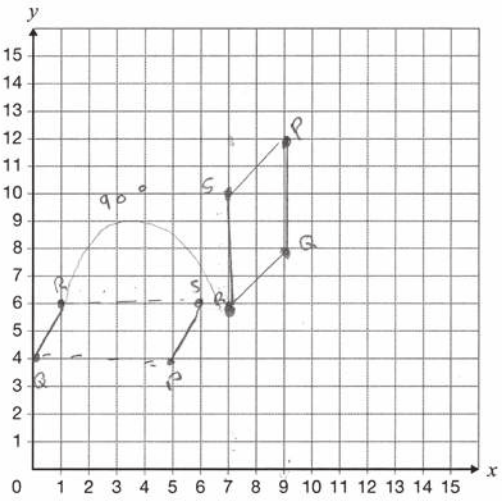
Plot and label the following points to form parallelogram PQRS on the grid below.

P (9, 12)

Q (9, 8)

R (7, 6)

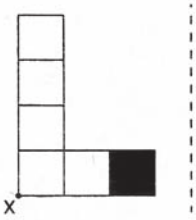
S (7, 10)



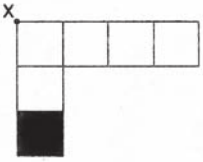
Rotate parallelogram PQRS 90° counter-clockwise about point R. Draw the new parallelogram on the grid above.

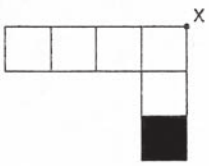
SAMPLE ANSWER

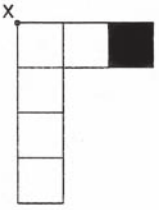
The shape below is reflected across the dotted line and then rotated 90° clockwise about point X.

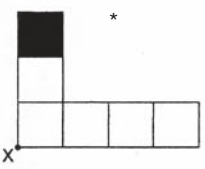


Which of the following shows the shape after the two transformations?

(A) 

B 

C 

D 

OBSERVATIONS

The student has read the table and chosen the response that indicates a clear understanding of the meaning of "mean amount of rainfall."

SAMPLE ANSWER

Judith records the amount of rainfall at her school for one week.

Amount of Rainfall

Day	Amount of rainfall (mm)
Sunday	20
Monday	18
Tuesday	0
Wednesday	22
Thursday	30
Friday	25
Saturday	25

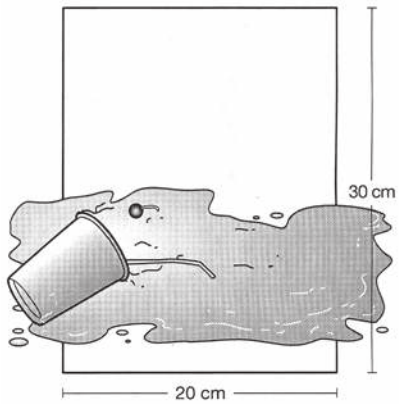
What is the mean amount of rainfall for the week?

(A) 20 mm *
B 22 mm
C 23 mm
D 25 mm

The selected response indicates an understanding of area, estimating and the more abstract relationship between the spill and the paper.

SAMPLE ANSWER

Samantha spills a milkshake on a rectangular piece of paper as shown below.



Which of the following **best** approximates the area of the entire spill?

A 100 cm^2
(B) 300 cm^2 *
C 400 cm^2
D 600 cm^2

Junior Mathematics

LEVEL

4

Uses sophisticated approaches to problems, generating comprehensive solutions, which are then communicated in a precise, technical manner

TARGET

Ask students at Level 4 open-ended questions about their mathematical reasoning and solutions, such as "What pattern do you see?" "How does this problem compare to another you have solved?" "How do you know?" or "How could you generalize your findings?"

You may see *some or all* of these characteristics in a student's performance at this level:

Computation

- makes very few computational errors
- selects and applies operations, vocabulary and units correctly
- generates comprehensive, accurate solutions

Problem Solving

- creates well-designed solutions to problems, showing a high level of mathematical reasoning and expression in a variety of ways
- evaluates his or her answers for reasonableness
- demonstrates an integrated and flexible understanding of mathematics within and across strands

Communication

- communicates mathematical thinking and processes clearly
- uses precise mathematical vocabulary and formats to explain his or her solutions and thinking
- sometimes presents alternative strategies and explanations using words or visual representations
- understands the purpose and audience for his or her explanations

