

Understanding Levels of **Achievement**

Using EQAO Information to Improve Student Learning

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.

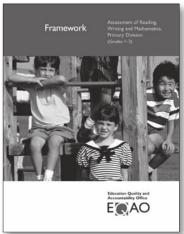
The objective and reliable assessment results are evidence that adds to current knowledge about student learning and serves as an important tool for improvement at all levels: for individual students, schools, boards and the province.

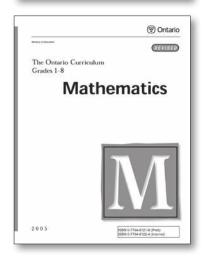
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Introduction







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 primary 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 101) 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.

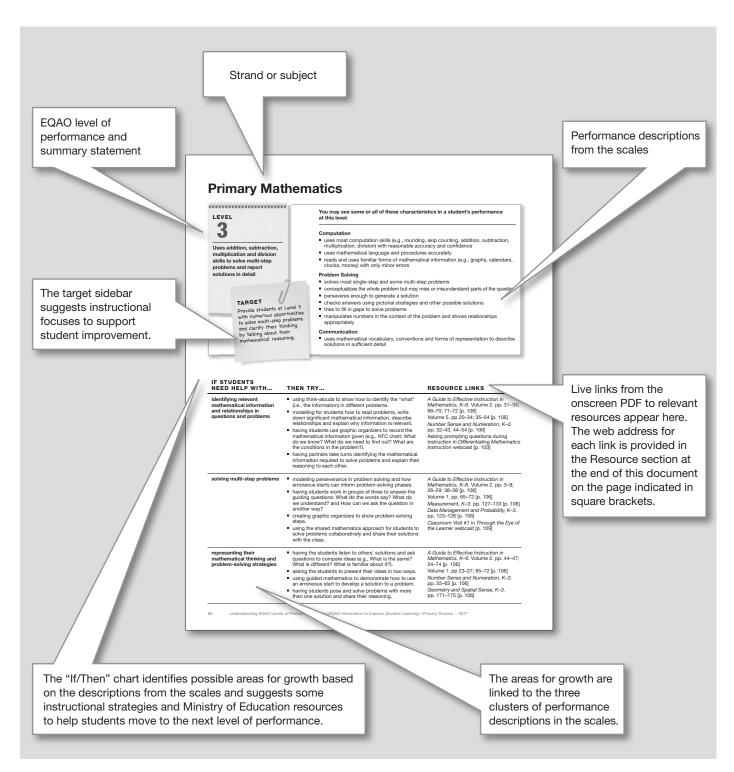
The relevant primary reading selections follow the reading section.

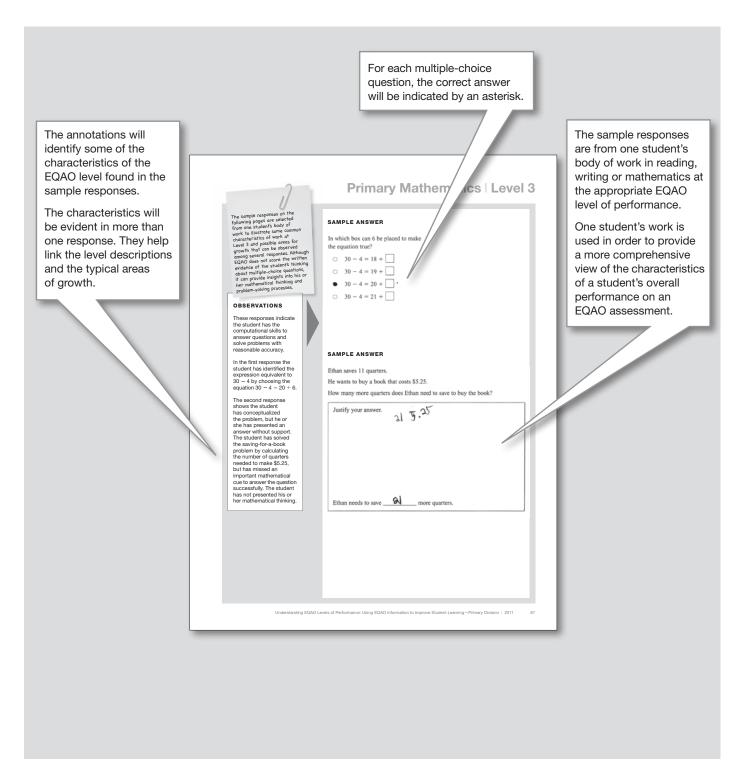
How to Use This Document

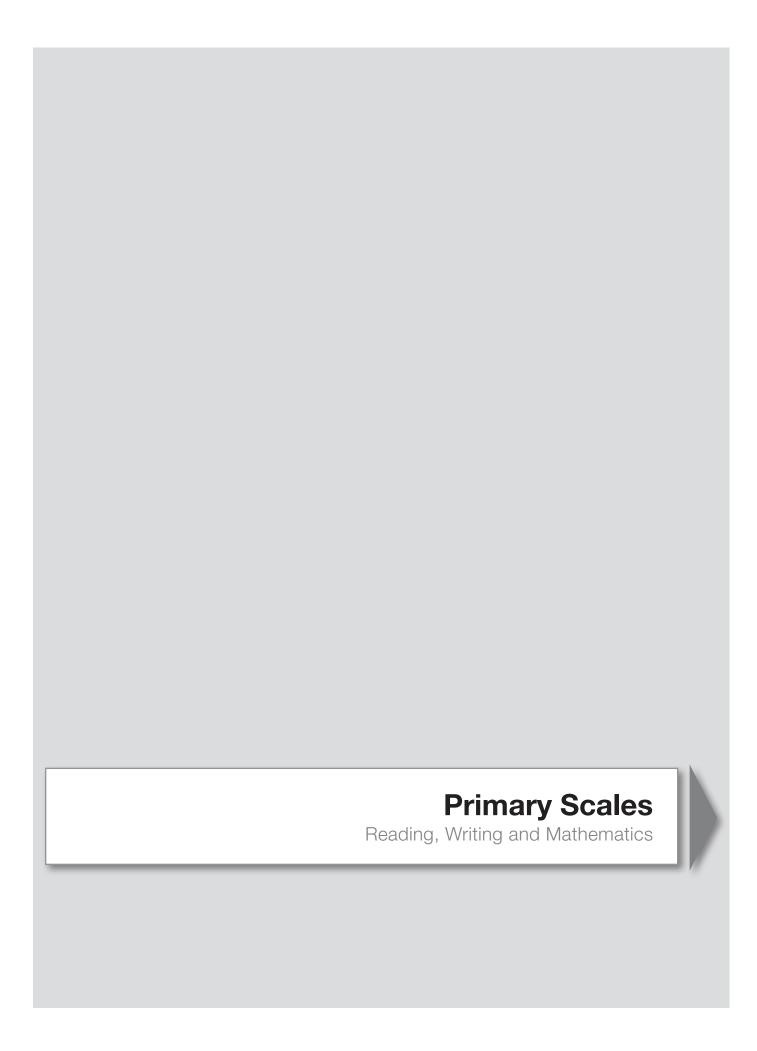
The Support Materials Section at a Glance

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







Primary Reading Scale

LEVEL

1

Understands familiar words and concrete ideas in texts and questions and attempts to answer the question

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

Answers to Questions

- shows some success at selecting answers from a list of choices
- relies on words from the question or text for his or her answer

Understanding of Text

- understands some specific, directly stated information and ideas
- understands parts rather than the whole of the text
- relies on a literal understanding of the text
- understands familiar words in context

Support for Answers

- refers to an idea from the text and often repeats it
- includes random details from the text
- focuses on him or herself rather than the text in answers

LEVEL

2

Uses ideas from the text and combines them with personal experience to select or develop simple answers to questions

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

Answers to Questions

- understands what questions are asking
- links words from the question and text with own ideas to select or form an answer
- attempts to answer questions with some specific words from the text

Understanding of Text

- recalls some factual ideas in the text
- identifies some meanings, clues and details that are not directly stated
- begins to make connections between the text and personal experience
- begins to show understanding of how text features (e.g., titles, heading, pictures) affect meaning
- begins to show understanding of how characteristics of texts (e.g., characters, setting, label, captions, organization) affect meaning

Support for Answers

- refers to some factual ideas in the text
- uses some examples from the text to support inferences and connections
- attempts to make relevant personal connections to the text
- begins to develop opinions related to the text
- organizes his or her thoughts in predictable ways

LEVEL

3

Generates ideas based on the text and his or her own experience and answers questions appropriately with evidence

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

Answers to Questions

- answers questions addressing a wide range of curriculum expectations and reading skills correctly
- provides written answers that are easy to understand

Understanding of Text

- understands the main ideas
- provides evidence of a thoughtful analysis of characters and events
- makes generalizations and judgments based on the text
- generates ideas based on the text and personal connections

Support for Answers

- uses relevant information from the text to support his or her thinking
- uses explanations to support his or her ideas and opinions
- makes connections related to the text
- supports answers with relevant ideas of his or her own

LEVEL

4

Answers questions skilfully, with complex reasoning and insightful evidence

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

Answers to Questions

- answers questions addressing a wide range of curriculum expectations and reading skills accurately and precisely
- expresses understanding clearly and thoughtfully in written answers

Understanding of Text

- understands text fully and relates it to background knowledge
- provides clear evidence of analysis in interpreting texts
- draws logical and relevant conclusions based on supporting details from the text
- makes inferences and interpretations that are often insightful
- integrates information and ideas in the text with prior knowledge

Support for Answers

- uses information from the text to support his or her thinking about significant ideas in the text
- uses extensive relevant explanations to support and justify his or her ideas and opinions about the text

Primary Writing Scale

LEVEL

1

Responds to part of the task using simple and often unconnected ideas while attempting to use a few conventions

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

Responses to Tasks

- demonstrates some understanding of the assigned task when the prompt type is familiar
- connects to words in the assigned task through simple learned patterns (e.g., "I like...", "I can...")

Ideas/Organization

- expresses simple ideas based on personal experiences and/or preferences
- often leaves ideas unconnected
- develops ideas using simple patterns (e.g., list, simple sequence)
- strings together common words to express an idea, often using familiar oral language patterns
- uses words directly from the prompt as a tool for generating writing

Conventions (spelling, punctuation, grammar, usage)

- uses printing or cursive writing that is irregular and difficult to read
- uses spelling, punctuation and grammar that interferes with his or her expression and the reader's understanding
- frequently bases spelling on the sounds of words and/or spells at random
- attempts to make sentences and experiments with capital letters and periods

LEVEL

2

Responds to aspects of the task with simple ideas drawn from personal experience and using simple conventions

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

Responses to Tasks

- responds to some key words in the task
- attempts to write in the form required by the task

Ideas/Organization

- expresses ideas that are sometimes unconnected
- begins to order ideas and use simple logical structure (e.g., beginning, middle, end)
- repeats ideas that may be unconnected or supported by few details
- uses simple connecting words (e.g., and, but, first, then)
- supports ideas with personal experience only

Conventions (spelling, punctuation, grammar, usage)

- demonstrates inconsistent awareness, understanding and use of conventions
- makes simple sentences using common words and inconsistent punctuation
- experiments with words containing vowel combinations, verb endings and more than one syllable
- uses invented spelling for many words

LEVEL

3

Responds purposefully to the task with an awareness of the reader, using relevant ideas and appropriate conventions

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

Responses to Tasks

- understands the task and writes in the form required by it
- demonstrates awareness of the audience and the purpose for writing

Ideas/Organization

- writes with a plan and a purpose
- clearly expresses ideas and opinions
- often supports ideas with facts, details and relevant personal experiences
- uses transition words
- begins to convey messages through a personal style (e.g., images, humour)

Conventions (spelling, punctuation, grammar, usage)

- applies conventional spelling, punctuation and grammar
- uses various sentence structures
- uses a variety of vocabulary, phrases, adjectives and adverbs
- includes text and print features (e.g., words in capital letters, indents, boldface) for effect

LEVEL

4

Responds competently and thoughtfully to the task with complex ideas and effective use of conventions, creating engaging and appealing written work

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

Responses to Tasks

- responds effectively to the assigned tasks
- makes effective choices related to the audience, purpose and form

Ideas/Organization

- maintains consistent, clear main idea or message throughout the writing
- expresses complex ideas with effective details and elaborations
- uses a voice that is expressive and appropriate to the audience and purpose
- engages and appeals to the reader through purposeful and effective use of techniques such as humour and dialogue
- organizes writing skilfully, with smooth transitions and connections between sentences and paragraphs

Conventions (spelling, punctuation, grammar, usage)

- uses conventions (spelling, grammar, punctuation) accurately and effectively to enhance the richness of the written message
- engages the reader through word choice, linking words and a variety of sentence types (e.g., simple, compound and complex sentences, questions, exclamations)

Primary Mathematics Scale

LEVEL

1

Uses addition to respond to simple problems and offers brief explanations of results

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

Computation

- recognizes symbols for addition
- uses addition correctly in familiar contexts
- attempts other simple operations
- creates and extends simple number patterns (e.g., 2, 4, 6 ...)

