Title: Gingerbread Men

Achievement Level: Novice 1

Criteria and Performance Level	Rationales
Problem Solving *Novice*	The student's strategy of drawing only one gingerbread man and themselves does not work to solve the task.
Reasoning & Proof *Novice*	The student's solution does not demonstrate understanding of the underlying mathematics of the task. The student does not indicate Gina's six gingerbread men and a total of 12 raisins for eyes.
Communication *Novice*	The student is not given credit for the mathematical term *diagram*. The student is drawing a picture of his gingerbread man and themselves. The scribing supports that the student is not addressing Gina's six gingerbread men.
Connections *Novice*	The student does not include a connection in their solution.
Representation *Novice*	The student does not provide any representation to support the underlying mathematics in the task.

Achievement Level: Novice 1

P/S	R/P	Com	Con	Rep	A/Level
N	N	N	N	N	N

"This is me. This is my gingerbread man. It is big (reread the problem) I only need 1 gingerbread man you can make 1 too."

AZ

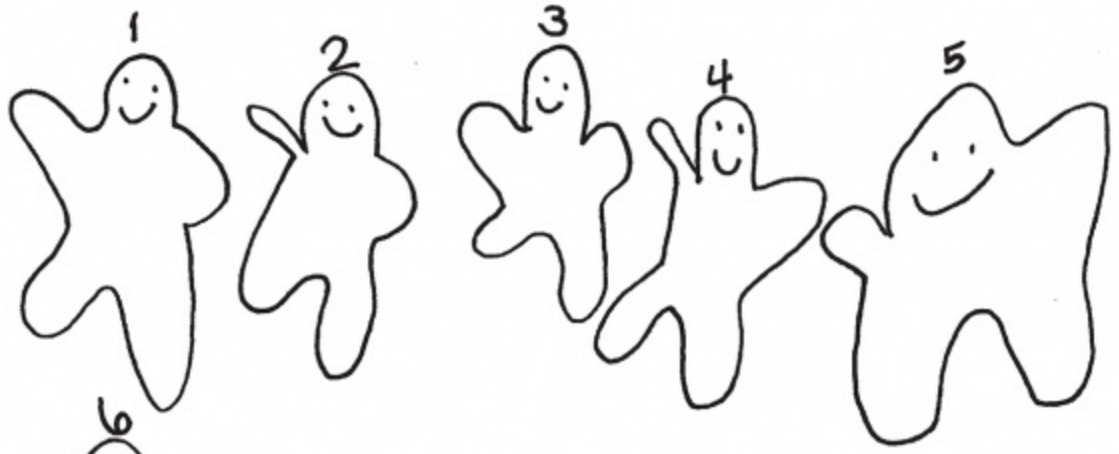
Title: Gingerbread Men

Achievement Level: Novice 2

Criteria and Performance Level	Rationales
Problem Solving *Practitioner*	The student's strategy of making a diagram of six gingerbread men with 12 raisin eyes works to solve the task. The student indicates a correct answer, "12," and states, "This is my answer, 12 raisins." A student will often use the letter "A" to represent the word *answer*.
Reasoning & Proof *Practitioner*	The student's diagram is adequate and systematic to support their reasoning and proof.
Communication *Novice*	The student does not use any mathematical language in their solution.
Connections *Novice*	The student does not include a connection in their solution.
Representation *Practitioner*	The student's diagram is appropriate and accurate. Necessary labels for gingerbread man and raisins are provided in the scribing.

Achievement Level: Novice 2

P/S	R/P	Com	Con	Rep	A/Level
P	P	N	N	P	N



"I did 1, 2, 3, 4, 5, 6 gingerbread men. I put 1, 2, 3, 4… 12 raisin eyes on them."

AZ

"This is my answer 12 raisins."

AZ

Title: Gingerbread Men

Achievement Level: Apprentice 1

Criteria and Performance Level	Rationales
Problem Solving *Practitioner*	The student's strategy of making a diagram of six gingerbread men and using 12 raisins for eyes works to solve the task. The student states a correct answer,"Gina has 12 raisins."
Reasoning & Proof *Practitioner*	The student's diagram is adequate and systematic to support their reasoning and proof.
Communication *Apprentice*	The student correctly uses the mathematical term *diagram*.
Connections *Novice*	The student does not include a connection in their solution. The comment, "I do not like raisins," is not mathematically relevant and cannot be considered an attempt at a mathematical connection.
Representation *Practitioner*	The student's diagram is appropriate and accurate. Necessary labels for gingerbread "people" and raisins are provided in the scribing.

