Activity 9 Assessment
Solving Equations with Multiple Terms

Solving Equations with Multiple Terms			
Interprets the meaning of single variable equations that involve more than one operation	Uses relational rods to model and solve multi-step equations involving whole numbers	Uses inverse relationships or other solution methods to solve multi-step equations involving whole numbers and/or decimals	Checks answers and identifies errors in solutions if the answer is incorrect
"The equation $2x + 3 = 21$ means that when you double a number and add 3 to the result, you get 21."	"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."	"For $2x + 3 = 21$, I know 21 is 3 more than $2x$. So, if I take away 3 from 21, I'll find out what $2x$ is. Then I can divide by 2 to find x. I can record this with a flow chart. $x \longrightarrow \times 2 \longrightarrow + 3 \longrightarrow 21$ $9 \longleftarrow \div 2 \longleftarrow - 3 \longleftarrow 21$."	"A student solves the equation $\frac{c}{3} - 4 = 8$ like this: *This equation means that $\frac{c}{3}$ is 4 more than 8.* *So, $\frac{c}{3} = 8 + 4$; $\frac{c}{3} = 12$* *I know that $\frac{12}{3}$ is 4, so $c = 4$.* But if I substitute 4 for c in the left side of the equation, I get $\frac{4}{3} - 4$, which is not equal to 8. Instead of dividing 12 by 3, the student should have multiplied to find a number that has a result of 12 when divided by 3. The correct answer is $c = 36$."
Observations/Documentation			