Problem Solving

- copies numbers and words from the question as all or part of an answer
- reads questions literally, without extracting mathematical cues about relationships and content
- reads explicitly presented information in charts, diagrams and graphs
- uses addition for most problem solving whether or not it is appropriate
- recognizes familiar geometric shapes (e.g., square, circle) and figures (e.g., prisms, pyramids)
- offers some illogical solutions

Communication

- provides brief explanations of mathematical thinking and processes
- often explains thinking and processes by restating the question

LEVEL

2

Uses addition and subtraction to respond to single-step problems, interpreting information literally from a variety of formats

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

Computation

- uses addition correctly to solve single-step problems (e.g., 15 + 10)
- uses simple operations (e.g., addition, subtraction) when problems are presented in familiar forms (e.g., 17 + 21)
- extends simple number and geometric patterns

Problem Solving

- has a literal understanding of the problem, but may not relate solution to the context
- may focus on part of the question rather than the whole
- interprets explicitly presented information from questions, charts, diagrams and graphs
- uses familiar cues to determine how to solve problems, but misses some mathematical cues about relationships and context and solves only part of the problem
- constructs simple patterns
- solves problems without necessarily associating numbers and their measurement units
- tries to solve all problems
- often represents mathematical thinking with unlabelled pictures

Communication

- offers first answers as final answers
- restates the question or answer or proof rather than elaborating

LEVEL

3

Uses addition, subtraction, multiplication and division skills to solve multi-step problems and report solutions in detail

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

Computation

- uses most computation skills (e.g., rounding, skip counting, addition, subtraction, multiplication, division) with reasonable accuracy and confidence
- uses mathematical language and procedures accurately
- reads and uses familiar forms of mathematical information (e.g., graphs, calendars, clocks, money) with only minor errors

Problem Solving

- solves most single-step and some multi-step problems
- conceptualizes the whole problem but may miss or misunderstand parts of the question
- perseveres enough to generate a solution
- checks answers using pictorial strategies and other possible solutions
- tries to fill in gaps to solve problems
- manipulates numbers in the context of the problem and shows relationships appropriately

Communication

 uses mathematical vocabulary, conventions and forms of representation to describe solutions in sufficient detail

LEVEL

4

Understands problems and responds to them by selecting effective mathematical strategies to provide efficient solutions, which are communicated clearly and effectively

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

Computation

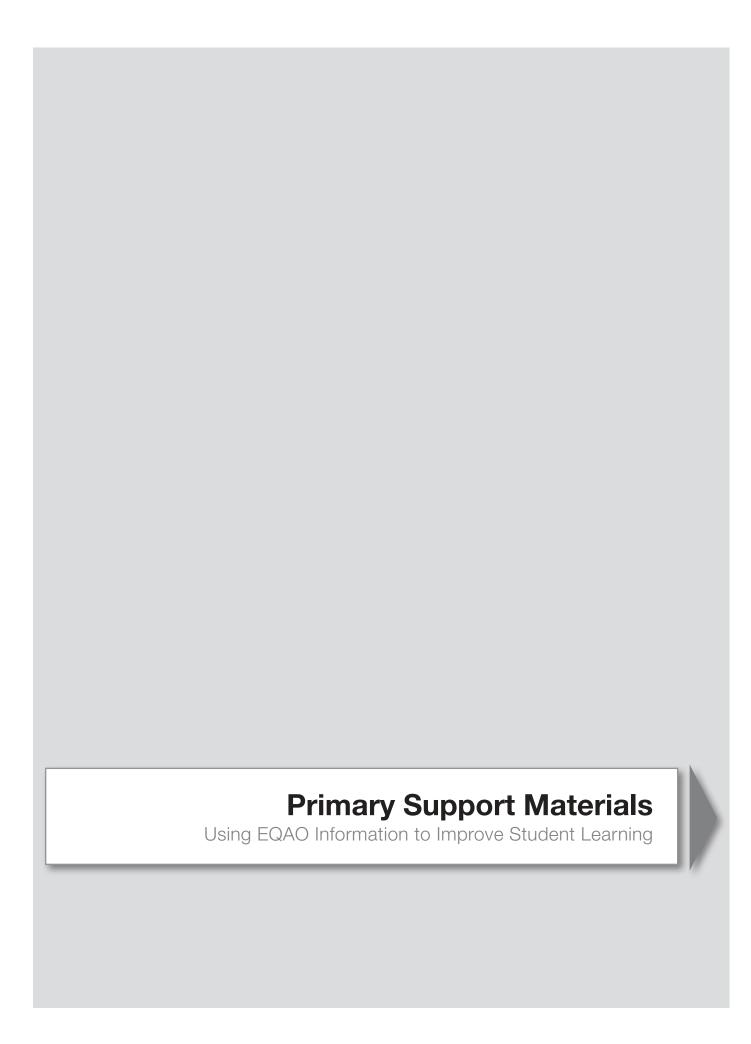
- uses numbers, operations and measurement units accurately and confidently
- provides precise, accurate and "rich" solutions, without extraneous information

Problem Solving

- analyzes questions and extracts relevant information to solve problems effectively and efficiently
- approaches problems looking for connections and relationships
- makes plans and uses a variety of ways to solve problems and represent his or her mathematical thinking
- selects the most effective strategies to solve problems
- knows when a task is finished

Communication

- uses mathematical vocabulary and procedures to communicate solutions clearly and precisely
- supports justifications with additional labelled information



Primary Reading

LEVEL

1

Understands familiar words and concrete ideas in texts and questions and attempts to answer the question

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TARGET

Support students at Level 1 in expanding their reading vocabulary and in making personal connections to text in order to make predictions about meaning.

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

Answers to Questions

- shows some success at selecting answers from a list of choices
- relies on words from the question or text for his or her answer

Understanding of Text

- understands some specific, directly stated information and ideas
- understands parts rather than the whole of the text
- relies on a literal understanding of the text
- understands familiar words in context

Support for Answers

- refers to an idea in the text and often repeats it
- includes random details from the text
- focuses on him or herself rather than the text in answers

IF STUDENTS NEED HELP WITH	THEN TRY	RESOURCE LINKS
understanding questions	 using guided reading to model how to ask and answer questions about texts. using shared reading to provide the students with opportunities to ask questions before, during and after reading. modelling how to answer student-generated questions after a read-aloud. 	A Guide to Effective Instruction in Reading, K-3, pp. 8.19–8.25, 8.14; 8.32–8.34 [p. 105] The reading instruction video collection at www.eworkshop.on.ca
expanding their reading vocabularies	 building on students' oral-language vocabulary in discussions and activities. creating a theme-related word wall to introduce and reinforce important reading vocabulary. asking students to bring interesting words to class and to make hypotheses about their meanings. using word games such as Pictionary and word sorts for students to develop meaning connections among words. 	A Guide to Effective Instruction in Reading, K–3, pp. 3.14; 9.17–9.19 [p. 105] Education for All, K–6, pp. 96, 101–105 [p. 105] World of Words monograph [p. 107] Language-Rich Environment webcast in Effective Instruction in Reading Comprehension [p. 108]
understanding that specific ideas and information develop an overall meaning of a whole text	 using read-alouds to model how to retell texts and make predictions and inferences. having reading partners use a response strategy like "Say Something" to read, pause and discuss predictions and understanding. using Directed Reading Thinking Activity (DRTAs) to help 	Word Study in Action webcast [p. 109] A Guide to Effective Instruction in Reading, K-3, pp. 3.17-3.18, 3.28, 3.29, 4.3-4.16 [p. 105] Using DRTA (Directed Reading Thinking Activity) to Predict When Reading

students make and adjust predictions while reading.

 using a "Picture Walk" strategy before reading to build background knowledge related to whole texts. [p. 109]

Guided Reading webcast [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 rely on limited details or examples from the text, but the examples aren't clearly linked to the questions. They are generalized statements rather than explanations. (Many hockey players practise; the response does not make the connection between practising and Gretzky's childhood clear.)

SAMPLE ANSWER	
Explain why Wayne Gretzky is called the "Great One." Use details from the and your own ideas to support your answer.	
Wayne fretzky is called the oreat one because he scored so the cords.	NOUN
SAMPLE ANSWER	
Describe how Wayne Gretzky's childhood helped him become a good hoc player. Use details from the text and your own ideas to support your answ	
by practicing	

"Wayne Gretzky"

OBSERVATION

The responses may be accurate based on prior knowledge, but, because the student has not used the context of the reading selection, reread or referred to particular details of the text, he or she has made incorrect inferences.

SAMPLE ANSWER

In paragraph 1, the word "tied" means

- put together.
- O create a bow.
- o match or equal. *
- join with string.

SAMPLE ANSWER

The end of the text says Wayne was proud to work with Canada's Olympic hockey team because he

- O liked hockey.
- O helped them win. *
- enjoyed practising.
- set many records with them.

"Wayne Gretzky"

OBSERVATION

The responses indicate that the student has made simple, accurate inferences based on elements of the text.

SAMPLE ANSWER

In the phrase "spit' out the tough parts," (paragraph 3) the word "tough" means

- O dry.
- O soft.
- hard. *
- O hairy.

SAMPLE ANSWER

The pictures beside paragraph 3 help the reader see how the plant

- withers and dies.
- eats other plants.
- grows in the soil.
- traps and eats insects. *

"The Venus Flytrap"

OBSERVATION

The response indicates an understanding of an important idea in the text, but it misses details.

SAMPLE ANSWER

Explain how "trigger hairs" help the Venus flytrap. Use examples from the text to support your answer.

fly trap because it country an insect

"The Venus Flytrap"

OBSERVATION

The response indicates that the student has used prior knowledge but hasn't used text details to make inferences.

SAMPLE ANSWER

Why does Mrs. Smith say line 5 of the text?

- to help students get a job
- to have students tell a story
- O to entertain the students in the class
- O to make the students think about their life *

OBSERVATION

The response shows that the student has used prior knowledge and textual context to make an accurate inference.

SAMPLE ANSWER

In lines 19-20, why is the word "thought" repeated?

- O to tell why Wade wants to be an explorer
- O to prove that the speaker knows what job to do
- to show that Mrs. Smith is unsure about how to answer *
- O to explain why Jasmine cannot think of what to do next

"The Ice Cream Taster"

OBSERVATION

The response answers the question but doesn't provide any support other than "I like wades idea."

SAMPLE ANSWER

Explain whether	or not you	would	d answer	r the	questions	in lines	5-6 the	same	way
that Wade does.	Use details	from	the text	and	your own	ideas to	support	your	
answer.			1 -	,	Sam	eway	de		

I would anser the wade begge I like wades idea.

OBSERVATION

The response paraphrases the question in place of an answer.

SAMPLE ANSWER

Describe what Mrs. Smith does to help the speaker of the poem decide what to be. Use details from the text to support your answer.

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neld help	٥,		
*:			
			62

Primary Reading

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LEVEL

2

Uses ideas from the text and combines them with personal experience to select or develop simple answers to questions

TARGET

Encourage students at Level 2 to survey text features, and to use them and their prior knowledge to make meaning and respond to questions.

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

Answers to Questions

- understands what questions are asking
- links words from the question and text with own ideas to select or form an answer
- attempts to answer questions with some specific words from the text

Understanding of Text

- recalls some factual ideas in the text
- identifies some meanings, clues and details that are not directly stated
- begins to make connections between the text and personal experience
- begins to show understanding of how text features (e.g., titles, heading, pictures) affect meaning
- begins to show understanding of how characteristics of texts (e.g., characters, setting, label, captions, organization) affect meaning

Writing in Precision Teaching in the

Primary Classroom webcast [p. 109]

Support for Answers

- refers to some factual ideas in the text
- uses some examples from the text to support inferences and connections
- attempts to make relevant personal connections to the text
- begins to develop opinions related to the text
- organizes his or her thoughts in predictable ways

IF STUDENTS NEED HELP WITH	THEN TRY	RESOURCE LINKS	
identifying the ideas and information in a text needed	 having them use graphic organizers such as mind maps to summarize important information. 	A Guide to Effective Instruction in Reading, K–3, p. 8.26 [p. 105]	
to answer questions	 using shared reading to pause after each paragraph and identify what is important to remember and what is interesting information. 	Education for All, K-6, p. 99 [p. 105]	
using text features and characteristics to help them make meaning as they read	 having them be "text critics" and describe the kind of information different text features provide. modelling how to use illustrations and sidebars to 	A Guide to Effective Instruction in Reading, K–3, pp. 5.26–5.31; 8.28–8.29 [p. 105]	
	monitor comprehension.asking them to create visuals to accompany an informational text.	Shared Reading: Text Structure in Effective Instruction in Reading Comprehension webcast [p. 108]	
		Shared Reading, Grades K-3 video at www.eworkshop.on.ca	
using prior knowledge to support understanding of	 having reading groups use a response strategy such as "Save the Last Word for Me" to discuss their 	A Guide to Effective Instruction in Reading, K–3, p. 3.28 [p. 105]	
a text	connections to and opinions about significant ideas in a text. modelling how you make connections that help you understand the important ideas and information in a text.	Making Predictions, Activating Prior Knowledge and Visualizing webcasts in Effective instruction in reading comprehension [p. 108]	
		Education for All, K-6, pp. 98-100 [p. 105]	
		Inference Game in <i>Precision Teaching in the Primary Classroom</i> webcast [p. 109]	
using ideas and information from a text to support	 demonstrating how to answer a question and highlighting the parts of the text that link to your 	A Guide to Effective Instruction in Reading, K–3, p. 8.33 [p. 105]	
answers	inferences and conclusions.	Writing in Precision Teaching in the	

them to find the textual support.

providing them with answers to questions and asking

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 include a few words and details from the text that indicate a basic literal understanding, but there is not always a clear link back to the question.

SAMPLE ANSWE	R
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Explain why Wayne Gretzky is called the "Great One." Use details from the text and your own ideas to support your answer.

Wen wayne was ten he was go at hockey. Wen he was older he was even be ter. So that is why he is cold the great one.

SAMPLE ANSWER

Describe how Wayne Gretzky's childhood helped him become a good hockey player. Use details from the text and your own ideas to support your answer.

Wan wayne wys a child his bad made him an ice ring K and he awas praktist.

"Wayne Gretzky"

OBSERVATION

The responses indicate that the student understands the questions and has made a genuine attempt based on prior knowledge and the context to select the correct answer. For Question 2, rereading of the text may have assisted the student in making a correct inference.

SAMPLE ANSWER

In paragraph 1, the word "tied" means

- O put together.
- create a bow.
- match or equal. *
- o join with string.

SAMPLE ANSWER

In paragraph 3, the word "anticipate" means to

- O know. *
- choose.
- explain.
- O describe.

"Wayne Gretzky"

OBSERVATION

The responses indicate that the student understands what the questions are asking, and in one case is able to link words from the question and text with prior knowledge to make an inference and select the correct answer. The responses also show an understanding of how text features (single quotation marks, pictures) affect meaning.

SAMPLE ANSWER

In the phrase "spit' out the tough parts," (paragraph 3) the word "tough" means

- dry.
- o soft.
- O hard. *
- O hairy.

SAMPLE ANSWER

The pictures beside paragraph 3 help the reader see how the plant

- O withers and dies.
- eats other plants.
- O grows in the soil.
- traps and eats insects. *

"The Venus Flytrap"

OBSERVATION

The response refers to some factual ideas in the text and uses some examples from it to draw a humorous conclusion. The response indicates a good understanding of the overall meaning of the text.

SAMPLE ANSWER

Explain how "trigger hairs" help the Venus flytrap. Use examples from the text to support your answer.

