Algebra

Activity 7 Assessment
Evaluating Algebraic Expressions

Evaluating Algebraic Expressions			
Recognizes expressions with variables in formulas, including understanding a variable as a changing quantity "The expression $l \times w$ is the formula for the area of a rectangle, where l is the length of the rectangle and w is the width."	Evaluates expressions with variables in formulas How can you find the area of a rectangle with length 15 cm and width 8 cm? "I used the formula $A = l \times w$. I substituted 15 cm for l and 8 cm for w. $A = l \times w$ $= 15 \text{ cm} \times 8 \text{ cm}$ $= 120 \text{ cm}^2$ The area is 120 cm^2.	Evaluates algebraic expressions without relating to a visual model or real-world situation How can you determine the value of the expression $3x + y$ when $x = 2.5$ and $y = 3.5$? "I substituted the values for the variables and then did the calculations. $3x + y = 3(2.5) + (3.5)$ $= 7.5 + 3.5$ $= 11$"	Solves problems that involve writing and evaluating algebraic expressions I want to fence a rectangular area that is 5 m long and 3 m wide for a pet dog. How can I determine the perimeter of this rectangle? "I know the formula for the perimeter of a rectangle is $P = 2l + 2w$. I substituted 5 m for l and 3 m for w, then did the calculations. $P = 2l + 2w$ $= 2(5 \text{ m}) + 2(3 \text{ m})$ $= 10 \text{ m} + 6 \text{ m}$ $= 16 \text{ m}$ The dog's area has a perimeter of 16 m."
Observations/Documentation			