Patterns and Relations

Activity 7 Assessment

Solving Equations with Multiple Terms (with Relational Rods)

Solving Equations with Multiple Terms (with Relational Rods)			
Interprets the meaning of single variable equations that involve more than one operation "The equation $2x + 3 = 21$ means that when you double a number and add 3 to the result, you get 21."	Uses relational rods to model and solve multi-term equations involving whole numbers "To model $2x + 3 = 21$, I started with the light green rod, which has a value of 3. I need to find 2 rods the same colour to place beside it to get to 21. The blue rod works. This means x is 9."	Checks solutions and identifies whether a given number is a solution of an equation Is $x = 8$ the solution of the equation $3x + 6 = 21$? "To check, I substitute 8 for the variable x. L.S. $= 3x + 6$ R.S. $= 21$ $= 3(8) + 6$ $= 24 + 6$ $= 30$ Since L.S. $\neq$ R.S. $x = 8$ is not the solution."	Solves a problem by writing and solving a multi-step equation In a basketball game, Pascal made 7 foul shots, worth one point each, and some 2-point baskets. Pascal scored a total of 23 points. How many 2-point baskets did they make? "I wrote the equation $2f + 7 = 23$, where f is the number of 2-points baskets made. Using rods, I found that 2 brown rods added to the black rod (7) makes 23. Since the brown rod has a value of 8, I know that Pascal made eight 2-point baskets."
Observations/Documentation			