Note:

The overall achievement level for this piece of student work falls under Exemplars exception to the rule category. If a student has all Apprentice scores or above, but a Novice in "Connections," the student may still receive an achievement level score of Apprentice. To learn more about Exemplars scoring, please refer to the section of your dashboard called

"Tools for Success" and click on the link for “Using the Assessment Rubric.”

Achievement Level: Apprentice 1

P/S	R/P	Com	Con	Rep	A/Level
P	P	A	N	P	A

"I don't like raisins."
AZ

"Gina has 12 raisins. I made gingerbread people and put on the raisin eyes (pointed to each correctly)."
AZ

Title: Gingerbread Men

Achievement Level: Apprentice 2

Criteria and Performance Level	Rationales
Problem Solving *Practitioner*	The student's strategy of making a diagram of six gingerbread men with 12 raisin eyes works to solve the task. The student states a correct answer, "12 raisins." Students often put a circle around an "A" to indicate the word *answer*.
Reasoning & Proof *Practitioner*	The student's diagram is adequate and systematic to support their reasoning and proof. A key and scribing is provided to define the gingerbread men and the raisins.
Communication *Practitioner*	The student correctly uses the mathematical terms *diagram*, *key*.
Connections *Novice*	The student does not include a connection in their solution.
Representation *Practitioner*	The student's diagram is appropriate and accurate. A key is provided for the gingerbread men, and the raisins for eyes are provided in the scribing.

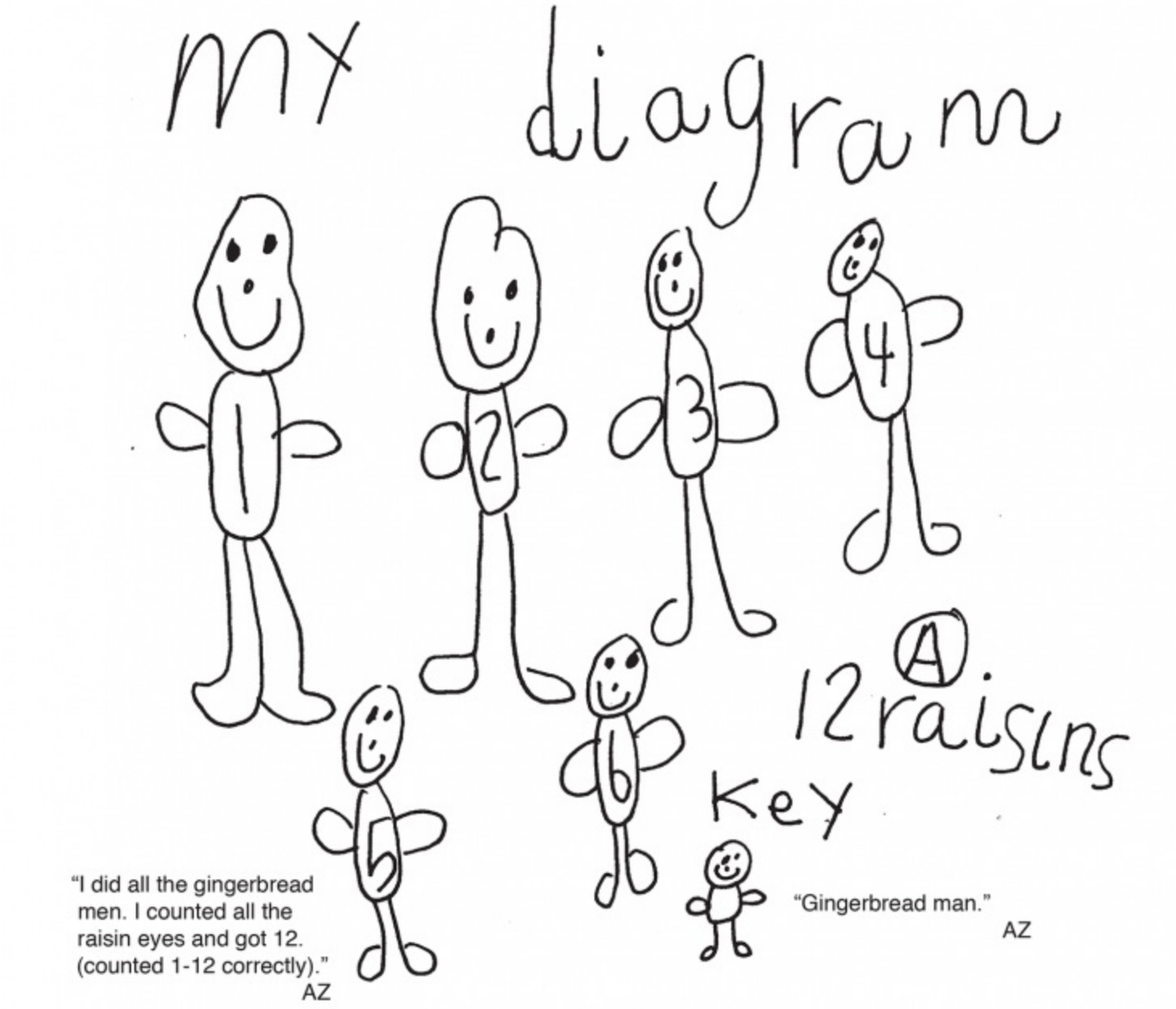
Note:

The overall achievement level for this piece of student work falls under Exemplars exception to the rule category. If a student has all Apprentice scores or above, but a Novice in "Connections," the student may still receive an achievement level score of Apprentice. To learn more about Exemplars scoring, please refer to the section of your

dashboard called "Tools for Success" and click on the link for “Using the Assessment Rubric.”

Achievement Level: Apprentice 2

P/S	R/P	Com	Con	Rep	A/Level
P	P	P	N	P	A



"I did all the gingerbread men. I counted all the raisin eyes and got 12. (counted 1-12 correctly)."
AZ

"Gingerbread man."
AZ

Title: Gingerbread Men

Achievement Level: Apprentice 3

Criteria and Performance Level	Rationales
Problem Solving *Practitioner*	The student's strategy of using ten frames to show six pairs of eyes works to solve the task. The student's answer, "12 •" is correct. The student also states, "This says 12 raisins."
Reasoning & Proof *Practitioner*	The student's ten frames support correct reasoning. They indicate two raisins for the eyes of six gingerbread men for a total of 12 raisins.
Communication *Apprentice*	The student correctly uses the mathematical term *ten frame*.
Connections *Novice*	The student solves the task without making a mathematically relevant connection about their solution.
Representation *Practitioner*	The student's ten frames are appropriate and accurate. The student labels each ten frame "raisins." The student provides additional support in the scribing to define the gingerbread men and the raisins for the eyes.