IF STUDENTS NEED HELP WITH...	THEN TRY...	RESOURCE LINKS
applying their understanding of mathematical relationships to solve problems	▪ asking groups of three to investigate problems using the discussion prompts "What do the words say?" "What do we understand?" "What problem is similar to this one?" and "How can we ask it another way?" ▪ using think alouds to identify relationships among mathematical ideas in other subject areas. ▪ using collaborative problem-solving games and activities. ▪ having the students use problem-posing strategies such as creating a picture book to illustrate mathematical concepts and relationships.	*A Guide to Effective Instruction in Mathematics, K–6* Volume 1. pp. 24–28 [p. 110] Volume 2. pp. 34, 46–47 [p. 110] Volume 3. pp. 9–12, 19–27 [p. 110] Volume 5. pp. 5–39 [p. 110] *Number Sense and Numeration, Grades 4–6,* Volume 1. pp 21–29, 68–79 [p. 110]
expanding their repertoire of strategies and processes to apply in different contexts	▪ structuring learning centres to encourage the students to use different tools to solve problems (e.g., concrete materials, physical actions, visual organizers, symbols and numbers, words). ▪ having the students select concrete, visual and electronic learning tools to illustrate their problem-solving processes. ▪ using a learning log for the students to record their problem-solving strategies and processes. ▪ having partners use each other's algorithms and methods to solve similar problems.	*A Guide to Effective Instruction in Mathematics, K–6* Volume 1. pp 26–27 [p. 110] Volume 2. pp. 36–44 [p. 110] Volume 3. pp 18–35, 45–46, 93–94 [p. 110] *Understanding Geometric Figures Through Drawing and Paper Folding* webcast [p. 113]
using a variety of strategies to show and communicate their reasoning	▪ having the students examine and explain each other's solutions to problems. ▪ asking the students to buddy with a student in an earlier grade to explain mathematical concepts and solutions to problems. ▪ modelling how to use different tools to construct and defend arguments for mathematical reasoning.	*High-Yield Strategies for Improving Mathematics Instruction and Student Learning* webcast [p. 113]

The sample responses on the following pages are selected from one student's body of work to illustrate some common characteristics of work at Level 4 and possible areas for growth that can be observed among several responses. Although EQAO does not score the written evidence of the student's thinking about multiple-choice questions, it can provide insights into his or her mathematical thinking and problem-solving processes.

OBSERVATIONS

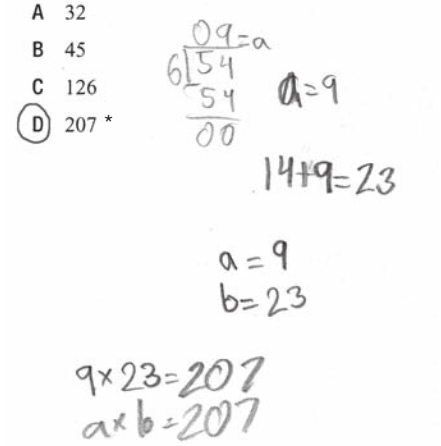
In these questions, the student has selected and accurately applied operations and mathematical vocabulary. In the first question, the student's written evidence shows careful calculation and the ability to think through a multi-step problem to solve for each variable (*a* and *b*) and then calculate the product.

The second question requires the student to understand the relationships among numbers, units and operations to calculate each person's age in four years—16 and 40—create a ratio (16:40) and reduce it to lower terms (2:5).

SAMPLE ANSWER

If $6 \times a = 54$ and $b - a = 14$, what is $a \times b$?

A 32
B 45
C 126
(D) 207 *



SAMPLE ANSWER

Natasha is 12 years old. Her teacher is 36 years old. Which ratio represents Natasha's age in 4 years to her teacher's age in 4 years?

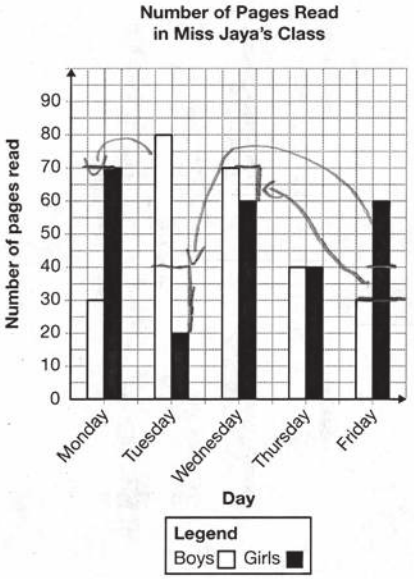
F 1:3
(G) 2:5 *
H 3:10
J 4:9

OBSERVATION

The student has demonstrated an integrated and flexible understanding of the key concepts and selected the correct answer. The use of arrows suggests that the student has deconstructed the bars in the double-bar graph and compared lengths—a more flexible solution than adding the sets of numbers and comparing the totals.

SAMPLE ANSWER

The bar graph shows the number of pages the boys and girls in Miss Jaya's class read in one week.



Which conclusion can be made about the number of pages read?

A The boys read more pages than the girls during this week.

B The girls read more pages than the boys during this week.

C The students read more pages on Tuesday than on Monday.

D The boys and the girls read the same number of pages during this week. *

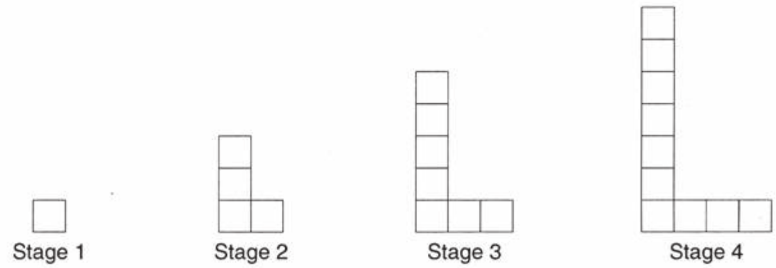
OBSERVATIONS

This question asks the student to use precise mathematical vocabulary and notation to explain the solution and support his or her mathematical thinking.