The triggers help tham because wen the bug tychis the triggers it will set oof the trap Pinerris serve!

"The Venus Flytrap"

OBSERVATION

The responses indicate an understanding of what the questions are asking. The student makes a correct inference for the first question, but the response to the second question suggests that he or she hasn't used the context of the lines to link the words from the text with his or her prior knowledge in order to draw a correct conclusion.

SAMPLE ANSWER

Why does Mrs. Smith say line 5 of the text?

- O to help students get a job
- to have students tell a story
- to entertain the students in the class
- to make the students think about their life *

SAMPLE ANSWER

In lines 19–20, why is the word "thought" repeated?

- to tell why Wade wants to be an explorer
- O to prove that the speaker knows what job to do
- O to show that Mrs. Smith is unsure about how to answer *
- to explain why Jasmine cannot think of what to do next

OBSERVATION

The response indicates a clear understanding of the question and some details from the text. The student states a strong opinion on this question and a clear personal reaction. Further details from the text would create contrast between the student's personal goal and Wade's, and better support the response, especially considering that an oceanographer is a type of explorer.

SAMPLE ANSWER

Explain whether or not you would answer the questions in lines 5–6 the same way that Wade does. Use details from the text and your own ideas to support your answer.

NO I bonthonto de like wont topo explor the Place I wole like to be an ocanogrer.

"The Ice Cream Taster"

OBSERVATION

The response indicates a clear understanding of Mrs. Smith's advice to the speaker but doesn't draw a conclusion as to how the advice is helpful.

SAMPLE ANSWER

Describe what Mrs. Smith does to help the speaker of the poem decide what to be. Use details from the text to support your answer.

to to lo wat your elly want to do. Do wat your brein all

Primary Reading

LEVEL

3

Generates ideas based on the text and his or her own experience and answers questions appropriately with evidence

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TARGET

Support students at Level 3 in finding relevant details from text and in synthesizing those details to make inferences from and interpretations of the text. You may see some or all of these characteristics in a student's performance at this level:

Answers to Questions

- answers questions addressing a wide range of curriculum expectations and reading skills correctly
- provides written answers that are easy to understand

Understanding of Text

- understands the main ideas
- provides evidence of a thoughtful analysis of characters and events
- makes generalizations and judgments based on the text
- generates ideas based on the text and personal connections

Support for Answers

- uses relevant information from the text to support his or her thinking
- uses explanations to support his or her ideas and opinions
- makes connections related to the text
- supports answers with relevant ideas of his or her own

IF STUDENTS NEED HELP WITH...

THEN TRY...

synthesizing ideas and information in a text to make inferences based on the whole text

- using shared reading to model how to make inferences and asking the students to share theirs.
- using reciprocal teaching for the students to practise developing an understanding of the text.
- having the students use stickies to write down a onesentence summary after each paragraph, and then use the stickies to help them summarize the whole passage.

RESOURCE LINKS

Reciprocal Teaching in Effective Instruction in the Primary Classroom webcast [p. 108]

Inference Game in *Precision Teaching in the Primary Classroom* webcast [p. 109]

integrating ideas and information from texts with prior knowledge to develop understanding and interpretations of the texts

- having the students use a strategy such as "Sketch to Stretch" to share and compare their interpretations with other students.
- using a two-column chart with the headings "Text Says" and "I Say" to model how you record interpretations while reading.
- having small groups examine and discuss the meanings of theme-related cartoons.

A Guide to Effective Instruction in Reading, K–3, p. 3.28 [p. 105]

Accountable Talk: Critical Literacy in *Effective Instruction in Reading Comprehension* webcast [p. 108]

using ideas and information from the text and relevant prior knowledge to support their thinking

- having small groups create tableaus to illustrate the big ideas in the text. Ask thestudents to explain which images best represent the text.
- using shared and guided activities to model how to construct an effective response.
- using discussion circles for the students to practise sharing and supporting their thinking orally.
- having partners create a supported response to questions generated by the class and having the partners share and compare responses.

A Guide to Effective Instruction in Reading, K-3, pp. 5.1-5.13; 6.1-6.24; 7.26 [p. 105]

Guided Reading, Grades K-3 video at www.eworkshop.on.ca

Success Criteria and Exemplars in Precission Teaching in the Elementary Classroom webcast [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 are correct, indicating an understanding of the overall text based on some details and inferences. The prior knowledge or personal opinions don't always substantiate the answer. For example, "Gretzky is a nice man...he tried his best" isn't clear support for calling him the "Great One." Additional accurate details would provide a more focused answer.

SAMPLE ANSWER

Explain why Wayne Gretzky is called the "Great One." Use details from the text and your own ideas to support your answer.

Wayne Gretzky is called the "Greatone" because he scored 378 goals. I think that wayne cretzky is a nice man and he is agod player because he tried his best.

SAMPLE ANSWER

Describe how Wayne Gretzky's childhood helped him become a good hockey player. Use details from the text and your own ideas to support your answer.

woyne Gretzky's childhood he ped him become a good bockey player and helped him play fair. His childhood helped him because his dad put a ice rink in the back yard so he can pracise.

"Wayne Gretzky"

OBSERVATION

The responses are accurate and are based on prior knowledge and inferences made from the text.

SAMPLE ANSWER

In paragraph 3, the word "anticipate" means to

- sknow. *
- O choose.
- explain.
- describe.

SAMPLE ANSWER

What is the main reason for Wayne Gretzky's success?

- body.sizé
- young age
- skating style
- ✓ natural talent *

"Wayne Gretzky"

OBSERVATION

The responses are accurate and are based on appropriate inferences drawn from details and features of the text.

SAMPLE ANSWER

In the phrase "spit' out the tough parts," (paragraph 3) the word "tough" means

- O dry.
- O soft.
- hard.
- O hairy.

SAMPLE ANSWER

The pictures beside paragraph 3 help the reader see how the plant

- withers and dies.
- O eats other plants.
- o grows in the sail.

"The Venus Flytrap"

OBSERVATION

The responses are accurate, demonstrating use of prior knowledge and relevant details from the text and indicating an overall understanding of it. In the first response, the process of how the trigger hairs work isn't explained. Specific details from the text would provide a fuller explanation of how the trigger hairs signal to the plant that it should close its leaves to trap the insect so it can eat it. In the second response, several reasons are provided to support the student's opinion about why the plant is unusual.

SAMPLE ANSWER

Explain how "trigger hairs" help the Venus flytrap. Use examples from the text to support your answer.

The triggerhairs help the venus flytrap because when a fly is in the right place it can eat it.

SAMPLE ANSWER

Explain why the Venus flytrap is an unusual plant. Use details from the text and your own ideas to support your answer.

The Venus flytrop is an unusual plant because is grows in the Swamp and it has two leaves that atach to arib and eat flies. I think the venus flytrap is a dangarus plant because it could pull your firger off.

"The Venus Flytrap"

OBSERVATION

The response shows clear references to textual details, makes inferences and provides a personal response. The answer could be more sharply focused by showing a contrast between the character in the poem and the student.

SAMPLE ANSWER

Explain whether or not you would answer the questions in lines 5–6 the same way that Wade does. Use details from the text and your own ideas to support your answer.

I would not like to goexploreing, Jungles mountains and much more I think I would answer it like I would be an explorer an gust explore canada.

"The Ice Cream Taster"

OBSERVATION

The responses are accurate and demonstrate effective use of details to make inferences and draw conclusions.

SAMPLE ANSWER

Why does Mrs. Smith say line 5 of the text?

- O to help students get a job
- O to have students tell a story
- O to entertain the students in the class
- Ø to make the students think about their life *

SAMPLE ANSWER

In lines 19–20, why is the word "thought" repeated?

- O to tell why Wade wants to be an explorer
- O to prove that the speaker knows what job to do
- to show that Mrs. Smith is unsure about how to answer *
- O to explain why Jasmine cannot think of what to do next

"The Ice Cream Taster"

Primary Reading

LEVEL

Answers questions skilfully, with complex reasoning and insightful evidence

TARGET

Support students at Level 4 in analyzing and interpreting the ideas and information in texts, as well as in making judgements about texts. You may see some or all of these characteristics in a student's performance at this level:

Answers to Questions

- answers questions addressing a wide range of curriculum expectations and reading skills accurately and precisely
- expresses understanding clearly and thoughtfully in written answers

Understanding of Text

- understands text fully and relates it to background knowledge
- provides clear evidence of analysis in interpreting texts
- draws logical and relevant conclusions based on supporting details from the text
- makes inferences and interpretations that are often insightful
- integrates information and ideas in the text with prior knowledge

Support for Answers

- uses information from the text to support his or her thinking about significant ideas
- uses extensive relevant explanations to support and justify his or her ideas and opinions about the text

IF STUDENTS **NEED HELP WITH...**

in texts

THEN TRY...

analyzing and interpreting the ideas and information

- using a reader's theatre strategy for students to develop collaborative interpretations of the texts.
- using a jigsaw strategy for the students to reread the text in "expert groups" and respond to different guiding questions based on the text. Have the students share their analysis and interpretations in "home groups" to develop interpretations of the whole text.

RESOURCE LINKS

High-Yield Strategies in Critical Literacy webcast [p. 106]

Critical Literacy: A Lens for Learning monograph [p. 107]

using elements of style (e.g., descriptive language, word choice, voice) to support the interpretation of texts

- using a strategy such as "Sketch to Stretch" to help them visualize their interpretation and identify the words and phrases they have used to create their images.
- reading aloud to them to model how descriptive language and word choice create images in the mind's eye. Ask the students to describe or sketch what they imagine as they listen.
- examining the powerful descriptive language in posters with the students and comparing the language to that in other types of text.

A Guide to Effective Instruction in Reading, K-3, p. 3.28 [p. 105]

Visualizing in Effective Instruction in Reading Comprehension webcast [p. 108]

Loaded Language in Critical Literacy webcast [p. 108]

integrating prior knowledge and opinions into responses

- using small group reciprocal reading activities for the students to ask and respond to one another's questions.
- providing reading partners with an anticipation or agree/disagree guide based on the text and asking the students to provide support for their viewpoints.
- modelling for the students how to pause while reading to link "I wonder" and "I think" statements to the ideas in the text.

Critical Literacies for All Ages in Critical Literacy webcast [p. 108]

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 are accurate. The student has a good understanding of the entire text and selects multiple appropriate details from it to support his or her answers and make a clear link between the text and his or her conclusions.

SAMPLE ANSWER

Explain why Wayne Gretzky is called the "Great One." Use details from the text and your own ideas to support your answer.

He was alled the Great One because when he was 10, Wayne scored 378 goals in just 68 gomes. At the age of 17, He was the youngest player in professional hockey in North America. So I personly think these things are amiazine.

SAMPLE ANSWER

Describe how Wayne Gretzky's childhood helped him become a good hockey player. Use details from the text and your own ideas to support your answer.

His childhood helped him become a good hockey player because his dod made a rink in thier backyard so Wayne began to play hockey on it, plus his dod supported his desire toplay hockey and helped him without pushing too much when he was a child.

"Wayne Gretzky"

OBSERVATION

The responses are accurate. The student has used prior knowledge and relevant text details to make inferences and draw a logical conclusion.

SAMPLE ANSWER

In paragraph 1, the word "tied" means

- O put together.
- create a bow.
- match or equal. *
- join with string.

SAMPLE ANSWER

In paragraph 3, the word "anticipate" means to

- know. *
- choose.
- o explain.
- O describe.

"Wayne Gretzky"

OBSERVATION

The student has used details and features from the text to make inferences and draw correct conclusions.

SAMPLE ANSWER

"The Venus Flytrap" is mainly about

- where the Venus flytrap grows.
- how the Venus flytrap gets its food. *
- when the Venus flytrap's leaves close.
- why the Venus flytrap grows in swamps.

SAMPLE ANSWER

The pictures beside paragraph 3 help the reader see how the plant

- withers and dies.
- o eats other plants.
- grows in the soil.
- traps and eats insects.*

"The Venus Flytrap"

OBSERVATION

The responses indicate a full understanding of the entire text and include multiple relevant details as well as evidence of a text-to-self connection that makes sense of the information in the text.

SAMPLE ANSWER

Explain why the Venus flytrap is an unusual plant. Use details from the text and your own ideas to support your answer.

I think the Venius flytrap is an unusual plant.

because of it's name, Venius is appoint and it does
trap flys but it also traps other insects. I also think
it's an unusual plant because it takes more than
aweek foreach learned algest and its just is a min to digest in lust. In st

SAMPLE ANSWER

Explain how "trigger hairs" help the Venus flytrap. Use examples from the text to support your answer.

Triggerhains" help the Venus Flytrap becouse when an insect lands on a leafs trigger hairs, the two sides close like a trap and hold the insect inside, I think trigger hairs relly help the Venus Flytrap.

"The Venus Flytrap"

OBSERVATION

The response uses relevant details from the text to which the student compares personal experience and goals to answer the question.

SAMPLE ANSWER

Explain whether or not you would answer the questions in lines 5–6 the same way that Wade does. Use details from the text and your own ideas to support your answer.

I would not like to be a person who explores jungles mountain and much more . To places hot and cold, his Fingers cross that he finds gold Insted I would like to be a marine bialigest to swim with the dolphins bear I swim with the dolphins every year.

"The Ice Cream Taster"

OBSERVATION

The responses are accurate and demonstrate effective use of text details and the student's prior knowledge to draw conclusions.

SAMPLE ANSWER

Why does Mrs. Smith say line 5 of the text?

- O to help students get a job
- to have students tell a story
- O to entertain the students in the class
- to make the students think about their life *

SAMPLE ANSWER

In lines 19-20, why is the word "thought" repeated?

- O to tell why Wade wants to be an explorer
- O to prove that the speaker knows what job to do
- to show that Mrs. Smith is unsure about how to answer *
- O to explain why Jasmine cannot think of what to do next

"The Ice Cream Taster"

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

Wayne Gretzky



No wonder he's been called the "Great 1 One" ever since he was a kid. When he was 10, Wayne Gretzky scored 378 goals in just 68 games. At 17, he was the youngest player in professional hockey in North America. He has set or tied 61 National Hockey League (NHL) records and is the league's all-time leading scorer.