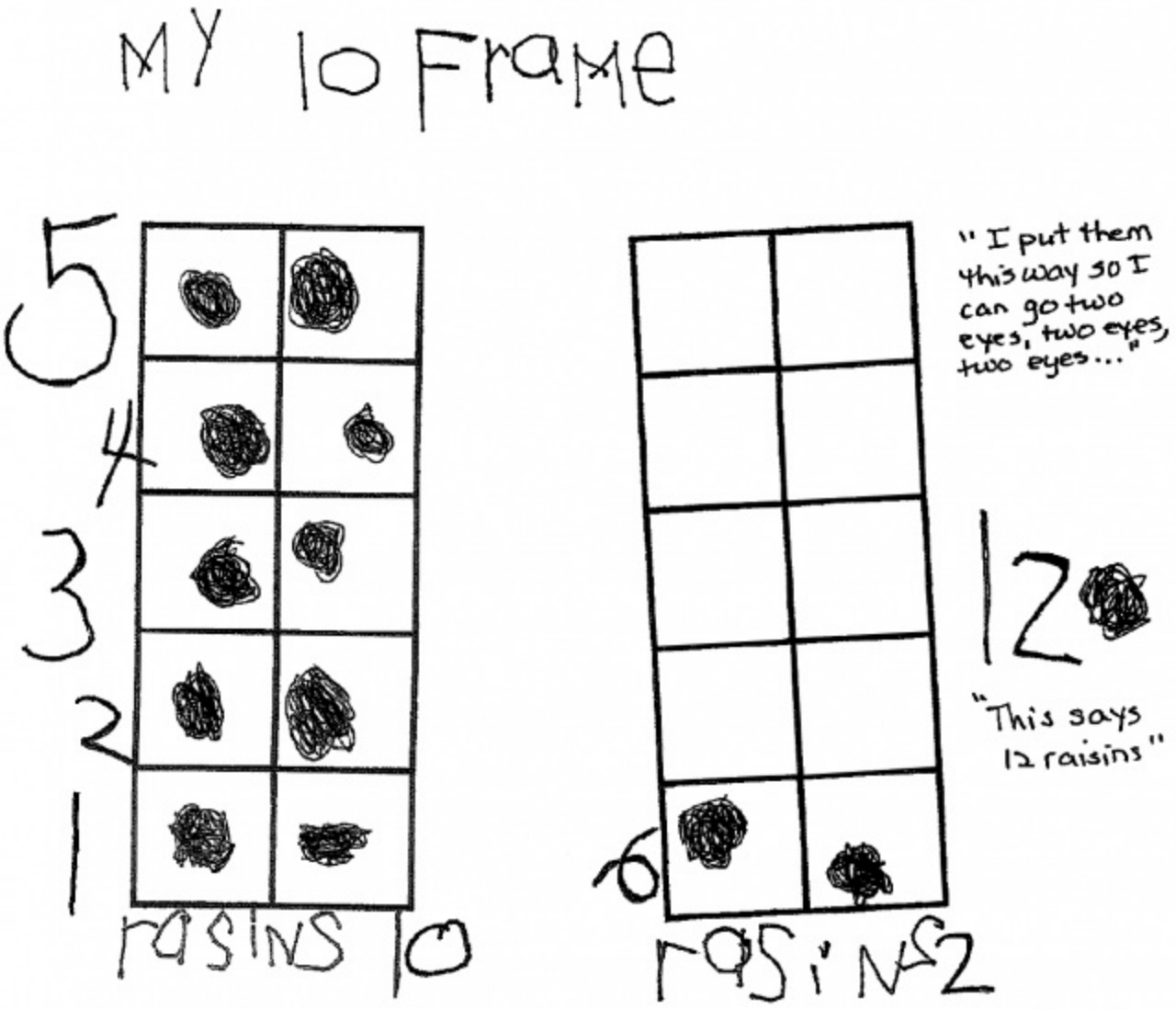
Note:

The overall achievement level for this piece of student work falls under Exemplars exception to the rule category. If a student has all Apprentice scores or above, but a Novice in "Connections," the student may still receive an achievement level score of

Apprentice. To learn more about Exemplars scoring, please refer to the section of your dashboard called "Tools for Success" and click on the link for “Using the Assessment Rubric.”

Achievement Level: Apprentice 3

P/S	R/P	Com	Con	Rep	A/Level
P	P	A	N	P	A



"I got a ten frame. I put 1, 2, 3, 4, 5. I got another ten frame for gingerbread man 6. I put two raisins for their eyes. I counted 1, 2, 3, 4 ... 12. She needs 12 raisins" A2