The solution shows sound mathematical thinking: a calculation of the number of blocks needed in Stages 5 and 6 and then clear reasoning that shows why Stage 5 can be made but not Stage 6. The student has considered the context of the problem.

SAMPLE ANSWER

Ms. Lewis has 50 blocks. She uses 22 of these blocks to make the pattern shown below.



How many stages will Ms. Lewis be able to complete with the 50 blocks?

Justify your answer.

Ms. Lewis will be able to complete 5 full stages of this pattern. I Know because 5 stages uses 35 blocks, but if you try 6 stages it equals 51 blocks that needs one extra block. So you can only make 5 stages.

10+3=13   13+3=16

22
1-S.1
4 S.2
7 S.3
10 S.4
13 S.5
16 S.6
29
Increase by 3

$$22 + 13 = 35$$
$$29 + 22 = 51$$

S.# = stage number

OBSERVATIONS

This question asks the student to use precise mathematical vocabulary and notation to explain the solution and support his or her mathematical thinking.

The graph is clear and properly labelled, and the data are correctly graphed. The explanation refers to the purpose for the communication, showing the student has understood and used the context.

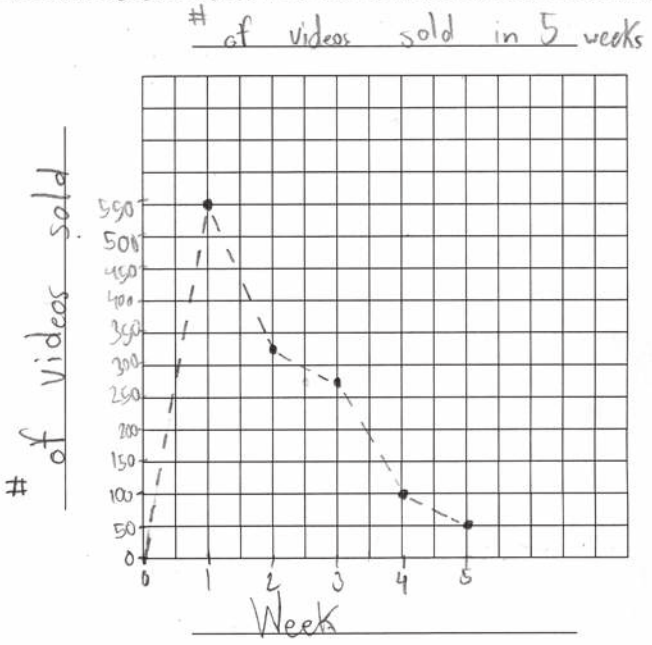
SAMPLE ANSWER

The table below shows the weekly video sales at a store over a five-week period.

Videos Sold

Week	1	2	3	4	5
Number of videos sold	550	325	275	100	50

Draw a broken-line graph to represent this data. Show titles and labels on the graph.



Explain why a broken-line graph is the most appropriate graph to represent this data.

I think a broken line graph is the most appropriate to represent the data since it shows if the business is improving or not.

OBSERVATIONS

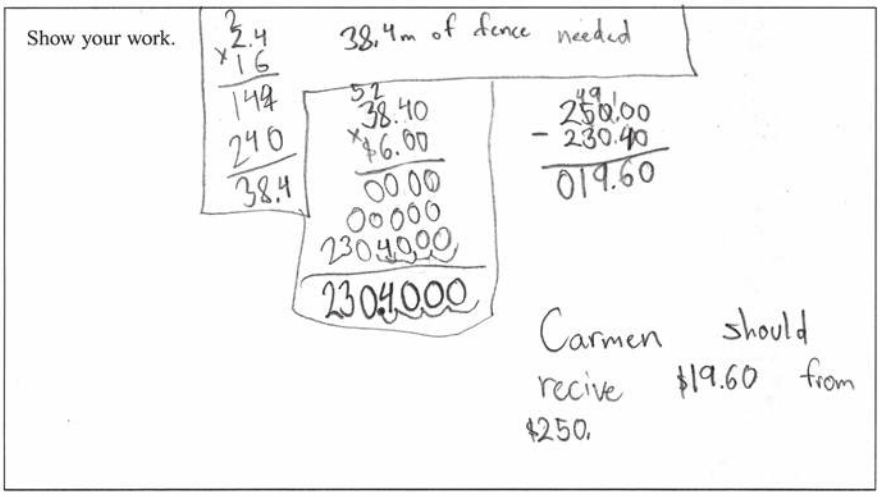
These responses show that the student has generated comprehensive, accurate solutions to multi-step problems, shown a high level of facility with mathematical expression and used precise mathematical vocabulary and notation to justify his or her solutions.

In an unusual solution to the fence problem, the student has determined the total length in metres of 16 sections of fence and multiplied it by the cost of one metre. The student's mathematical thinking is clearly and precisely represented.

Although the response that the probability stays the same is accurate, the student has considered the increase in green and yellow marbles but not the idea that the whole has changed. The probability of green has gone from $\frac{4}{8}$ to $\frac{5}{10}$, both equal to $\frac{1}{2}$.

