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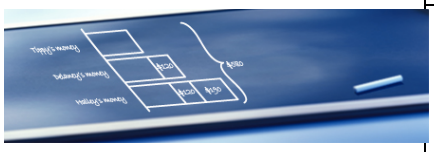
Solving Math Problems With the

Singapore Model Drawing Method

STEPS	PHASE (main actions)	DESCRIPTORS
1.	You READ to UNDERSTAND the TEXT of the problem (Image courtesy of gesadaphorn,www.freedigitalphotos.net)	**Read** the problem first to get the context (e.g., What's the problematic situation?)
2.		**Read** the problem again and **identify**: a. THE GIVENS (the known quantities) b. WHAT NEEDS TO BE FOUND (the unknown quantities).
3.		Read the problem again & **separate the items** you wish to represent visually. Use a slash to help you.
4.	You DRAW the bar MODEL to help you see the problem and solve it. 	**Represent one chunk** by at least **one rectangle or bar**. Label it with the known value or mark it as an unknown (use a"?" or variable").
5.		Return to the text to check the mathematical **relationships** between the bars of the model.
6.		**Adjust the size of the bars** to illustrate the relationships*. Does one or a group of bars find in others? How do they compare with each other? *You may go back and re-read the problem.
7	You TRANSLATE THE VISUAL into equations & solve them (Image courtesy of samuiblue,www.freedigitalphotos.net)	**Translate** the relationships between **the bars** into mathematical sentences (**equations**).
8		**Compute the equations** and add the found information to the bar model.
9.		Repeat steps 5-7 until you solved the problem and have the **solution**.
10		*Does the solution make sense? Is it a reasonable number in the problem? In real life?*
11.		**State the solution** clearly, using a complete sentence that answers the question of the problem.

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