2

3

Wayne began playing hockey on a rink his dad had made in their backyard in Brantford, Ontario. Wayne says his father supported his desire to play hockey and

helped him without pushing too much. Wayne would shoot and skate for hours—he loved it so much that it never seemed like practising to him. When he played in the NHL, he would exhaust his teammates with his long practices.

He wasn't big and his style wasn't smooth, but Wayne had an accurate shot and a natural instinct for the game. He seemed to see plays happen in slow motion and could anticipate where the puck was heading.

Although proud of his records as a player, Wayne was especially proud to work with Canada's men's Olympic hockey team in 2002. He helped lead them to their gold medal.

Adapted from *The Kids Book of Great Canadians* by Elizabeth MacLeod © 2004. Used by permission of Kids Can Press Photo: © Canadian Olympic Committee/The Canadian Press.

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

The Venus Flytrap A Meat-Eating Plant!



The Venus flytrap is an unusual plant that was discovered over 200 years ago. It is found all over the world, but it is native to North and South Carolina. It grows in swamps, where the soil lacks nitrogen, an important part of a plant's diet.

1

2

3

The Venus flytrap grows about 30 cm high. The plant's leaves grow close to the bottom of the stem. Each leaf has two parts attached to a rib. The surface of each side has three sensitive hairs or trigger hairs, and the edges are fringed with sharp spikes.

Catching a Fly





Open Leaf Closed Leaf

The Venus flytrap feeds itself by trapping insects inside its leaves. When an insect lands on a leaf's trigger hairs, the two sides close like a trap and hold the insect inside. The soft parts of the insect are then digested. It takes more than a week for each leaf to digest an insect and "spit" out the tough parts. After the plant has taken in the food,

the trap opens, and the leaf is in position to capture another victim. After a leaf has caught several insects, it withers and dies. The Venus flytrap has been known to last as long as 25 years under good care.

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

The Ice Cream Taster

The clock struck nine on Monday morning. Mrs. Smith gave us a warning: "Take out a pen each of you, Let us make our dreams come true."



"When you grow up, what will you be? 5 What is your future? What do you see? Take your pen and write it down. May you smile and not frown."

Jasmine knew right away: For her job she would play 10 Soccer all day in the sun. What job could be more fun?



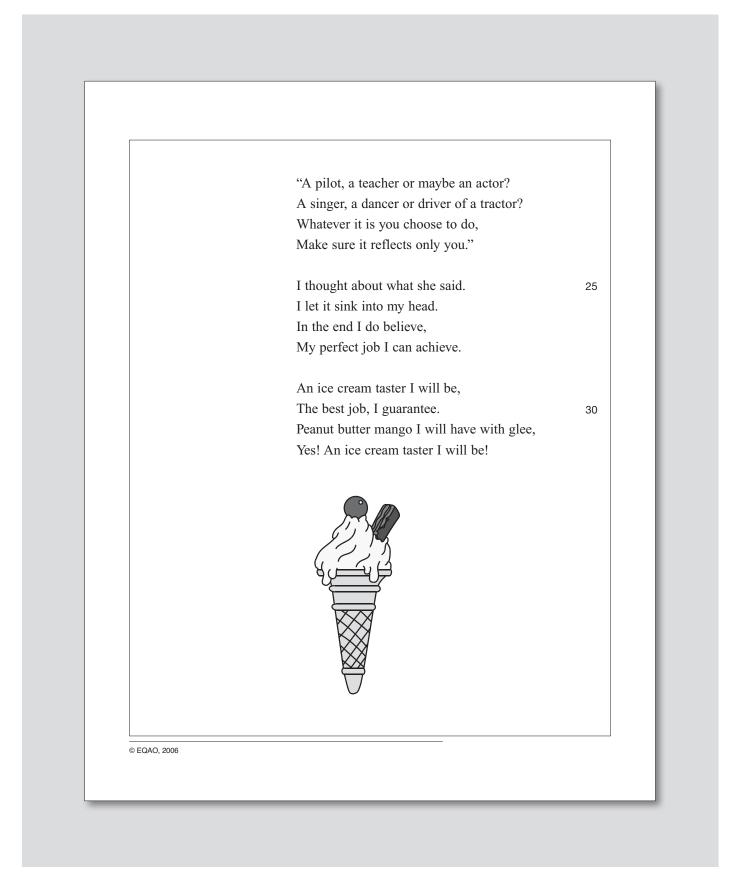
Wade wished to explore Jungles, mountains and much more. To places hot and places cold, 15 His fingers crossed that he finds gold.



I said, as I put up my hand, "What if I have nothing planned?" Mrs. Smith sat and thought, And thought, and thought and thought a lot. 20

continued on page 46 ▼

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



Primary Writing

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LEVEL

1

Responds to part of the task using simple and often unconnected ideas while attempting to use a few conventions

TARGET

Support students at Level 1 in generating ideas, finding details and mastering the vocabulary to express them through multiple opportunities to discuss writing tasks with you and peers.

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

Responses to Tasks

- demonstrates some understanding of the assigned task when the prompt type is familiar
- connects to words in the assigned task through simple learned patterns (e.g., "I like...", "I can...")

Ideas/Organization

- expresses simple ideas based on personal experiences and/or preferences
- often leaves ideas unconnected
- develops ideas using simple patterns (e.g., list, simple sequence)
- strings together common words to express an idea, often using familiar oral language patterns
- uses words directly from the prompt as a tool for generating writing

Conventions (spelling, punctuation, grammar, usage)

- uses printing or cursive writing that is irregular and difficult to read
- uses spelling, punctuation and grammar that interferes with his or her expression and the reader's understanding
- frequently bases spelling on the sounds of words and/or spells at random
- attempts to make sentences and experiments with capital letters and periods

IF STUDENTS NEED HELP WITH	THEN TRY	RESOURCE LINKS
expanding their writing vocabulary	 reading mentor texts to note the writer's use of language. using shared writing experiences to brainstorm interesting words. 	A Guide to Effective Instruction in Writing, K–3, pp. 1.16 and 1.19 [p. 105]
	 maintaining and adding to a word wall, or creating vocabulary anchor charts. 	Education for All, K-6, p. 109 [p. 105]
	having them collect words they would like to use in their writing.	World of Words monograph [p. 107]
generating ideas	 providing opportunities for them to use think, pair, share after real-life experiences 	A Guide to Effective Instruction in Writing, K–3, p. 1.11 [p. 105]
	 using group picture mapping to visualize sequence and details. using storytelling as an oral pre-writing strategy to 	Education for All, K-6, p. 108 [p. 105]
	 illustrate how to develop plot and characters. having them use an "I wonder" book to record questions they would like to investigate further. 	Storytelling and Story Writing monograph [p. 107]
ordering and grouping ideas	 having them reconstruct texts from jumbled paragraphs. providing sticky notes for them to record, arrange and rearrange ideas. 	A Guide to Effective Instruction in Writing, K–3, pp. 1.15, 1.19 [p. 105]
	 using graphic organizers to help them focus and group ideas. 	Education for All, K-6, p. 109 [p. 105]
		Organization, Revision and Reflection in Non-Fiction Writing webcast [p. 108]
using written language structures (using the	using oral rehearsal of words and parts of words to reinforce proper spelling.	A Guide to Effective Instruction in Writing, K–3, pp. 1.17–1.19 [p. 105]
conventions of written language)	 providing mini-lessons on editing for sentence length and variety. creating class anchor charts for punctuation marks. 	Education for All, K-6, pp. 109–110 [p. 105]

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 the generalization of familiar patterns to create the past tense of a verb or the plural of a noun. Support with the spelling patterns of irregular verbs and plurals would assist this student in making accurate choices.

SAMPLE ANSWER

Choose the word that correctly completes the following sentence.

The winner of the music contest

- o sing
- O sang *
- singed
- sanged

SAMPLE ANSWER

Which is the correct plural form of the word "candy"?

- À
- candys
- O candies *
- candees
- candyes

OBSERVATION

The response suggests that the student has made some link to the paragraph (specific colours) but has a limited understanding of how to include details to support a main idea. The student has missed the comparison pattern of the second sentence.

SAMPLE ANSWER

Which sentence would add the best supporting details to the following paragraph?

There are many types of fish in the world. Some fish live in fresh water, while others live in salt water. Fish can have bright colours, like green, purple and red. There are many different kinds of fish.

- There are also some mammals that live in the water.
- Many colours can be seen from far away, like green and red.
- Some fish are small, like guppies, while others are larger, like bass. *
- The world is a big place, with many kinds of mammals and reptiles.

OBSERVATION

The response indicates some understanding of the prompt but is not written in the form of instructions. The ideas are organized in a logical order, but issues with spelling, punctuation and sentence structure affect clarity and interfere with the reader's understanding of the student's text.

SAMPLE ANSWER

Write instructions that explain how to prepare for school.

I go to school ever y day witch my
un the and It is you I brad your
telt and bad gour sand and put
on your school pans and school starata
and my baxpak

Remember:

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

Write your instructions here.

I go to school everyday witch My an tetes
and IT is good and I brad your feet and bad your
send and puton your school Pans and school
sanata and my bakpak

OBSERVATION

The response indicates some understanding of the assigned task. The ideas expressed are simple and demonstrate limited understanding of how to include supporting details to support a main idea.

SAMPLE ANSWER

Describe how the weather affects the way people dress.

Ideas for My Paragraph
The wealther affects me a lot and
It is not good forme at ala
more and that what I Think

Remember:

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

Write your paragraph here.

The we office officets mealet and It is

not good forme a tala more and that

what I Think

SAMPLE ANSWER

Write a letter to a newspaper explaining why everyone should be responsible for keeping their community clean.



Ideas for My Letter

-toher it be a wonder ful

- Not be a gar wage domp and look Like this Domeny

Make shove the world has ares

Remember:

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

OBSERVATION

The response demonstrates some understanding of the structure of a letter.

The student has responded to the task with a limited number of relevant details that are largely undeveloped. The response expresses a personal opinion based on a personal experience rather than developing ideas about why everyone should be responsible for keeping the community clean.

Sentence structure and punctuation interfere with the student's expression and the reader's understanding of the response.

SAMPLE ANSWER (continued)
Write your letter here. Den News pares
I think the community should be clean
because it needs to be a wonderful place
to live in and also not to have
garbage all over the place on the
ground. Because there are sometimes animals
that eat garbage and they are on my front lawn.
т

Primary Writing

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LEVEL

2

Responds to aspects of the task with simple ideas drawn from personal experience and using simple conventions

TARGET

Encourage students at
Level 2 to draw on personal
experiences and do further
reading or exploration to
add details to their writing.
Provide them with clear
models and exemplars of
completed work.

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

Responses to Tasks

- responds to some key words in the task
- attempts to write in the form required by the task

Ideas/Organization

- expresses ideas that are sometimes unconnected
- begins to order ideas and use simple logical structure (e.g., beginning, middle, end)
- repeats ideas that may be unconnected or supported by few details
- uses simple connecting words (e.g., and, but, first, then)
- supports ideas with personal experience only

Conventions (spelling, punctuation, grammar, usage)

- demonstrates inconsistent awareness, understanding and use of conventions
- makes simple sentences using common words and inconsistent punctuation
- experiments with words containing vowel combinations, verb endings and more than one syllable
- uses invented spelling for many words

IF STUDENTS NEED HELP WITH	THEN TRY	RESOURCE LINKS
grouping and organizing ideas and supporting details into sentences	modelling how to group similar ideas from a quick- write draft. weight group is experience or charte to help the	A Guide to Effective Instruction in Writing, K-3, pp. 1.15 and 1.19 [p. 105]
and paragraphs	 using graphic organizers or charts to help the students sort ideas and create a paragraph structure. having the students create a simple self-checklist of questions about paragraph organization to use when drafting writing. 	Education for All, K-6, p. 109 [p. 105]
using different forms of writing	 using mentor texts to explore the purposes and features of forms of writing. 	A Guide to Effective Instruction in Writing, K–3, pp. 1.21 and 5.6 [p. 105]
	 having partners create and share templates for specific writing forms. 	Bridget Scimes - Report Writing subsection
	 co-creating anchor charts that illustrate the elements and structures of different forms. 	of Non-Fiction Writing webcast [p. 109]
	 asking the students to collect samples of different forms of writing and posting them with the appropriate anchor charts. 	
writing with a purpose and for an intended audience	 using a shared-writing approach for the students to create a text for a specific purpose and audience (e.g., friendly letter to a pen pal) 	A Guide to Effective Instruction in Writing, K–3, pp. 1.19, 1.26, Appendix 1–1 [p. 105]
	 modelling how to vary language and word choice depending on the purpose and audience. 	Education for All, K-6, p. 108 [p. 105]
	 creating a word wall of effective language to satisfy different purposes (e.g., describe, explain). 	Sharing Student Writing in Word Study in Action webcast [p. 109]
using conventional spelling, punctuation and grammar to	 modelling how to proofread and correct errors in a chart story. 	A Guide to Effective Instruction in Writing, K–3, pp. 1.17–1.18 [p. 105]
convey meaning clearly	 co-creating a simple editing checklist as a class reference. 	Education for All, K–6, pp. 109–110 [p. 105]
	 brainstorming a list of words appropriate for a writing task and posting them on an anchor chart to support spelling. 	Understanding Word Structure in Word Study in Action webcast [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.

OBSERVATION

Although incorrect, the responses suggest the student has attempted to use the context of the sentence or paragraphs to determine an answer.

The first response suggests that the student has generalized familiar patterns in an attempt to create the past tense of the verb.

The second response suggests that the student has selected an opening sentence based on prior knowledge of the topic rather than the main idea of the paragraph.

The third response selects a detail related to where fish live (water) rather than a detail about the types of fish.

SAMPLE ANSWER

Choose the word that correctly completes the following sentence.

The winner of the music contest at the meeting.

- O sing
- o sang *
- singed
- sanged

SAMPLE ANSWER

Which sentence would add the best supporting details to the following paragraph?

There are many types of fish in the world. Some fish live in fresh water, while others live in salt water. Fish can have bright colours, like green, purple and red. There are many different kinds of fish.

- There are also some mammals that live in the water.
- Many colours can be seen from far away, like green and red.
- Some fish are small, like guppies, while others are larger, like bass. *
- The world is a big place, with many kinds of mammals and reptiles.

SAMPLE ANSWER

Choose the best opening sentence for this paragraph.

It makes

lights glow. It runs the computer, television, washing machine, refrigerator and other appliances. It makes flowers bloom, trees grow and water flow. The world is full of energy.