SAMPLE ANSWER

Carmen wants to install a fence. Each section of fence is 2.4 metres long and costs $6.00 per metre. Carmen will need 16 sections of fence. How much change should he receive from $250?



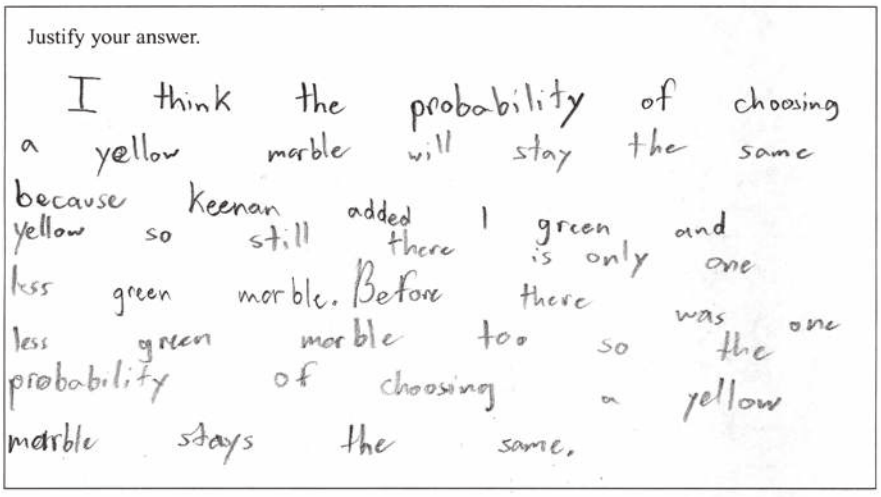
SAMPLE ANSWER

Keenan places 3 green marbles, 4 yellow marbles and 1 blue marble in a bag.

Keenan then adds 1 green marble and 1 yellow marble to the bag.

Does the probability that Keenan will randomly choose a yellow marble increase, decrease or stay the same?

Circle one: Increases Decreases (Stays the same)



Junior Mathematics | Level 4

OBSERVATION

The response is comprehensive and accurate and demonstrates an integrated and flexible mathematical understanding. This student has ignored the ones in both fractions and dealt with the fractional relationships added onto one (i.e., ½, ¾ and ⅝), showing a deep and flexible understanding of fractions and percents. The student's ability to work with percents over 100% indicates a deep understanding of the relationship between percents and fractions. The student has used precise mathematical vocabulary and notation to justify his or her solutions.

SAMPLE ANSWER

Consider the fractions $\frac{3}{2}$ and $1\frac{3}{4}$.

• Which of these fractions is larger?

Justify your answer.

I think $1\frac{3}{4}$ is a larger fraction because if is one whole and 75%, whereas $\frac{3}{2}$ is 1 whole and 50%. So $1\frac{3}{4}$ is larger.

The larger fraction is $1\frac{3}{4}$.

• Find a fraction between $\frac{3}{2}$ and $1\frac{3}{4}$.

Justify your answer.

$1\frac{5}{8}$ is a fraction between $\frac{3}{2}$ and $1\frac{3}{4}$ because it is 1 whole and 62.5% which means it is not smaller than $\frac{3}{2}$ 1 and not bigger than $1\frac{3}{4}$.

A fraction between $\frac{3}{2}$ and $1\frac{3}{4}$ is $1\frac{5}{8}$.

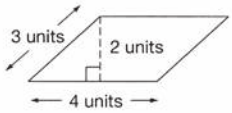
OBSERVATION

This question asks students to apply an understanding of geometric figures and formulas, select and use operations and represent and communicate their thinking. The solution shows the correct calculation of the area of the parallelogram, and a rectangle and a triangle both with the area eight units squared and the squares and half-squares clearly marked.

The justification shows the precise use of mathematical vocabulary and notation to explain the student's solution.

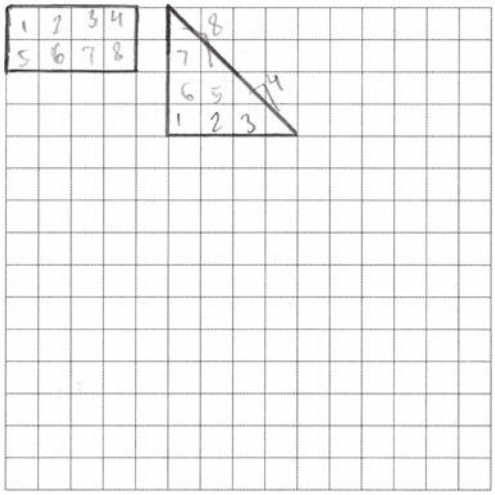
SAMPLE ANSWER

Determine the area of the parallelogram below.



The area of the parallelogram is 8 units^2.

Draw a triangle and a rectangle each with the same area as the parallelogram. Use the grid below.



Justify your answers.

The rectangle and triangle have the same area as the parallelogram. I say that because all of the shapes have a area of 8 units^2.