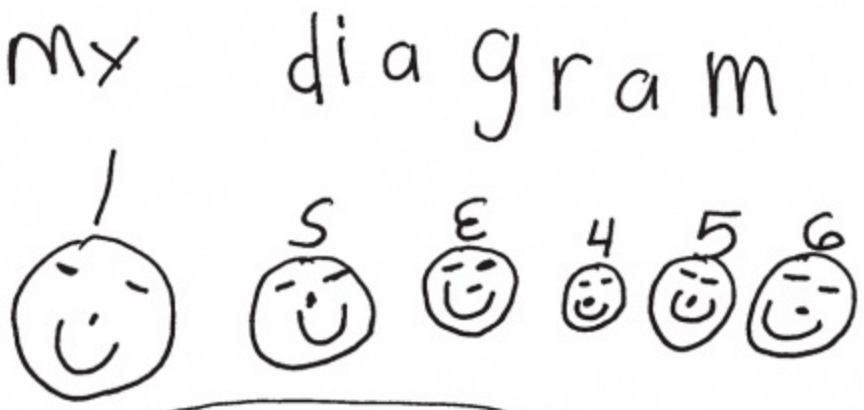
Title: Gingerbread Men

Achievement Level: Practitioner 1

Criteria and Performance Level	Rationales
Problem Solving *Practitioner*	The student's strategy of making a diagram of six gingerbread men faces and 12 raisin eyes works to solve the task. The student indicates a correct answer, "dozen, 12," and states, "I got 12 raisins."
Reasoning & Proof *Practitioner*	The student has a systematic approach and the diagram supports their thinking.
Communication *Practitioner*	The student correctly uses the mathematical terms *diagram*, *dozen*, *pair*.
Connections *Practitioner*	The student makes the relevant observations, "It's a dozen," and, "This says pair. They have a pair of eyes. We do too."
Representation *Practitioner*	The student's diagram is appropriate and accurate. Necessary labels for the gingerbread men and the raisins for eyes are provided in the scribing.

Achievement Level: Practitioner 1

P/S	R/P	Com	Con	Rep	A/Level
P	P	P	P	P	P



"This says pair they have a pair of eyes. We do too."

AZ

"It is a dozen."

AZ

"These are my 6 gingerbread men. These are the raisins (counted correctly) I got 12 raisins."