- We need to save energy.
- O Children are full of energy.
- Energy makes things happen.*
- We use lots of energy in the gym.

OBSERVATION

The response indicates an understanding of some key ideas in the task but is written in a diary format rather than in the form of instructions for preparing for school. The writer supports the response with multiple relevant details that may be overly personal for instructions. The response uses a few simple connecting words to add some order to the ideas. Spelling is largely phonetic and interferes with the reader's understanding.

SAMPLE ANSWER

Write instructions that explain how to prepare for school.

Ideas for My Instructions

You walk up and ent drefis

and then you get drest you

get you dag rety for school

then you get your runs rety,

You get your plann and putit

In your beg. And them you gotos chool

Remember:

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

Write your instructions here.

You work up and have brafis and then you get trest, you get your Beg and get your plant and get Your lunch rety, you get You hair drough and you brungh your hair. And I want and Play for 20 or 25 minsis and wock t.v. Then get My Beg and go out sind and go on the Bus.

OBSERVATION

The student has responded to some key words in the task and focused only on how people dress, not on how the weather affects the way people dress. The student includes multiple details, but the ideas are not organized to show a clear connection to the task. The sentences are simple. The spelling interferes with the reader's understanding.

SAMPLE ANSWER

Describe how the weather affects the way people dress.

Ideas for My Paragraph

PEOPLE & ress IIKE

Adas r sow they wunted dress

is they have a dres with a

3 coluor's and made a flowles

People have porty tres like
thay are all biffrit coluors.

Remember:

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

Write your paragraph here.

people dress like a dost sow they wanted dress is they have a 3 count and made a flowres. People have porty dres to and they dres like they are all biffrint colyon's. They are all biffrint colyon's. They have some horns or flowres. People have sorn dress. They have log dress. And Sizias.

SAMPLE ANSWER

Write a letter to a newspaper explaining why everyone should be responsible for keeping their community clean.



Ideas for My Letter

Remember:

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

OBSERVATION

The response shows some understanding of the task and develops one main idea with related and sometimes repeated details (putting garbage in our pockets and not on the ground). The response does not demonstrate knowledge of letter form but does explain what people can do to keep the world healthy and clean. The student uses mostly simple and some complex sentences. Largely phonetic spelling interferes with the reader's understanding.

SAMPLE ANSWER (continued)

Write your letter here. 0

Primary Writing

LEVEL

3

Responds purposefully to the task with an awareness of the reader, using relevant ideas and appropriate conventions

TARGET

Encourage students at
Level 3 to develop a
personal voice through
strategic choice of ideas
and details, and attention to
vocabulary that expresses
thoughts specifically
and vividly.

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

Responses to Tasks

- understands the task and writes in the form required by it
- demonstrates awareness of the audience and the purpose for writing

Ideas/Organization

- writes with a plan and a purpose
- clearly expresses ideas and opinions
- often supports ideas with facts, details and relevant personal experiences
- uses transition words
- begins to convey messages through a personal style (e.g., images, humour)

Conventions (spelling, punctuation, grammar, usage)

- applies conventional spelling, punctuation and grammar
- uses various sentence structures
- uses a variety of vocabulary, phrases, adjectives and adverbs
- includes text and print features (e.g., words in capital letters, indents, boldface) for effect

IF STUDENTS NEED HELP WITH...

THEN TRY...

maintaining a clear and focused main idea

- modelling the use of a web to show how ideas connect to the main idea in a student writing sample.
- using an exemplar or chart story to show one or more paragraphs that maintain a clear focus on the main idea while developing a different aspect of the topic.
- using small-group read-alouds for students to share their writing to identify points of confusion, gaps in content, missing details, etc.

RESOURCE LINKS

A Guide to Effective Instruction in Writing, K–3, pp. 3.6–3.7 [p. 105] Education for All, K–6, p. 109 [p. 105]

Storytelling and Story Writing monograph [p. 107]

developing a personal style appropriate to the topic, form, purpose and audience

- using interactive writing to construct opening and closing paragraphs that have a powerful voice.
- using two or three exemplars of single informational paragraphs on the same topic, and highlighting elements such as word choice and organization of sentences to illustrate different writing styles.
- having students retell a familiar story by changing the setting, characters and/or event details.
- using dramatic retellings and re-enactments for students to explore and imagine different people's roles in an important historical event.

A Guide to Effective Instruction in Writing, K–3, Chapter 4 [p. 105]

Bridget Scimes—Report Writing in *Non-Fiction Writing* webcast [p. 109]

Why Student Voice Matters [p. 108]

selecting vocabulary and using writing elements to suit a particular purpose and audience

- using a mentor text to prompt discussion about how purpose and audience affect word choice and sentence length and variety.
- providing small groups with a paragraph with blank spaces in place of some adjectives, nouns and verbs and asking each group to fill in the blanks with a different audience in mind. As a class, share and compare paragraphs.
- creating a class thesaurus of synonyms and antonyms related to a particular theme.

A Guide to Effective Instruction in Writing, K-3, pp. 1.20, and 1.26 Appendix 1-1, 6.17 Appendix 6-7 [p. 105]

Education for All, K-6, p. 108 [p. 105]

Powerful Words: The Reading/Writing Connection in *Word Study in Action* webcast [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. 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 a clear sense of paragraph sequence and structure.

SAMPLE ANSWER

Choose the best order to make a paragraph using the sentences below.

- (1) It lasted for 18 hours.
- (2) Last summer, we took the longest airplane ride ever!
- (3) When we finally arrived, we had a wonderful visit with our relatives.
- (4) During the flight, the crew served us six meals.
- 2, 1, 4, 3 *
- 04, 3, 2, 1
- 01, 3, 2, 4
- \bigcirc 3, 1, 2, 4

SAMPLE ANSWER

Choose the best opening sentence for this paragraph.

It makes

lights glow. It runs the computer, television, washing machine, refrigerator and other appliances. It makes flowers bloom, trees grow and water flow. The world is full of energy.

- We need to save energy.
- Children are full of energy.
- Energy makes things happen.*
- We use lots of energy in the gym.

OBSERVATION

The response demonstrates a clear understanding of paragraph development and use of relevant detail to create coherence.

SAMPLE ANSWER

Which sentence would add the best supporting details to the following paragraph?

There are many types of fish in the world. Some fish live in fresh water, while others live in salt water. Fish can have bright colours, like green, purple and red. There are many different kinds of fish.

- There are also some mammals that live in the water.
- Many colours can be seen from far away, like green and red.
- Some fish are small, like guppies, while others are larger, like bass. *
- The world is a big place, with many kinds of mammals and reptiles.

OBSERVATION

The response indicates a clear understanding of the task and the form required. The instructions are numbered and organized in a logical order. Although some items could clearly be combined using more sophisticated sentence structures, the student seems to aim for a humorous voice with overly simplified details. Spelling, capitalization and punctuation are conventional.

SAMPLE ANSWER

Write instructions that explain how to prepare for school.

Ideas for My Instructions
-Tell the order to do things.
-Grab my dea's and
Put them in one.

Remember:

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

Write your instructions here.

J. Get at of bed. 2 Go to the Kitcherand ed breakfeard.

3. Finish your breakfeart 4. Go out of the Kitchen. 5. Go

to your room. 6. Get dressed. 7. Go to the bathroom. 8. Pickop

Your tooth brush - 9. Get your tooth brash leady - 40. Brush

Your testh - 11 - Put your tooth brash down. 12. Spit. 13.

Dirk up your comb- 14. Comb your hair. 15. Go Out of

the Dathroom. 16. Get all the Staff you need for School

ready. 17. Put it in your back pack 18. Put on your

back pack - 19. Put on your shoes and cost - 20. Go out the doorlo school

OBSERVATION

The response demonstrates a clear understanding of the task and uses an effective, humorous, questioning approach to convey an appropriate message. There is evidence of voice. Details are related to the student's main idea but tend to be general rather than specific. Some punctuation and spelling are unconventional but do not interfere with the reader's understanding.

SAMPLE ANSWER

Describe how the weather affects the way people dress.

Ideas for My Paragraph

-Tell what People might wear on a cold and not day-Say what they might do if People don't dress properly.
-Tell reasons why.

Remember:

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

Write your paragraph here.

What would happen if you work really warm worm clothes on a hot day. You'de be boiling night. Well what happens if you work really cold clothes on a cold day like shorts and staff. You'de be freezing Cold. Well You Shorts always always make sure you dress approprietly for the weather who knows one day it could be boiling hot.

SAMPLE ANSWER

Write a letter to a newspaper explaining why everyone should be responsible for keeping their community clean.



Ideas for My Letter

- Tell when we can doit

Remember:

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

OBSERVATION

The student has responded to the task with relevant, specific details but minimal elements of the letter form. The main idea is developed using relevant supporting ideas in a simple organizational structure. There is an attempt to use transition words, but it is not consistent. The student uses a variety of sentence structures and appropriate punctuation. Occasional grammar or spelling issues do not interfere with the reader's understanding.

SAMPLE ANSWER (continued)
Write your letter here.
I think everyone should be responsible for
Keeping out community clean I think this
Bedausk if you leave litter around the
commanity it doesn't make it look nice.
First off-there is a lot of Plastic bottles,
cigaretts, pop cans, pop tals, and plustic
bags lying in the Park and on the street
People get expect because animals can
get trapped and it can even cause
trouble for as We ceant to help as soon
assue can on this can cause problems. So
if you see some litter Dick it apand
put it in the garbage.
Sincerly, [name]

Primary Writing

LEVEL

4

Responds competently and thoughtfully to the task with complex ideas and effective use of conventions, creating engaging and appealing written work

TARGET

Assist students at Level 4 in refining their writing through sentence variety, strategic organization of ideas in paragraphs and development of a personal voice through the choice of vocabulary to suit the particlar audience and purpose.

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

Responses to Tasks

- responds effectively to the assigned tasks
- makes effective choices related the audience, purpose and form

Ideas/Organization

- maintains consistent, clear main idea or message throughout the writing
- expresses complex ideas with effective details and elaborations
- uses a voice that is expressive and appropriate to the audience and purpose
- engages and appeals to the reader through purposeful and effective use of techniques such as humour and dialogue
- organizes writing skilfully, with smooth transitions and connections between sentences and paragraphs

Conventions (spelling, punctuation, grammar, usage)

- uses conventions (spelling, grammar, punctuation) accurately and effectively to enhance the richness of the written message
- engages the reader through word choice, linking words and a variety of sentence types (e.g., simple, compound and complex sentences, questions, exclamations)

IF STUDENTS NEED HELP WITH...

THEN TRY...

using all the features of the assigned written forms

- examining mentor texts to identify and label the key features.
- having small groups reconstruct a non-fiction writing form from jumbled paragraphs and compare their decisions.
- using interactive writing to co-create the writing form with all of its key features.
- asking students to create an illustrated book about how to write in a particular form.

RESOURCE LINKS

A Guide to Effective Instruction in Writing, K–3, pp. 1.20 and 1.26 Appendix 1–1 [p. 105]

Education for All, K-6, p. 109 [p. 105]

organizing ideas into several paragraphs

- modelling how to sort ideas gathered in a graphic organizer or template into paragraphs.
- co-creating a writing template or graphic organizer for students to record ideas for each paragraph.
- teaching students to copy and paste on the computer to sort ideas and arrange paragraphs.
- asking students to use one of their own informational paragraphs and expand each sentence into a paragraph with relevant details.

A Guide to Effective Instruction in Writing, K–3, pp. 1.15, 1.19, and 1.23 [p. 105]

Education for All, K-6, p. 108 [p. 105]

using a point of view, word choices and stylistic elements to develop a personal style in their writing

- using illustrated books on the same topic or that tell the same story to explore points of view.
- using "author's chair" for students to identify what contributes to different writing styles.
- modelling how to use specific feedback prompts such as "I thought the words used when you described... were..."
- providing reflective time for partners to reread and revise writing.

A Guide to Effective Instruction in Writing, K–3, p. 1.16 "Voice" [p. 105]

Storytelling and Story Writing monograph [p. 107]

Word Study in *Non-Fiction Writing* webcast [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. 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 a clear sense of paragraph structure and coherence.

SAMPLE ANSWER

Choose the best order to make a paragraph using the sentences below.

- (1) It lasted for 18 hours.
- (2) Last summer, we took the longest airplane ride ever!
- (3) When we finally arrived, we had a wonderful visit with our relatives.
- (4) During the flight, the crew served us six meals.
- 2, 1, 4, 3 *
- 0 4, 3, 2, 1
- 01, 3, 2, 4
- 0 3, 1, 2, 4

SAMPLE ANSWER

Choose the best opening sentence for this paragraph.

It makes

lights glow. It runs the computer, television, washing machine, refrigerator and other appliances. It makes flowers bloom, trees grow and water flow. The world is full of energy.

- We need to save energy.
- Children are full of energy.
- Energy makes things happen.*
- We use lots of energy in the gym.

OBSERVATION

The response indicates that the student still needs to refine his or her use of some familiar words.

SAMPLE ANSWER

Choose the pair of words that correctly completes the sentence.

On the weekend, you might go ______ the park with your

two friends.

- O to, too
- O too, to
- O to, two *
- too, two

OBSERVATION

The response is thoughtful and engages the reader by taking an unexpected point of view on the topic. The ideas are specific, consistent and developed with appropriate details. The response includes a variety of sentence structures, and the grammar is generally correct, with the exception of the final sentence. Punctuation and spelling are used correctly.

SAMPLE ANSWER

Write instructions that explain how to prepare for school.

Ideas for My Instructions
For School you must have a backpach, Pencily
sharpeners, Erosers, Proper clothes and staffy
that you are suppose to bring to school
like.....

Indent



Indent

Remember:

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

Write your instructions here.

To be prepared for School you must have a back pack, pencils, erasers, sharpeners and you must have a have proper clothes on and you must be nice to others. You should bring indoor shoes and outdoor shoes. You task your teacher when you have gym so you know when to bring your shorts and to have proper shoes short sleeve shirt and remeber to always have a smile on your face when you go to gym.

OBSERVATION

The student has responded to the main idea of the task with specific, relevant details and an element of humour. The paragraph shows unity, with introductory and concluding sentences that mirror each other, and uses a simple causeand-effect organizational pattern. The student aims to develop complex ideas with sentence structures that end up being somewhat awkward.