Resources

Resources

Ministry of Education of Ontario. (2006). *The Ontario Curriculum, Grades 1–8: Language* (Rev. ed.): http://www.edu.gov.on.ca/eng/curriculum/elementary/language.html

Ministry of Education of Ontario. (2005).*The Ontario Curriculum, Grades 1–8: Mathematics* (Rev. ed.): http://www.edu.gov.on.ca/eng/curriculum/elementary/math.html

Ministry of Education of Ontario. Online teaching resources at http://www.eworkshop.on.ca

Ministry of Education of Ontario. EduGAINS Resource Portal Web site: http://www.edugains.ca/newsite/aboutgains.html

Ministry of Education of Ontario. Math GAINS resources: http://www.edugains.ca/newsite/gainspop/mathpop.html

Ministry of Education of Ontario Web site: http://www.edu.gov.on.ca/eng

Literacy and Numeracy Secretariat. Webcasts for Educators: http://www.curriculum.org/secretariat/literacy_en.shtml

Assessment and Evaluation

Education Quality and Accountability Office. (2007). *EQAO questionnaire data: Using contextual data to inform improvement planning:* http://www.eqao.com/pdf_e/07/07P085e.pdf

Education Quality and Accountability Office. (2007). *Framework: Assessment of reading, writing and mathematics, primary division (Grades 1–3):* http://www.eqao.com/pdf_e/08/3e_Framework_07_web.pdf

Education Quality and Accountability Office. (2007). *Framework: Assessment of reading, writing and mathematics, junior division (Grades 4–6):* http://www.eqao.com/pdf_e/08/6e_Framework_07_web.pdf

Education Quality and Accountability Office. (2008, August). *Using data to promote student success: A brief guide to assist school administrators in interpreting their data:* http://eqaoweb.eqao.com/PBS/Files/G36_2008/Dudg_3_6e_0808.pdf

Education Quality and Accountability Office. (2011). *EQAO's province-wide tests: The power of good information:* http://www.eqao.com/pdf_e/11/Cpogi_ne_0211_WEB.pdf

Education Quality and Accountability Office. (2011). *Summary of results and strategies for teachers, 2010–2011:* http://www.eqao.com/pdf_e/11/Summary_ResultsStrategies_PJ_201011e.pdf

Ministry of Education of Ontario. (n.d.). *Effective questioning.* Available at http://www.edugains.ca/resourcesAER/VideoLibrary/index.html?movieID=7 (Intro and Learning Series [Flash video] 5:15)

Ministry of Education of Ontario. AER GAINS resources to support *Growing Success* at http://www.edugains.ca/newsite/aer2/index.html

Ministry of Education of Ontario. EduGAINS resource portal at http://www.edugains.ca/newsite/aboutgains.html

Ministry of Education of Ontario. (2010). *Growing success: Assessment, evaluation, and reporting in Ontario schools, Grades 1 to 12*. Available at http://www.edu.gov.on.ca/eng/policyfunding/growSuccess.pdf

Equity and Inclusive Education

Ministry of Education of Ontario. (2005). *Education for all: The report of the expert panel on literacy and numeracy instruction for students with special education needs, kindergarten to Grade 6*. Available at http://www.edu.gov.on.ca/eng/document/reports/speced/panel/speced.pdf

Ministry of Education of Ontario. (2007). *English language learners/ESL and ELD programs and services: Policies and procedures for Ontario elementary and secondary schools, kindergarten to Grade 12*. Available at http://www.edu.gov.on.ca/eng/document/esleldprograms/esleldprograms.pdf

Literacy and Numeracy Secretariat. (2007, March 29). *Making mathematics accessible for all students* (Webcasts for educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/march29_2007.shtml

Ministry of Education of Ontario. (2005). *Many roots, many voices: Supporting English language learners in every classroom.* Available at http://www.edu.gov.on.ca/eng/document/manyroots/manyroots.pdf

Ministry of Education of Ontario. (2009). *Realizing the promise of diversity: Equity and inclusive education in Ontario schools.* Available at http://www.edu.gov.on.ca/eng/policyfunding/inclusiveguide.pdf

Literacy

Primary Division

Ministry of Education of Ontario. Guides to effective instruction available at the online Ontario Ministry of Education and TFO eworkshop teaching resource portal at http://www.eworkshop.on.ca/edu/core.cfm

Ministry of Education of Ontario. (2003). *A Guide to Effective Instruction in Reading, Kindergarten to Grade 3*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Reading_K_3_English.pdf

Ministry of Education of Ontario. (2005). *A Guide to Effective Instruction in Writing, Kindergarten to Grade 3*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Writing_%20K_3.pdf

Resources (continued)

Junior Division

Ministry of Education of Ontario. (2006). *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume One. Foundations of literacy instruction for the junior learner, part 1*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Lit_456_Vol_1_Pt1_Junior_Learner.pdf

Ministry of Education of Ontario. (2006). *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume One. Foundations of literacy instruction for the junior learner, part 2*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Lit_456_Vol_1_Pt2_Junior_Learner.pdf

Ministry of Education of Ontario. (2006). *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume Two. Assessment.* Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Lit_456_Vol_2_Assessement.pdf

Ministry of Education of Ontario. (2006). *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume Three. Planning and classroom management.* Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Lit_456_Vol_3_Planning.pdf