AZ

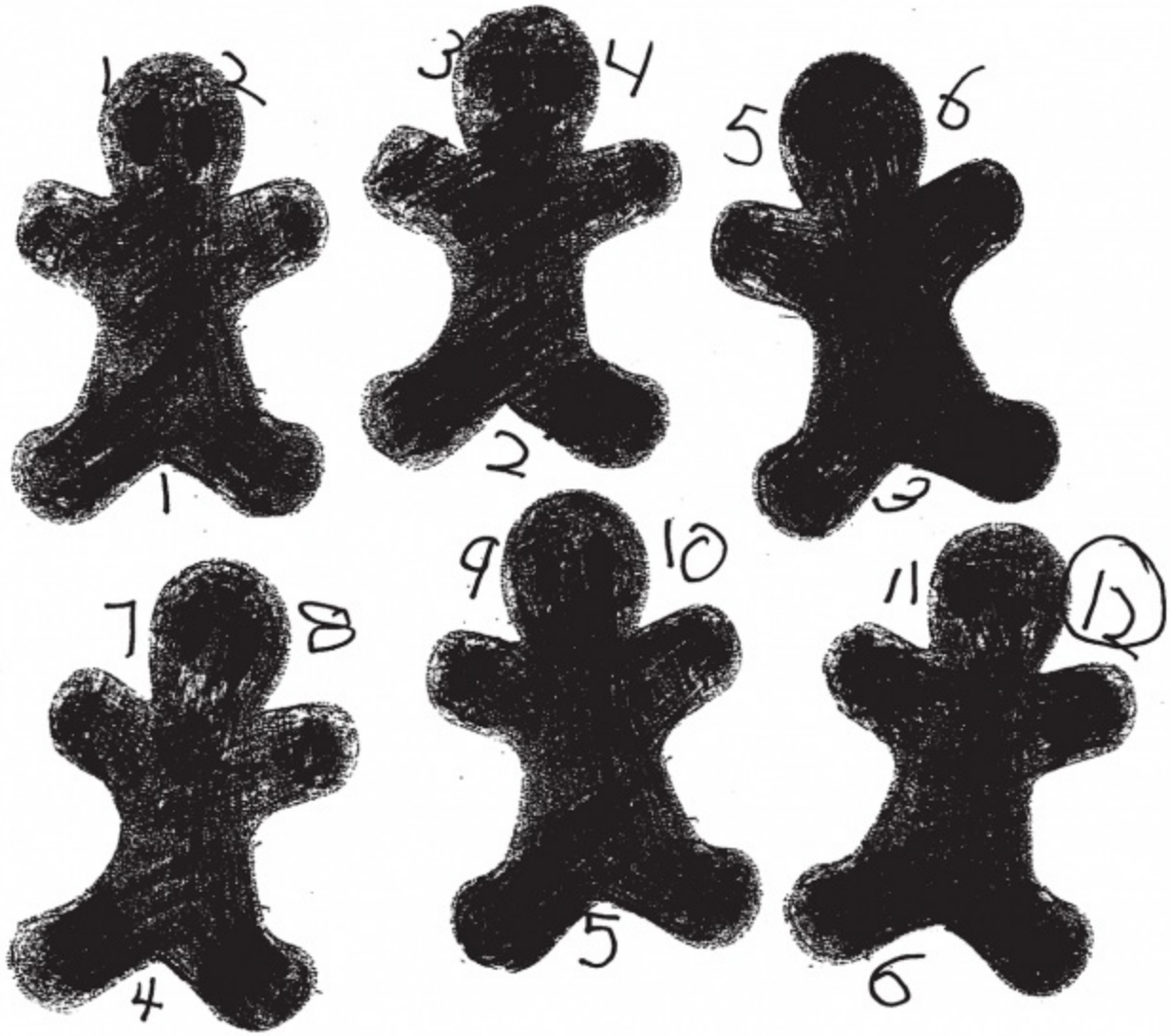
Title: Gingerbread Men

Achievement Level: Practitioner 2

Criteria and Performance Level	Rationales
Problem Solving *Practitioner*	The student's strategy of gluing paper "gingerbread men," on their paper and adding the raisin eyes works to solve this task. The student states a correct answer, "My answer is 12 raisins."
Reasoning & Proof *Practitioner*	The student has a systematic approach and the diagram supports their thinking.
Communication *Practitioner*	The student correctly uses two mathematical terms *diagram*, *more*.
Connections *Practitioner*	The student makes the mathematical relevant observation, "She gots more raisins than gingerbread mans."
Representation *Practitioner*	The student's diagram is appropriate and accurate. A key is provided for the raisins and the gingerbread men in the scribing.

Achievement Level: Practitioner 2

P/S	R/P	Com	Con	Rep	A/Level
P	P	P	P	P	P



"I did a diagram. I glued my gingerbread on 1, 2, 3, 4, 5, 6. I put on raisin eyes, 1,2, 3,4… 12. My answer is 12 raisins. She gots more raisins then gingerbread mans."

AZ

Title: Gingerbread Men

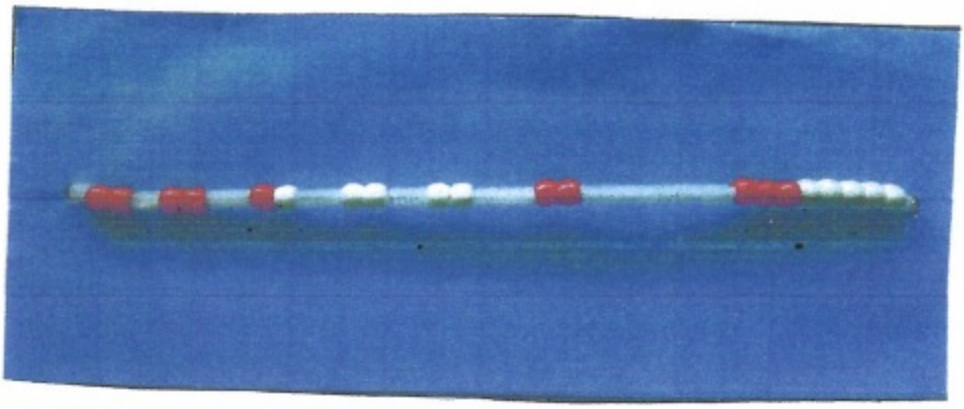
Achievement Level: Practitioner 3

Criteria and Performance Level	Rationales
Problem Solving *Practitioner*	The student's strategy of using a rekenrek to show six pairs of raisins/eyes for six gingerbread men works to solve the task. The student's answer, "Lisa needs 12 raisins," is correct.
Reasoning & Proof *Practitioner*	The student uses correct reasoning by understanding that the task requires using two raisins/eyes per gingerbread man and then finding a total of 12 raisins.
Communication *Practitioner*	The student correctly uses the mathematical terms *rekenrek*, *diagram*, *pair*.
Connections *Practitioner*	The student uses a second strategy, a diagram, to determine Gina needs 12 raisins for six gingerbread men. The student makes the mathematically relevant observation, "Two eyes is a pair."
Representation *Practitioner*	The student correctly moves the beads on the rekenrek to show six groups of two. The scribing defines the six groups as gingerbread men and each bead as a raisin. The student's diagram is accurate and appropriate. The scribing defines the gingerbread men and the raisins/eyes. The student does not compare the two representations to determine that their answer is correct for the Expert level.

