Graphic Organizer

- Have students complete each section of this Graphic Organizer as the concept is completed in class, or have them use it as a review at the end of the chapter.
- If space is limited, enlarge the Graphic Organizer on an 11 × 17 sheet. Then students can fold it vertically into three sections.

Math Link: Wrap It Up!

Planning Notes

- Remind students that their task is to complete a presentation of their playing card box.
- Consider having students work in groups or pairs.
- Students need to complete Math Links 1.1, 1.2, and 1.3 to do the first four check boxes. If students have not completed these Math Links, have them start with the fifth check box and use a regular deck of playing cards to complete the rest of the exercise.

Common Errors

- Some students may have difficulty completing the first few check boxes.

R$_x$ Have students work in small groups using only one student's design. Assign certain check boxes to each part of the group. If time permits, allow two class periods to complete this exercise.

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; there may be an error in the calculation of one surface area, but the result is used correctly throughout the question; the second calculation of surface area is correct
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 weak communication or missing justification in one section of the surface area calculation *or* • provides a complete and correct response to all parts of the exercise except the second check box
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 one set of surface area calculations; communication may be weak; the surface area of one of the six boxes may be incorrect but the answer is used correctly when calculating the dimensions of the large package *or* • provides correct partial answers to all parts of the exercise
2 **(Below Acceptable)**	❑ Applies/develops **some relevant** mathematical process 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 the third and fourth check boxes and identifies the correct dimensions for surface area *or* • provides a correct response for the fourth and fifth check boxes
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**	• correctly identifies the type of line symmetry but has weak or absent communication in using appropriate terms *or* • provides a correct start to the surface area calculation *or* • correctly completes one part of the question relating to surface area *or* • provides a correct start to one of the last four check boxes