Ministry of Education of Ontario. (2008). *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume Four. Oral language*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Lit_456_Vol_4_Oral_Language.pdf

Ministry of Education of Ontario. (2008). *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume Five. Reading.* Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Lit_456_Vol_5_Reading.pdf

Ministry of Education of Ontario. (2008). *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume Six. Writing.* Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Lit_456_Vol_6_Writing.pdf

Ministry of Education of Ontario. (2008). *A Guide to Effective Literacy Instruction, Grades 4 to 6: Volume Seven. Media literacy.* Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Lit_456_Vol_7_Media_Literacy.pdf

Numeracy

Primary Division

Ministry of Education of Ontario. (2003). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Number sense and numeration*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Math_K_3_NSN.pdf

Ministry of Education of Ontario. (2005). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Geometry and spatial sense*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Math_K_3_GSS.pdf

Ministry of Education of Ontario. (2007). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Data management and probability*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Data_Management_and_Probability_K-3.pdf

Ministry of Education of Ontario. (2007). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Measurement.* Available at http://www.eworkshop.on.ca/edu/resources/guides/Measurement_K-3.pdf

Ministry of Education of Ontario. (2007). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 3: Patterning and algebra*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Patterning_and_Algebra_K-3.pdf

Primary and Junior Divisions

Ministry of Education of Ontario. Math GAINS resources: http://www.edugains.ca/newsite/gainspop/mathpop.html

Ministry of Education of Ontario. (n.d.). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume One. Foundations of mathematics instruction*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Math_K_6_Volume_1.pdf

Ministry of Education of Ontario. (n.d.). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Two. Problem solving and communication*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Math_K_6_Volume_2.pdf

Ministry of Education of Ontario. (n.d.). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Three. Classroom resources and management*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Math_K_6_Volume_3.pdf

Ministry of Education of Ontario. (n.d.). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Four. Assessment and home connections*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Math_K_6_Volume_4.pdf

Ministry of Education of Ontario. (n.d.). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Volume Five. Teaching basic facts and multidigit computations.* Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Math_K_6_Volume_5.pdf

Ontario College of Teachers. (2010, March). What is bansho? *Professionally Speaking*. Available at http://professionallyspeaking.oct.ca/march_2010/features/lesson_study/bansho.aspx

Ministry of Education of Ontario. (2007). Constructing a collective thinkpad—Bansho as assessment for Learning. Recording a range of student thinking—Assessment for Learning. Organizing to see a range of student thinking—Bansho. *Facilitator's handbook: A guide to effective instruction in mathematics, kindergarten to Grade 6: Teaching and learning through problem solving* (pp. 31–34). Available at http://www.curriculum.org/LNS/coaching/files/pdf/ProblemSolving.pdf

Resources (continued)

Junior Division

Ministry of Education of Ontario. (2006). *A Guide to Effective Instruction in Mathematics, Grades 4 to 6: Number sense and numeration: Volume 1. The big ideas*. Available at http://www.eworkshop.on.ca/edu/resources/guides/NSN_vol_1_Big_Ideas.pdf

Ministry of Education of Ontario. (2006). *A Guide to Effective Instruction in Mathematics, Grades 4 to 6: Number Sense and Numeration: Volume 2. Addition and subtraction*. Available at http://www.eworkshop.on.ca/edu/resources/guides/NSN_vol_2_Addition_Subtraction.pdf

Ministry of Education of Ontario. (2006). *A Guide to Effective Instruction in Mathematics, Grades 4 to 6: Number Sense and Numeration: Volume 3. Multiplication*. Available at http://www.eworkshop.on.ca/edu/resources/guides/NSN_vol_3_Multiplication.pdf

Ministry of Education of Ontario. (2006). *A Guide to Effective Instruction in Mathematics, Grades 4 to 6: Number Sense and Numeration: Volume 4. Division*. Available at http://www.eworkshop.on.ca/edu/resources/guides/NSN_vol_4_Division.pdf

Ministry of Education of Ontario. (2006). *A Guide to Effective Instruction in Mathematics, Grades 4 to 6: Number Sense and Numeration: Volume Five. Fractions*. Available at http://www.eworkshop.on.ca/edu/resources/guides/NSN_vol_5_Fractions.pdf

Ministry of Education of Ontario. (2006). *A Guide to Effective Instruction in Mathematics, Grades 4 to 6: Number Sense and Numeration: Volume 6. Decimal numbers.* Available at http://www.eworkshop.on.ca/edu/resources/guides/NSN_vol_6_Decimal_Numbers.pdf

Ministry of Education of Ontario. (2008). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Data management and probability, Grades 4 to 6.* Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Data_Management_Probability_456.pdf

Ministry of Education of Ontario. (2008). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Geometry and spatial sense, Grades 4 to 6*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Geometry_Spatial_Sense_456.pdf

Ministry of Education of Ontario. (2008). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Measurement, Grades 4 to 6*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Measurement_456.pdf

Ministry of Education of Ontario. (2008). *A Guide to Effective Instruction in Mathematics, Kindergarten to Grade 6: Patterning and algebra, Grades 4 to 6*. Available at http://www.eworkshop.on.ca/edu/resources/guides/Guide_Patterning_and_Algebra_456.pdf