Achievement Level: Practitioner 3

P/S	R/P	Com	Con	Rep	A/Level
P	P	P	P	P	P

My Rekenrek



Note: Student's rekenrek was reduced in size in the printing to fit student's paper and to save ink.

"Can you help me write 12?"

Note: Student correctly counted 1-12 while putting a dot by each raisin

"I got my rekenrek because I know how to push two and leave a finger space. I did it six times for six gingerbread men. Then I went 1, 2, 3.. 12. Lisa needs 12 raisins. I glued it on when Mrs. B printed it for me. Then I made my diagram. I turned the beads into raisins I did 2,2,2,2,2,2, for 6 gingerbread men eyes. I did 1, 2, 3 ... 12 raisins for the eyes. 2 eyes is a pair!"

AZ

Title: Gingerbread Men

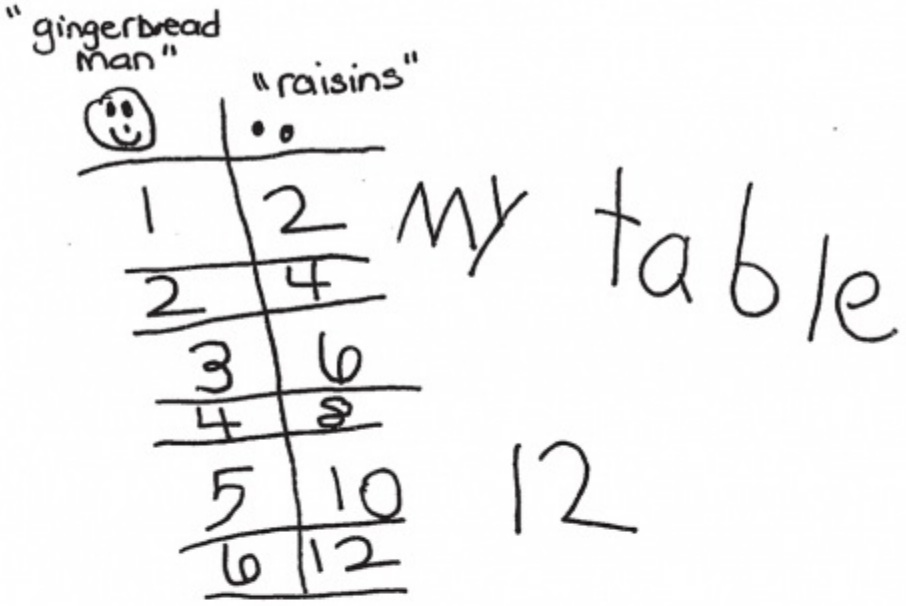
Achievement Level: Expert 1

Criteria and Performance Level	Rationales
Problem Solving *Expert*	The student's strategy of making a diagram of six gingerbread men and 12 raisins for eyes works to solve the task. The student indicates a correct answer, "12." The student then uses an alternative strategy of a table to show the six gingerbread men and 12 raisins for eyes. The student relates this task to a previous, completed problem.
Reasoning & Proof *Expert*	The student creates a table to verify their answer of twelve raisins. The student also relates the problem to a previous, completed task and links the mathematical similarities.
Communication *Expert*	The student correctly uses the mathematical terms *diagram*, *key*, *dozen*, *pair*, *table*, *pattern*.
Connections *Expert*	The student makes the mathematically relevant Practitioner observations, "Pair of eyes," "Dozen is 12." The student states "2 raisins is a pair," and "I did the add 2 pattern." The student also recreates the task by adding their own gingerbread man for a total of "14," and states, "I did one for me. Now it is 14 raisins." The student makes an Expert connection by verifying their own answer by creating a table and stating, "This is called correct because I got 12 again." The student makes an additional Expert connection by relating the Gingerbread Man task to a task done in the past that involved counting dog legs. "We did that when we counted 3 dogs legs. That table was hard because I did 4, 8, 12 on it."

Representation *Expert*	The student's diagram is appropriate and accurate. The key and the scribings provide all necessary labels. The student's table is appropriate and accurate with all necessary labels included.

Achievement Level: Expert 1

P/S	R/P	Com	Con	Rep	A/Level
E	E	E	E	E	E



"I did the add 2 pattern. This is called correct because I got 12 again. We did that when we counted 3 dog's legs. That table was hard because I did 4, 8, 12 on it (student is referencing another task)."

AZ