SAMPLE ANSWER

Describe how the weather affects the way people dress.

Ideas for My Paragraph

If it's snowing then people that have whirts and short sleeve shirts are going to want to change in something more warmer! Ke...





Indent

Remember:

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

Write your paragraph here.

because if it was winter and everyone wore big jackets, mittens, boots and scarfs and when they got out at was so hot and sunny that it make's everyone go inside and change into something nice Another way the weather affects the way people dress is that if I had a shirt on and it ways raining that would make me say that maybe next time I should ask what the weather is so now it makes me want to go change into something eless. That's how the weather safects the way people dress.

SAMPLE ANSWER

Write a letter to a newspaper explaining why everyone should be responsible for keeping their community clean.



Ideas for My Letter

If you don't clean up your community
it will look grass with stuff every
where. It will be messydirty and people
lots and lots noone will what to
no one every Responsible to everclean

Indent SIndent

Remember:

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

Primary Writing | Level 4

OBSERVATION

The student has responded to the task prompt using an appropriate letter form. Although there is some repetition, the overall message is clearly and consistently developed. More details of greater relevance and specificity would help the student to avoid repetition and enrich the message. Minor issues with spelling and punctuation do not interfere with the strong message.

SAMPLE ANSWER (continued)

Write your letter here.
Dear, Newspaperpeople, Thuy May 28,09
II think everyone should be responsib
for cleaning up their community because
if hoone in the world helped to cleancup
their commanity everyones community would
Look gross with stuff everywhere. It will messy
dirty and no one would want to go around
your communitys they would be so dirty and
messy because noone's responible to help
Clear up. 500 I think we should Start
having a Clean up Community Day so
everyone will clean roup their Communitys
on those Clean up Community Days. So now
we can have clean communitys everyday.
Now everyone will want to come and
Visit you because you have a nice fresh
Community.
[name]
[name], O-

Primary Mathematics

LEVEL

Uses addition to respond to simple problems and offers brief explanations of results

00000000000000000000000000

TARGET

Support students at Level 1 in developing fluency in the selection and use of basic operations and procedures for solving problems in different contexts.

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

Computation

- recognizes symbols for addition
- uses addition correctly in familiar contexts
- attempts other simple operations
- creates and extends simple number patterns (e.g., 2, 4, 6 ...)

Problem Solving

- copies numbers and words from the question as all or part of an answer
- reads questions literally, without extracting mathematical cues about relationships and content
- reads explicitly presented information in charts, diagrams and graphs
- uses addition for most problem solving whether or not it is appropriate
- recognizes familiar geometric shapes (e.g., square, circle) and figures (e.g., prisms, pyramids)
- offers some illogical solutions

Communication

- provides brief explanations of mathematical thinking and processes
- often explains thinking and processes by restating the question

IF STUDENTS **NEED HELP WITH...**

THEN TRY...

expanding their computational skills, including counting and operational sense

- creating classroom charts of environmental print samples that illustrate the concepts of number as label and number as quantity.
- having the students use manipulatives to explore connections between counting and quantity.
- having the students use number lines and charts to represent addition and subtraction questions.

Number Sense and Numeration, K-3. pp. 5-9; 9-13; 17-21; 32-40 [p. 106]

RESOURCE LINKS

Patterning and Algebra, K-3, pp. 35-36 [p. 106] A Guide to Effective Instruction in Mathematics, K-6. Volume 5. pp. 20-26 [p. 106]

Primary numeracy module: Operational Sense [Video Webcast] at www.eworkshop.on.ca

understanding the mathematical relationships in problems

- modelling how to read questions and represent situations with manipulatives and/or pictures.
- using think-alouds to show what action is represented by each operation in a problem and the relationships between operations (e.g., addition is joining; subtraction is separating or comparing).
- asking partners to describe the situation in a problem and explain their understanding of it.
- using retell-relate-reflect for the students to paraphrase what the problem is asking and compare it to other problems to find similarities and differences.

Number Sense and Numeration, K-3. pp. 44-54 [p. 106]

Geometry and Spatial Sense, K-3 pp. 40-42

Measurement, K-3. pp. 33-34 [p. 106] Patterning and Algebra, K-3. pp. 8-18 [p. 106] Data Management and Probability, K-3. pp. 24-26 [p. 106]

A Guide to Effective Instruction in Mathematics, K-6. Volume 5. pp. 20-26 [p. 106] Primary numeracy module: Number relationships [Video Webcast] at www.eworkshop.on.ca

developing strategies to represent their mathematical thinking

- posing problems in familiar contexts, making real-life connections to the problems.
- modelling how to use manipulatives to represent the concepts, patterns and relationships in the problem and then recording the same thinking with sketches and diagrams.
- having the students discuss problems and solutions among themselves before they draw or write to show their thinking.

Number Sense and Numeration, K-3. pp. 55-63 [p. 106]

Patterning and Algebra, K-3. pp. 101-106 [p. 106]

A Guide to Effective Instruction in Mathematics, K-6. Volume 2. pp. 55-79 [p. 106]

Communication in the Mathematics Classroom monograph [p. 107]

developing mathematical vocabulary

- modelling the use of math words throughout the day, using them in different contexts and clarifying their
- asking small groups to talk about their mathematical thinking and compare their ideas to those of other groups.
- creating a word wall of mathematical terms.

A Guide to Effective Instruction in Mathematics, K-6. Volume 2. pp. 3-9; 23

Volume 3. p. 66 [p. 106]

Data Management and Probability, K-3. p. 30 Measurement, K-3. pp. 10-17 [p. 106]

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.

OBSERVATION

The responses indicate an inconsistent grasp of simple mathematical relationships. In the first response, the student has incorrectly used subtraction and/ or addition, or may have misunderstood the relationships that equations represent. In the second, the sum 63+17 is correctly decomposed to 60+10+7+3.

SAMPLE ANSWER

In which box can 6 be placed to make the equation true?

•
$$30 - 4 = 18 + 6$$

$$\bigcirc$$
 30 - 4 = 19 +

$$\bigcirc$$
 30 - 4 = 20 +

$$\bigcirc$$
 30 - 4 = 21 +

SAMPLE ANSWER

Joseph adds 63 + 17 in his head. Which of the following will give Joseph the same answer?

$$\bigcirc$$
 60 + 10 + 7

$$\bigcirc$$
 60 + 20 + 10

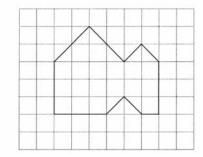
$$\bigcirc$$
 60 + 10 + 10 + 3

OBSERVATION

The responses recognize familiar geometric forms and properties. The first response suggests the student understands the concept of area but has not accounted for the half-squares in the triangles. In the second response, he or she identifies the hexagonalbased pyramid but answers inconsistently, as "octagonal-based pyramid" is marked as the answer.

SAMPLE ANSWER

What is the area of this shape?



- O 18 square units
- O 20 square units
- O 22 square units *
- 26 square units

SAMPLE ANSWER

The chart below shows information about the faces of some pyramids.

Pyramids

Name	Base	Remaining sides	
Square- based		$\triangle \triangle$	
Triangular- based	\triangle	\triangle	
hexagond	\bigcirc	$\triangle \triangle $	

What pyramid name is missing from the chart?

- octagonal-based
- hexagonal-based *
- pentagonal-based
- rectangular-based

OBSERVATION

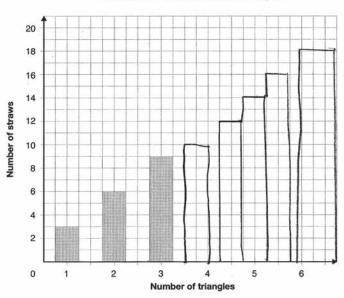
The student has read the question and determined that the graph needs to be completed, but it is unclear in the work presented what concepts the student understands. The bars for triangles 4 and 5 do not indicate an understanding of the pattern or the relationship between straws and triangles. However, the representation of 18 straws for six triangles is correct. For the second part of the question, the student has repeated the number in the question but has not calculated the number of straws.

SAMPLE ANSWER

Sally is making triangles using straws.

She creates a bar graph to show how many straws she needs to make triangles.

Number of Straws to Make Triangles



Complete the graph to show the number of straws for 4, 5 and 6 triangles.

How many straws will Sally need to make 8 triangles?

Justify your answer.
There is 8 triangles and it is good Beight and
Bright.

OBSERVATION

The student has read information explicitly presented in the chart but has not understood the relationship between the colour and the number of students. He or she has recorded the information on the grid paper with no regard for the conventions of graph making (e.g., no title or labels, incorrect scale).

SAMPLE ANSWER

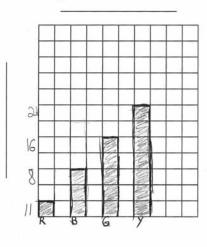
Jocelyn surveys all the Grade 3 students about their favourite colour.

Her results are shown in the table below.

Favourite Colour

Colour	Number of students		
Red	24		
Blue	16		
Green	8		
Yellow	11		

Create a bar graph showing this data. Remember to include all titles and labels. Your graph must fit on the grid below.



OBSERVATION

The student has had some success selecting the correct answer to solve single-step problems. He or she understands simple relationships (longest to shortest, units) and uses addition in familiar contexts. The second response suggests that the student has added incorrectly to reach a sum of 92 rather than 82, or does not understand rounding.

SAMPLE ANSWER

Which of the following lists the measurements in order from longest to shortest?

- O 90 cm; 1 m 34 cm; 223 cm
- 223 cm; 1 m 34 cm; 90 cm *
- O 223 cm; 90 cm; 1 m 34 cm
- O 1 m 34 cm; 90 cm; 223 cm

SAMPLE ANSWER

The school has 37 red skipping ropes and 45 blue skipping ropes.

Which number below is closest to the total number of skipping ropes the school has?

- 0 75
- O 80 *
- O 85
- 90

OBSERVATION

The student has not understood clearly what the question is asking. The student has read the question literally without extracting mathematical cues about relationships and context. The student appears to have read the pictograph, completed the half-square for "Other," and, without reference to the key, restated the numbers of people choosing the different animals. There has been no attempt to determine the information for dogs.

SAMPLE ANSWER

In a class, 26 students choose their favourite type of animal. Their answers are shown in the pictograph below.

Favourite Type of Animal

	Key
Other	
Dog	
Bird	
Cat	

The pictograph is missing the information for dogs.

Complete the pictograph to show how many students choose dogs.

Justify your answer	cat and	Bird 5 Dog	()
othera			
ž.			

OBSERVATIONS

The student has not answered the question, but rather copied the numbers from the question.

For the number of quarters, the student has written the total value of \$5.25.

SAMPLE ANSWER

Ethan saves 11 quarters.

He wants to buy a book that costs \$5.25.

How many more quarters does Ethan need to save to buy the book?

Justify your answer.

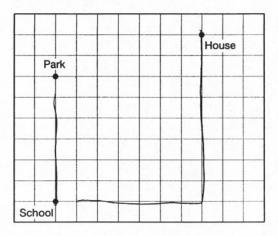
Ethan needs to save 5-25 more quarters.

OBSERVATION

The response indicates that the student has read and understood some of the information in the question (e.g., "plays at the park," "walks only on the grid lines," "shortest path"), but has missed the cue that Dale goes to the park and then goes home. Instead, the student has drawn a path from the school to the park and another path from the school to the house.

SAMPLE ANSWER

Dale plays at the park each day after school.



He walks only on the grid lines. Draw the shortest path he can take from the school to the park and then to his house.

Describe Dale's path.

Polk

I geis Deil a leinto The parkand to

The House

School

Primary Mathematics

LEVEL

Uses addition and subtraction to respond to single-step problems, interpreting information literally from a variety of formats

TARGET

Support students at Level 2 in learning and applying different strategies for performing computations, such as mental calculation, estimation and algorithms.

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

Computation

- uses addition correctly to solve single-step problems (e.g., 15 + 10)
- uses simple operations (e.g., addition, subtraction) when problems are presented in familiar forms (e.g., 17+21)
- extends simple number and geometric patterns

Problem Solving

- has a literal understanding of the problem, but may not relate solution to the context
- may focus on part of the question rather than the whole
- interprets explicitly presented information from questions, charts, diagrams and graphs
- uses familiar cues to determine how to solve problems, but misses some mathematical cues about relationships and context and solves only part of the problem
- constructs simple patterns
- solves problems without necessarily associating numbers and their measurement units
- tries to solve all problems
- often represents mathematical thinking with unlabelled pictures

Communication

- offers first answers as final answers
- restates the question or answer or proof rather than elaborating

IF STUDENTS **NEED HELP WITH...**

THEN TRY...

RESOURCE LINKS

consolidating computational skills and strategies

- creating a strategy wall for students to refer to when solving problems using computational skills.
- using mathematical games for the student to practise computational skills in different contexts, such as counting forward and backward, and composing and decomposing numbers.
- having the students select and use manipulatives (e.g., bead strings, hundred charts, tiles) to solve problems requiring computational skills.

Number Sense and Numeration, K-3. pp. 5-14; 17-28; 32-36; 40-45 [p. 106] Patterning and Algebra, K-3, pp. 27-32, 35-36 [p. 106] Measurement, K-3. pp. 28-30 [p. 106]

A Guide to Effective Instruction in Mathematics, K-6. Volume 1. pp. 28-32 [p. 106]

Volume 2. pp. 38-45 [p. 106] Volume 5. pp. 46-54 [p. 106]

identifying relationships to solve problems

- using think-alouds to show how to create mental images (e.g., invisible number line, hundreds chart, pattern blocks) to see relationships.
- providing everyday activities requiring the students to see mathematical relationships (e.g., compose and decompose numbers, consider properties of geometric
- using activity centres for investigations and inquiries to develop reasoning about relationships (e.g., addition is inverse of subtraction, triangles can form a rectangle, patterns are often implied in one another).

Number Sense and Numeration, K-3. pp. 46-50; 53-54 [p. 106] Geometry and Spatial Sense, K-3. pp. 40-42 [p. 106] A Guide to Effective Instruction in Mathematics, K-6. Volume 1. pp. 65-72 Volume 3. pp. 45; 50-51; 93 [p. 106]

representing their mathematical thinking

- modelling how to use different ways of representing mathematical thinking, such as tables, charts, graphs, tallies, sketches and words.
- using shared approaches to mathematics such as think, pair, write to develop written solutions, and collaborative groups of three to represent a solution and then participate in a class discussion about the mathematical thinking in each group's solution.
- using mathematical language in context in all subject areas.