Capacity Building Series Monographs

Literacy

Literacy and Numeracy Secretariat. (2009, August). *Critical literacy: A lens for learning* (Capacity Building Series: Secretariat Special Edition 9). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Critical_Literacy.pdf

Literacy and Numeracy Secretariat. (2009, October). *A World of Words: Enhancing vocabulary development for English language learners* (Capacity Building Series: Secretariat Special Edition 11). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/world_of_words.pdf

Literacy and Numeracy Secretariat. (2008, March). *Non-fiction writing for the junior student* (Capacity Building Series: Secretariat Special Edition 5). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Non_Fiction_Writing.pdf

Literacy and Numeracy Secretariat. (2007, December). *Student self-assessment* (Capacity Building Series: Secretariat Special Edition 4). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/StudentSelfAssessment.pdf

Literacy and Numeracy Secretariat. (2007, September). *Teacher moderation: Collaborative assessment of student work* (Capacity Building Series: Secretariat Special Edition 2). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Teacher_Moderation.pdf

Literacy and Numeracy Secretariat. (2010, March). *Reading fluency* (Capacity Building Series: Secretariat Special Edition 12). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/reading_fluency.pdf

Numeracy

Literacy and Numeracy Secretariat. (2008, September). *Differentiating mathematics instruction* (Capacity Building Series: Secretariat Special Edition 7). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/different_math.pdf

Literacy and Numeracy Secretariat. (2010, September). *Communication in the mathematics classroom: Gallery walk, math congress and bansho* (Capacity Building Series: Secretariat Special Edition 13). Available at http://www.curriculum.org/secretariat/eyes/files/CommunicationMathematics.pdf

Literacy and Numeracy Secretariat. (2011, February). *Bansho (board writing)* (Capacity Building Series: Secretariat Special Edition 17). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/CBS_bansho.pdf

Resources (continued)

What Works: Research into Practice Series Monographs and Articles

Other titles can be found at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/archive.html

Literacy and Numeracy Secretariat. (2010, December). *Video games in the classroom: Building skills in literacy and numeracy* (What Works? Research into Practice Monograph 31). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_Video_Games.pdf

Literacy

Literacy and Numeracy Secretariat. (2009, October). *Storytelling and story writing: Using a different kind of pencil* (What Works? Research into Practice: Research Monograph 20). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_Storytelling.pdf

Literacy and Numeracy Secretariat. (2007, October). *Poetry: A powerful medium for literacy and technology development* (What Works? Research into Practice: Research Monograph 7). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Hughes.pdf

Literacy and Numeracy Secretariat. (2008, May). *Content literacy* (What Works? Research into Practice: Research Monograph 13). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/contentLiteracy.pdf

Literacy and Numeracy Secretariat. (2010, December). *Developing critical literacy skills: Exploring masculine and feminine stereotypes in children's literature* (What Works? Research into Practice: Research Monograph 32). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_Critical_Literacy.pdf

Literacy and Numeracy Secretariat. (2010, October). *Improving student writing: Using feedback as a tool* (What Works? Research into Practice: Research Monograph 29). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_Improving_Student_Writing.pdf

Literacy and Numeracy Secretariat. (2010, September). *Word study instruction: Enhancing reading comprehension* (What Works? Research into Practice Monograph 27). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_Word_Study.pdf

Literacy and Numeracy Secretariat. (2010, February). *Science and literacy in the elementary classroom* (What Works? Research into Practice: Research Monograph 26). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_science_literacy.pdf

Literacy and Numeracy Secretariat. (2008, April). *Boys' underachievement: Which boys are we talking about?* (What Works? Research into Practice Monograph 12). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Martino.pdf

Payne, M. J. (n.d.). *Why student voice matters*. Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/classroom/StudentVoice.html

Numeracy

Literacy and Numeracy Secretariat. (2009, November). *Problem-based learning in mathematics: A tool for developing students' conceptual knowledge* (What Works? Research into Practice: Research Monograph 22). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/WW_problem_based_math.pdf

Literacy and Numeracy Secretariat. (2007, March). *Learning mathematics vs. following "rules": The value of student-generated methods* (What Works? Research into Practice: Research Monograph 2). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Lawson.pdf

Literacy and Numeracy Secretariat. (2007, January). *Student interaction in the math classroom: Stealing ideas or building understanding* (What Works? Research into Practice: Research Monograph 1). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/Bruce.pdf

Literacy and Numeracy Secretariat. (2008, July). *ESL in the mathematics classroom* (What Works? Research into Practice: Research Monograph 14). Available at http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/ESL_math.pdf

Webcasts and Podcasts

Assessment, Teaching and Learning

Literacy and Numeracy Secretariat. (2007, September 10). *Teacher moderation: Collaborative assessment of student work* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/september10.shtml

Literacy and Numeracy Secretariat. (2010, October 15). *Developing inquiring minds: Moderation of student work* [Webcasts]. Available at http://www.curriculum.org/secretariat/inquiring/moderation.shtml

Literacy and Numeracy Secretariat. (2010). Informing practice: Learning intentions and success criteria. *Student-led conferences* (Literacy and Numeracy Secretariat Webcast Professional Learning Series) [Video webcast segment]. Available at http://www.curriculum.org/secretariat/studentled/informing.shtml

