Graphic Organizer

- If students are overwhelmed by writing out all the steps, have them show each step algebraically.
- You many wish to have students make five flash cards using each of the equations from the Graphic Organizer. They can recopy the equation on the back of the flash card and solve it.

Math Link: Wrap It Up!

Planning Notes

- Introduce the table and lead a discussion about the meaning of MJ (megajoules, a measure of the energy our bodies need).
- Have students consult the Math Links that they have completed throughout the chapter for help setting up the equations.

Common Errors

- Students may want to solve these problems without using algebraic equations.

R$_x$ Remind students that they can use guess and check to verify their answers, but that they must set up and solve algebraic equations.

- Students may express the answer without units or with the incorrect units.

R$_x$ Have them write their answers in a complete sentence.

The chart below shows the Rubric for the Math Link: Wrap It Up! and provides notes that specify how to identify the level of specific answers for this project.

Score/Level	Holistic Descriptor	Specific Question Notes
5 **(Standard of Excellence)**	❑ Applies/develops **thorough** strategies and mathematical processes for making **significant** comparisons/connections that demonstrate a **comprehensive** understanding of how to develop a complete solution ❑ Uses **efficient** and **effective** procedures that may contain a **minor mathematical error** that does not affect understanding ❑ Uses **significant** mathematical language to explain understanding and provides **in-depth** support for the conclusion	• provides a complete and correct solution
4 **(Above Acceptable)**	❑ Applies/develops **thorough** strategies and mathematical processes for making **reasonable** comparisons/connections that demonstrate a **clear** understanding ❑ Uses **reasonable** procedures that may contain a **minor mathematical error** that may hinder the understanding in one part of a complete solution ❑ Uses **appropriate** mathematical language to explain understanding and provides **clear** support for the conclusion	• provides a complete response with one missing or incorrectly solved question
3 **(Meets Acceptable)**	❑ Applies/develops **relevant** strategies and mathematical processes for making **some** comparisons/connections that demonstrate a **basic** understanding ❑ Uses **basic** procedures that may contain a **major mathematical error** or **omission** ❑ Uses **common** language to explain understanding and provides **minimal** support for the conclusion	• correctly completes parts a), b), and one of parts c), d), or e) with a correct start to one remaining part *or* • provides correct and complete solutions to two of parts c), d), or e) *or* • provides correct starts to all parts of the exercise, with some parts solved completely **Note:** Students may provide five correct equations, but there must be an attempt to solve at least one the equations.
2 **(Below Acceptable)**	❑ Applies/develops **some relevant** mathematical processes for making minimal comparisons/ connections that lead to a **partial solution** ❑ Uses **basic** procedures that may contain several major mathematical errors ❑ Communication is **weak**	• correctly completes parts a) and b) with a correct start to one remaining part *or* • provides a correct and complete response to part c), d), or e)
1 **(Beginning)**	❑ Applies/develops an **initial start** that may be **partially correct** or could have led to a correct solution ❑ Communication is **weak** or **absent**	• provides a correct initial start or a complete response to part a) or part b) *or* • writes and solves two equations correctly