Number Sense and Numeration, K-3. pp. 55-63 [p. 106] Data Management and Probability, K-3. pp. 13-18 [p. 106] A Guide to Effective Instruction in

Mathematics, K-6. Volume 2. Problem Solving and Communication. pp. 3-9; 55-74 [p. 106]

Primary numeracy module: communication at www.eworkshop.on.ca

checking solutions for reasonableness

- having the students use estimation to anticipate the solution before solving problems.
- modelling checking strategies (e.g., substituting answers back into the original problem to see if they make sense).
- have students use the four-step problem-solving model.

A Guide to Effective Instruction in Mathematics, K-6. Volume 2. pp. 20-22; 36-37 [p. 106]

Bansho in High-Yield Strategies webcast [p. 108]

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.

OBSERVATION

The responses extend simple number patterns. The response to the first question completes the pattern by adding 25, and that to the second question, by adding 13.

SAMPLE ANSWER

What are the missing numbers in the skip-counting pattern below?

800, 825, 850, 875, ___, ___, 975

- 0 885, 895, 905
- 0 895, 900, 905
- 900, 925, 950 *
- 0 905, 930, 945

SAMPLE ANSWER

An increasing pattern is shown. What are the next four terms in the pattern?

1, 14, 27, 40, 53, __, __, __, __,

- **66**, 79, 92, 105 *
- 0 66, 80, 93, 107
- 0 67, 80, 93, 106
- 0 67, 82, 96, 111

OBSERVATION

The student has used simple operations (e.g., addition, subtraction) to solve familiar problems. For example, in the first question, he or she may have determined the total number of days by using repeated addition (i.e., 7 + 7 + 7 + 7)or multiplication (i.e., 4×7), or by looking at a calendar. In the second question, he or she may have determined the change by subtracting or skip counting by 25s.

SAMPLE ANSWER

How many days are in 4 weeks?

- 0
- 0 14
- 28 *
- O 30

SAMPLE ANSWER

Samir spends \$7.25 at the store. How much change should he receive from \$10.00?

- O \$2.25
- \$2.75 *.
- O \$3.25 ·
- O \$3.75 .

OBSERVATION

The first response suggests that the student understands the concept of symmetry. But the second response indicates that the student is not able to apply his or her understanding by drawing a symmetrical shape or to explain the characteristics of the property fully.

SAMPLE ANSWER

Look at the letters below. Count the lines of symmetry each letter has.

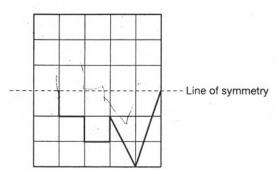


How many lines of symmetry are there in total?

- 0 3
- 0 4
- 5
- 0 6

SAMPLE ANSWER

Complete the shape on the grid so that it is symmetrical. Use the dashed line as a line of symmetry.



Explain how you know the completed shape is symmetrical.

That will be a cryline

OBSERVATION

The student has relied on addition to solve problems even when it is not appropriate. In this solution, the students has tried to get an answer by adding the three numbers in the question (i.e., 23 + 2 + 6 = 31 and 9 + 23 + 2 = 25), but these operations are not appropriate to the problem.

SAMPLE ANSWER

A Grade 3 class wins a pizza party for reading the most books in September. There are 23 students in the class and each student will get 2 slices of pizza. If each pizza has 6 slices, how many pizzas should the class buy?

show your work. So if we start at 23+2+6=31

that's how much we well get. But if we start at 23+2=46

insepwedon't want 460131 So we might want

insepwedon't want 460131 So we might want

to triy a now way we well start at 23+2=25

maby that will here use find its

The class should buy _____ pizzas.

OBSERVATION

The response doesn't provide evidence of the mathematical thinking that went into determining that 16 more quarters are needed.

SAMPLE ANSWER

Ethan saves 11 quarters.

He wants to buy a book that costs \$5.25.

How many more quarters does Ethan need to save to buy the book?

Justify your answer. Ethan will need is 16 more 2 yarders to buy the book he wants

Ethan needs to save 16 more quarters.

OBSERVATION

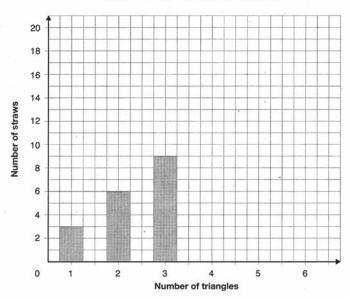
The student has begun to solve the multi-step problem ("It takes 3 straws to make a triangle") but hasn't extended his or her thinking to complete the graph for triangles 4 to 6, or to respond to what is asked: "How many straws are needed to make 8 triangles?"

SAMPLE ANSWER

Sally is making triangles using straws.

She creates a bar graph to show how many straws she needs to make triangles.

Number of Straws to Make Triangles



Complete the graph to show the number of straws for 4, 5 and 6 triangles.

How many straws will Sally need to make 8 triangles?

How many Sally Will need & 3 Straws to make a triangle

OBSERVATION

The student has read the problem but has missed some mathematical cues and solved only part of it. The student has determined the amount, perhaps with repeated addition (i.e., 5 + 5 + 5 +5 + 5 + 5 + 5 + 5), but stopped at \$40. The response does not indicate the student has considered the fact that Marc needs to earn more than \$42 in order to buy a video game priced at \$42.

SAMPLE ANSWER

Marc receives \$5 a week for walking a dog.

He wants to buy a video game that costs \$42.

How many weeks will it take him to save enough money to buy the video game?

- 0 5
- 0
- .
- 0 9'

OBSERVATION

The student has shown he or she understands simple numeric relationships, and has used simple operations to select a correct response.

SAMPLE ANSWER

What number correctly completes the number sentence below?

$$1 \times 6 = 6$$

- O 36
- 0 6
- 1 1
- 0 0

SAMPLE ANSWER

Which number sentence describes the drawing below?

- \bigcirc 1 × 24 = 24
- \bigcirc 2 × 12 = 24
- $4 \times 6 = 24 *$
- \bigcirc 8 \times 3 = 24

Primary Mathematics

LEVEL

3

Uses addition, subtraction, multiplication and division skills to solve multi-step problems and report solutions in detail

TARGET

Provide students at Level 3 with numerous opportunities to solve multi-step problems and clarify their thinking by talking about their mathematical reasoning.

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

Computation

- uses most computation skills (e.g., rounding, skip counting, addition, subtraction, multiplication, division) with reasonable accuracy and confidence
- uses mathematical language and procedures accurately
- reads and uses familiar forms of mathematical information (e.g., graphs, calendars, clocks, money) with only minor errors

Problem Solving

- solves most single-step and some multi-step problems
- conceptualizes the whole problem but may miss or misunderstand parts of the question
- perseveres enough to generate a solution
- checks answers using pictorial strategies and other possible solutions
- tries to fill in gaps to solve problems
- manipulates numbers in the context of the problem and shows relationships appropriately

Communication

 uses mathematical vocabulary, conventions and forms of representation to describe solutions in sufficient detail

IF STUDENTS NEED HELP WITH...

mathematical information

questions and problems

identifying relevant

and relationships in

THEN TRY...

using think-alouds to show how to identify the "what" (i.e., the information) in different problems.

- modelling for students how to read problems, write down significant mathematical information, describe relationships and explain why information is relevant.
- having students use graphic organizers to record the mathematical information given (e.g., KFC chart: What do we know? What do we need to find out? What are the conditions in the problem?).
- having partners take turns identifying the mathematical information required to solve problems and explain their reasoning to each other.

RESOURCE LINKS

A Guide to Effective Instruction in Mathematics, K–6. Volume 2. pp. 31–34; 66–70; 71–72 [p. 106]
Volume 5. pp 20–34; 35–54 [p. 106]
Number Sense and Numeration, K–3. pp. 32–43, 44–54 [p. 106]
Asking prompting questions during instruction in Differentiating Mathematics Instruction webcast [p. 103]

solving multi-step problems

- modelling perseverance in problem solving and how erroneous starts can inform problem-solving phases.
- having students work in groups of three to answer the guiding questions: What do the words say? What do we understand? and How can we ask the question in another way?
- creating graphic organizers to show problem-solving steps
- using the shared mathematics approach for students to solve problems collaboratively and share their solutions with the class.

A Guide to Effective Instruction in Mathematics, K-6. Volume 2. pp. 3–9; 26–29; 36–38 [p. 106] Volume 1. pp. 65–72 [p. 106] Measurement, K-3. pp. 127–133 [p. 106] Data Management and Probability, K-3. pp. 123–128 [p. 106] Classroom Visit #1 in Through the Eye of the Learner webcast [p. 109]

representing their mathematical thinking and problem-solving strategies

- having the students listen to others' solutions and ask questions to compare ideas (e.g., What is the same? What is different? What is familiar about it?).
- asking the students to present their ideas in two ways.
- using guided mathematics to demonstrate how to use an erroneous start to develop a solution to a problem.
- having students pose and solve problems with more than one solution and share their reasoning.

A Guide to Effective Instruction in Mathematics, K-6. Volume 2. pp. 44-47; 54-74 [p. 106]
Volume 1. pp 23-27; 65-72 [p. 106]
Number Sense and Numeration, K-3. pp. 55-63 [p. 106]
Geometry and Spatial Sense, K-3.

pp. 171–175 [p. 106]

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

These responses indicate the student has the computational skills to answer questions and solve problems with reasonable accuracy.

In the first response the student has identified the expression equivalent to 30 - 4 by choosing the equation 30 - 4 = 20 + 6.

The second response shows the student has conceptualized the problem, but he or she has presented an answer without support. The student has solved the saving-for-a-book problem by calculating the number of quarters needed to make \$5.25, but has missed an important mathematical cue to answer the question successfully. The student has not presented his or her mathematical thinking.

SAMPLE ANSWER

In which box can 6 be placed to make the equation true?

$$\bigcirc$$
 30 - 4 = 18 +

$$\bigcirc$$
 30 - 4 = 19 +

$$\bigcirc$$
 30 - 4 = 21 +

SAMPLE ANSWER

Ethan saves 11 quarters.

He wants to buy a book that costs \$5.25.

How many more quarters does Ethan need to save to buy the book?

Ethan needs to save

8

more quarters.

OBSERVATION

In the favourite-kindof-animal question, the student has accurately represented seven dogs in the pictograph and stated that seven people liked dogs but has provided no evidence of the mathematical thinking used to determine this response.

SAMPLE ANSWER

In a class, 26 students choose their favourite type of animal. Their answers are shown in the pictograph below.

Favourite Type of Animal

MUUL

Key

Each represents 2 students.

The pictograph is missing the information for dogs.

Complete the pictograph to show how many students choose dogs.

Justify your answer. 7 people 1. k Pog's

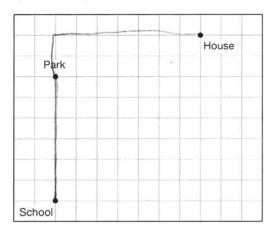
OBSERVATION

The answer shows a conceptual understanding of measurement and geometry problems.

The student has chosen and drawn the shortest path from the school to the park and to his or her house and explained this choice.

SAMPLE ANSWER

Dale plays at the park each day after school.



He walks only on the grid lines. Draw the shortest path he can take from the school to the park and then to his house.

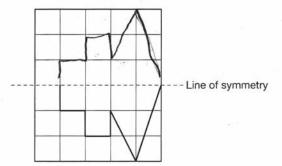
Describe Dale's path. 48 right 7

OBSERVATION

The answer shows a conceptual understanding of symmetry. The student states that he or she has used a "miorr" (i.e., a mira) but does not state any geometric properties of symmetry to indicate that he or she knows the new figure is symmetrical.

SAMPLE ANSWER

Complete the shape on the grid so that it is symmetrical. Use the dashed line as a line of symmetry.

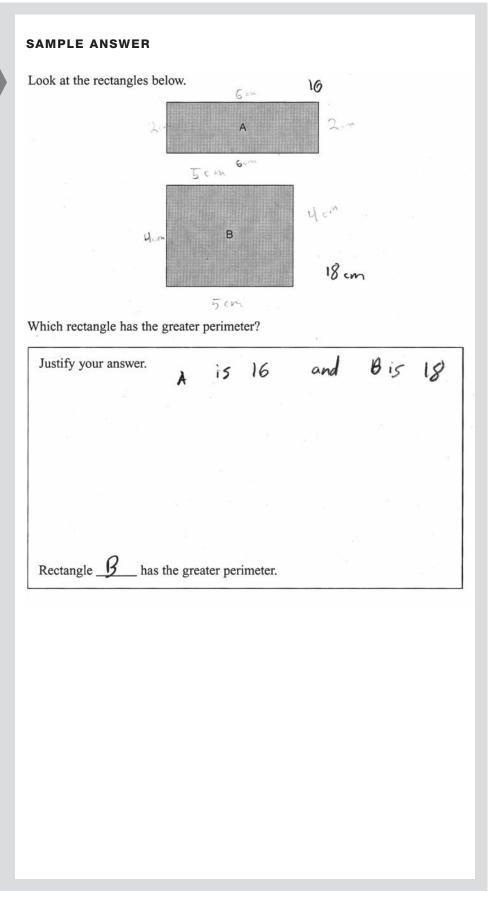


Explain how you know the completed shape is symmetrical.

Tused a mior

OBSERVATION

The student has solved the problem but has vaguely represented his or her mathematical thinking. It appears that he or she has attached the dimensions 6 cm by 2 cm to Rectangle A and 5 cm by 4 cm to Rectangle B and calculated the two perimeters as 16 and 18 (no units). The solution goes on to say, correctly, that Rectangle B has the greater perimeter. The student has manipulated the numbers in the context of the problem and used the numbers and relationships of the rectangles appropriately.



OBSERVATION

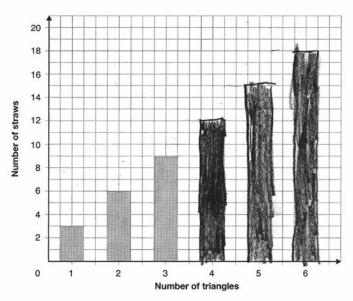
The student has used mathematical language and procedures with considerable accuracy and has attempted to solve this multi-step problem. In part one, the graph accurately represents the pattern (i.e., add three each time); however, in part two, the student work shows 36 as a starting point with no evidence of where this number has come from.