Literacy

Literacy and Numeracy Secretariat. (2007, November 29). *Critical literacy* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/november29.shtml

Literacy and Numeracy Secretariat. (2006, March 29). *Differentiated instruction: Continuing the conversation* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/march29.shtml

Literacy and Numeracy Secretariat. (2006, October 25). *Effective instruction in reading comprehension* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/october25.shtml

Resources (continued)

Literacy and Numeracy Secretariat. (2008, May 2). *High-yield strategies to improve student learning* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/may2.shtml

Literacy and Numeracy Secretariat. (2010, January 4). *Literature circles* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/circles/index.shtml

Literacy and Numeracy Secretariat. (2007, September 10). Special feature webcast: *Making sense of reading instruction: Grades 4 to 6*. Available at http://www.curriculum.org/secretariat/january31.shtml

Literacy and Numeracy Secretariat. (2008, April 18). *Non-fiction writing* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/april18.shtml

Literacy and Numeracy Secretariat. (2010, October 29). Word sort. Inference game. Writing. Guided reading. Student self-assessment. In *Precision teaching in the primary classroom* [Webcast]. Available at http://www.curriculum.org/secretariat/precision/index.shtml and http://www.curriculum.org/secretariat/precision/inference.shtml

Literacy and Numeracy Secretariat. (2008, May 2). Part 3. The gradual release of responsibility model: Shared reading: Signal words. In *High-yield strategies to improve student learning* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/may2.shtml

Literacy and Numeracy Secretariat. (2009, January 30). *Teaching for understanding: Summarization* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/january30TU.shtml

Literacy and Numeracy Secretariat. (2010, October 21). *Word study in action* [Video webcast]. Available at http://www.curriculum.org/secretariat/wordstudy/index.shtml. (Especially "Powerful Words: The Reading/Writing Connection.")

Numeracy

Literacy and Numeracy Secretariat. (2008, May 28). *Differentiating mathematics instruction* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/may28.shtml

Literacy and Numeracy Secretariat. (2008, February 26). *High-yield strategies for improving mathematics instruction and student learning* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/february26_full.shtml

Literacy and Numeracy Secretariat. (2008, May 2). *High-yield strategies to improve student learning* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/may2.shtml

Literacy and Numeracy Secretariat. (2007, October 30). *Learning mathematics within contexts* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/october30.shtml

Literacy and Numeracy Secretariat. (2005, November 2). *Mathematical knowledge for teaching with Dr. Deborah Loewenberg Ball* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/november2.shtml

Literacy and Numeracy Secretariat. (2010, March 4). *Through the eye of the learner: From student work to teacher practice* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/eyes/index.shtml. (Especially "Classroom Visit #1" and "Classroom Visit #2.")

Literacy and Numeracy Secretariat. (2009, January 30). *Understanding of geometric figures through drawing and paper folding* (Webcasts for Educators) [Video webcast]. Available at http://www.curriculum.org/secretariat/january30geometric.shtml

Literacy and Numeracy Secretariat. (2010, June 1). *The three-part lesson in mathematics: Co-planning, co-teaching and supporting student learning*. [Video webcast]. Available at http://resources.curriculum.org/secretariat/coplanning/

Literacy and Numeracy Secretariat. (n.d.). *Number relationships*. [Learning module]. Available at http://www.eworkshop.on.ca

Literacy and Numeracy Secretariat. (n.d.). *Communication*. [Learning module]. Available at http://www.eworkshop.on.ca

Additional Materials to Support Webcasts

Literacy and Numeracy Secretariat. (2006, October 25). *Text features, forms, and genres* (Webcasts for educators: Additional materials). Available at http://www.curriculum.org/secretariat/files/Oct25TextFeatures.pdf

Literacy and Numeracy Secretariat. (2006, October 25). *Questions to promote metacognitive thinking during reading, writing, speaking, and listening* (Webcasts for educators: Additional materials). Available at http://www.curriculum.org/secretariat/files/Oct25Metacognition.pdf

Literacy and Numeracy Secretariat. (2006, October 25). *Reciprocal teaching session* (Webcasts for educators: Additional materials). Available at http://www.curriculum.org/secretariat/files/Oct25teaching.pdf

Literacy and Numeracy Secretariat. (2006, October 25). *Using DRTA (Directed Reading Thinking Activity) to predict when reading* (Webcasts for educators: Additional materials). Available at http://www.curriculum.org/secretariat/files/Oct25reading.pdf

Literacy and Numeracy Secretariat. (2006, October 25). *Organizational patterns found in informational texts* (Webcasts for educators: Additional materials). Available at http://www.curriculum.org/secretariat/files/Oct25Patterns.pdf

Literacy and Numeracy Secretariat. (2006, October 25). *Comprehension – An overview* (Webcasts for educators: Additional materials). Available at http://www.curriculum.org/secretariat/files/Oct25comprehension.pdf

Literacy and Numeracy Secreatriat. (2007, November 29). *Critical literacy plan* (Webcasts for educators: Additional materials). Available at http://www.curriculum.org/secretariat/files/Nov29LessonPlans.pdf

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