SAMPLE ANSWER

Sally is making triangles using straws.

She creates a bar graph to show how many straws she needs to make triangles.

Number of Straws to Make Triangles



Complete the graph to show the number of straws for 4, 5 and 6 triangles.

How many straws will Sally need to make 8 triangles?

OBSERVATION

The answers show an understanding of the measurement and geometry concepts in these problems.

The student understands the relationships between longest and shortest and metres and centimeters and has correctly ordered the measurements.

The student has solved these single-step problems by correctly counting the number of square units in the shape (taking into consideration the half-squares in the triangles) and identifying the congruent shapes in the picture. These responses suggest that the student has understood the geometric relationships.

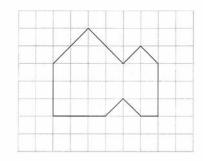
SAMPLE ANSWER

Which of the following lists the measurements in order from longest to shortest?

- O 90 cm; 1 m 34 cm; 223 cm
- 223 cm; 1 m 34 cm; 90 cm *
- O 223 cm; 90 cm; 1 m 34 cm
- O 1 m 34 cm; 90 cm; 223 cm

SAMPLE ANSWER

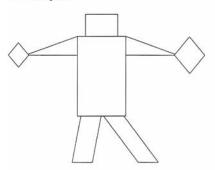
What is the area of this shape?



- O 18 square units
- O 20 square units
- 22 square units *
- O 26 square units

SAMPLE ANSWER

Karen draws the picture below using 2-D shapes.



Which shapes are congruent in her picture?

- triangles *
- rectangles
- rhombuses
- parallelograms

Primary Mathematics

LEVEL

4

Understands problems and responds to them by selecting effective mathematical strategies to provide efficient solutions, which are communicated clearly and effectively

000000000000000000000000000000

TARGET

Encourage students at Level 4 to try out different ways to solve problems or complete a task efficiently, and provide opportunities for them to explain their strategy decisions.

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

Computation

- uses numbers, operations and measurement units accurately and confidently
- provides precise, accurate and "rich" solutions, without extraneous information

Problem Solving

- analyzes questions and extracts relevant information to solve problems effectively and efficiently
- approaches problems looking for connections and relationships
- makes plans and uses a variety of ways to solve problems and represent his or her mathematical thinking
- selects the most effective strategies to solve problems
- knows when a task is finished

Communication

- uses mathematical vocabulary and procedures to communicate solutions clearly and precisely
- supports justifications with additional labelled information

IF STUDENTS NEED HELP WITH...

THEN TRY...

RESOURCE LINKS

analyzing problems

- using a guided approach (e.g., mind maps) to demonstrate how to identify the mathematical demands of the problem.
- asking the students to talk about the situation in the problem: what they know and what they need to determine.
- having the students examine problems and highlight "do words" (operations, actions implied) in one colour and "what words" (math information) in a different colour.

A Guide to Effective Instruction in Mathematics, K–6 [p. 106]
Volume 2. pp. 1–80 [p. 106]
Volume 5. pp. 20–34; 35–54 [p. 106]
Data Management and Probability, K–3. pp. 129–134 [p. 106]

Open-Ended and Parallel Learning Tasks for Instruction in *Differentiating Mathematics Instruction* webcast [p. 109]

expanding their repertoire of strategies to solve multistep problems

- having partners challenge each other to identify and record the steps they need to take to get to a solution.
- using a guided approach to listing and grouping mathematical ideas in the problem to develop appropriate problem-solving strategies.
- using journals for student to record their mathematical thinking, strategies, challenges and unexpected solutions.
- responding to the students' journal entries to clarify and reinforce mathematical concepts and thinking.

A Guide to Effective Instruction in Mathematics, K-6 [p. 106] Volume 3. pp. 3–11 [p. 108] Volume 2. pp. 30–34; 37; 48–50; 78 [p. 106]

justifying their mathematical thinking

- using a guided approach to demonstrate using conjecture to anticipate reasonable answers and solutions.
- using shared mathematics to have the students listen to the solutions of others, compare their thinking, suggest how they might adjust their thinking based on what they have heard, and explain why their answer makes sense.
- using a guided approach for the students to solve problems in different ways and compare findings.
- having partners read each other's work to see whether the arguments are convincing and clearly presented.

A Guide to Effective Instruction in Mathematics, K–6.
Volume 2. pp 56–58; 73–79;
Volume 1. pp 65–72 [p. 106]
Communication in the Mathematics
Classroom monograph [p. 107]

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

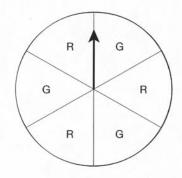
The responses show that the student has analyzed the questions and used relevant information (including numbers, operations and measurement units) accurately to determine a solution.

The first selected response shows the student is able to predict the probability of winning a game when there are an equal number of options.

The student has demonstrated an understanding of metric units by ordering the measurements from longest to shortest.

SAMPLE ANSWER

Kareem is playing a game using the spinner below.



If the arrow lands on an R, Kareem wins.

How many times should Kareem expect to win if he spins the arrow 10 times?

- 0 3
- 5
- 0 6
- O 10

SAMPLE ANSWER

Which of the following lists the measurements in order from longest to shortest?

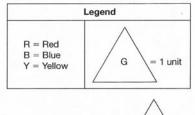
- O 90 cm; 1 m 34 cm; 223 cm
- 223 cm; 1 m 34 cm; 90 cm *
- O 223 cm; 90 cm; 1 m 34 cm
 - O 1 m 34 cm; 90 cm; 223 cm

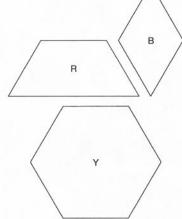
OBSERVATION

The selected response indicates that the student understands the geometric and area relationships and can solve a multi-step problem. He or she has correctly determined how many triangles can be found in the pattern block shapes.

SAMPLE ANSWER

Using the green triangle, find the total area of these pattern blocks.





What is the total area of all 3 pattern blocks?

- O 9 units
- O 10 units
- 11 units *
- O 12 units

OBSERVATIONS

The solution shows that the student has made a plan and solved the problem using a variety of ways to represent mathematical thinking.

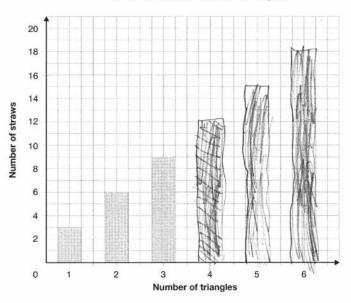
The graph is complete and accurate, showing 12, 15 and 18 for triangles 4, 5 and 6. And the calculation of 24 straws for eight triangles is supported with a repeated addition sentence.

SAMPLE ANSWER

Sally is making triangles using straws.

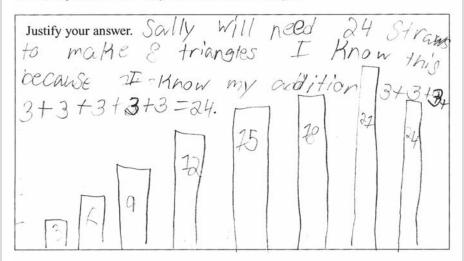
She creates a bar graph to show how many straws she needs to make triangles.

Number of Straws to Make Triangles



Complete the graph to show the number of straws for 4, 5 and 6 triangles.

How many straws will Sally need to make 8 triangles?



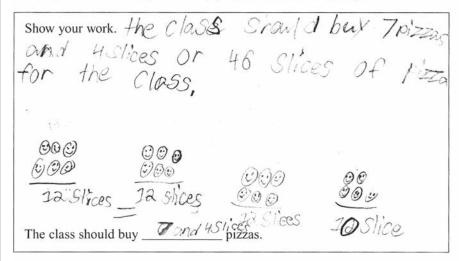
OBSERVATIONS

The solution shows that the student has made a plan and solved the problem using a variety of ways to represent mathematical thinking.

The student work shows precise calculations and presents the mathematical thinking clearly. The student has not concluded that eight pizzas are necessary, and has answered seven pizzas and four slices. Even though pizza is sold by the slice, a real-life context for the problem would require the class to buy eight whole pizzas.

SAMPLE ANSWER

A Grade 3 class wins a pizza party for reading the most books in September. There are 23 students in the class and each student will get 2 slices of pizza. If each pizza has 6 slices, how many pizzas should the class buy?



OBSERVATION

The student has understood the real-life context and selected nine weeks rather than eight weeks. The list of weeks and increments of five beside the question reveals the student's mathematical thinking.

SAMPLE ANSWER

Marc receives \$5 a week for walking a dog.

He wants to buy a video game that costs \$42.

How many weeks will it take him to save enough money to buy the video game?

- 0 5
- 0 7
- 0 8
- **9***

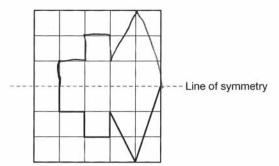
5= 1 wee H 10= 2 wee HS 25= 3 wee HS 25= 5 wee HS 30= 6 wee HS 35= 7 wee HS 40= 8 wee HS 45= 9 wee HS

OBSERVATION

The response uses mathematical vocabulary and clearly labelled procedures to communicate a solution precisely. The student has completed the shape to make it symmetrical and shown reasoning that describes a characteristic of a symmetrical shape.

SAMPLE ANSWER

Complete the shape on the grid so that it is symmetrical. Use the dashed line as a line of symmetry.



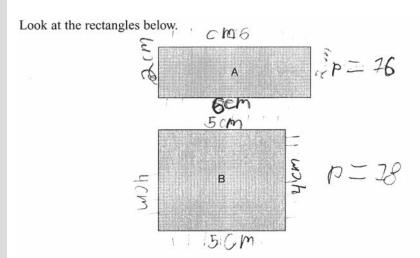
Explain how you know the completed shape is symmetrical. I know this shape is symmetrical because if you flip it is the except the same as the other side of

OBSERVATIONS

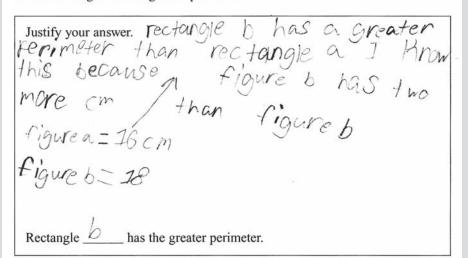
The solution shows that the student has made a plan and solved the problem using a variety of ways to represent mathematical thinking.

The solution shows the perimeter calculations with respect to the diagrams and makes the appropriate comparison, suggesting that the perimeter of Rectangle B, 18 cm, is larger than that of Rectangle A,16 cm.

SAMPLE ANSWER



Which rectangle has the greater perimeter?



OBSERVATION

The solution shows that the student knows when the task is finished and supports his or her argument with additional information about adding up the other numbers to get 19 and calculating that seven more respondents are needed to complete the pictograph. The student has accurately drawn 3½ squares.

SAMPLE ANSWER

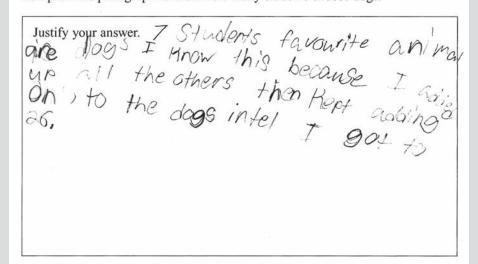
In a class, 26 students choose their favourite type of animal. Their answers are shown in the pictograph below.

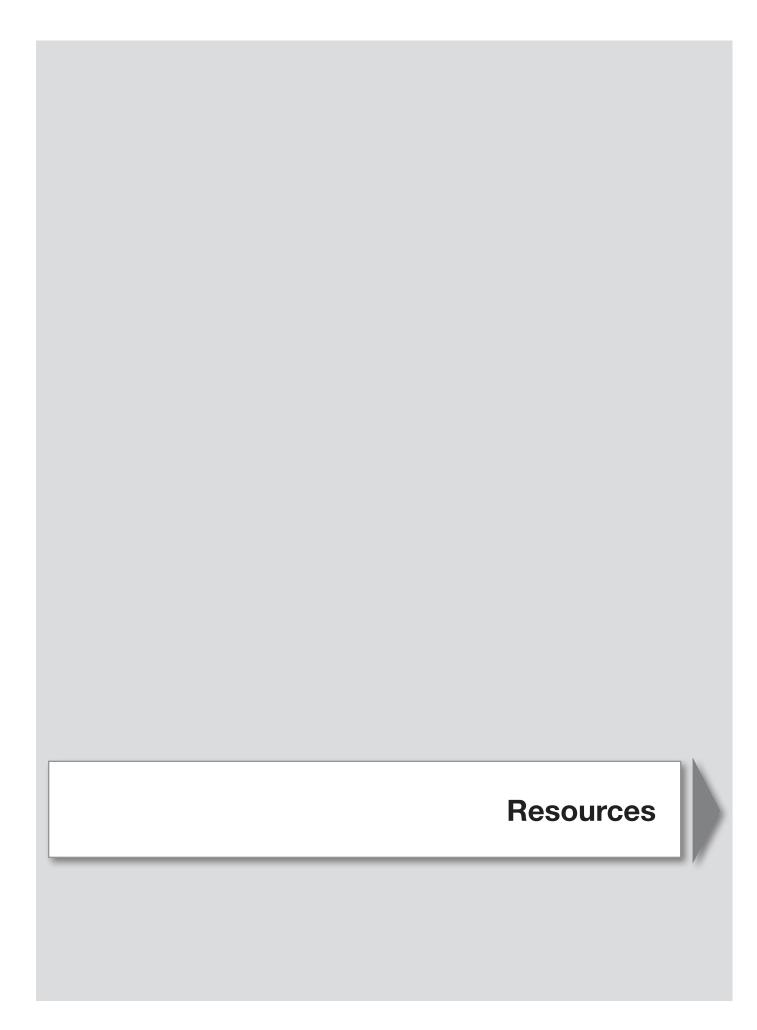
Favourite Type of Animal

Cat	
Bird	0000
Dog	
Other	□ C.

The pictograph is missing the information for dogs.

Complete the pictograph to show how many students choose dogs.





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