

Teacher directions:

- Print the card sets for each group of students using colored cardstock.
- Laminate all materials before using for longer durability.
- Cut cards apart and place sets in baggies or envelopes or on notebook rings.
- Use **Process Thinking Cards** to prompt student thinking and help students process the information, patterns and mathematical relationships they will be working with during an activity or exercise.
- Suggested uses:
 - Select a few cards (by letters) appropriate to your learning activity and ask students to be thinking about these as they complete their work.
 - Discuss cards as a whole group or have groups or individuals discuss one or two cards.
 - Incorporate discussion questions into written conclusion paragraphs.
 - Differentiate for the specific abilities of a student or group (Special Education, ELL, GT) by removing/adding cards.
- Generate additional cards for the set.
- Copy the template below with all the questions and have students glue it into their math notebooks for continued use during the year.



Process Thinking Questions

- A. Can you see a pattern? Explain the pattern in a sentence.
- B. How can you use a pattern to find an answer?
- C. Will a table work in this situation? Explain why or why not.
- D. Is this a situation where a graph could be used? Why or why not?
- E. If a graph is possible, what type of graph is best? Explain your choice.
- F. What math idea (concept) is the problem describing? How do you know?
- G. Which key words found in the situation help you know what math to do next? Explain.
- H. What type of units will describe the outcome to the situation? How do you know?
- I. What is the best problem solving strategy to use in this situation? Why do you think so?
- J. What mathematical property(ies) justify your step(s)? Explain.
- K. Could you use estimation strategies in this problem? Why or why not?
- L. How can you determine if your answer is reasonable to the situation?
- M. Would a drawing, diagram or picture help make the math in the situation clearer? How so?
- N. How would a Venn diagram or other organizing tool illustrate the relationships? Explain.
- O. Are there equivalent mathematical relationships being applied? What are they?
- P. How would you explain your process to someone just learning this math topic?
- Q. Is there information missing that is needed? What else do you need to know?
- R. Is there information provided that you do not need to use to solve the problem? Explain.
- S. Is this concept similar to one you have learned before? How so?
- T. What mathematical symbols will you use in problem solving? In presenting the answer?
- U. What 3 points about what you have learned would a new student need to know to be successful?

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<p>D. Is this a situation where a graph could be used? Why or why not?</p>	<p>E. If a graph is possible, what type of graph is best? Explain your choice.</p>	<p>F. What math idea (concept) is the problem describing? How do you know?</p>
<p>G. Which key words found in the situation help you know what math to do next? Explain.</p>	<p>H. What type of units will describe the outcome to the situation? How do you know?</p>	<p>I. What is the best problem solving strategy to use in this situation? Why do you think so?</p>
<p>J. What mathematical property(ies) justify your step(s)? Explain.</p>	<p>K. Could you use estimation strategies in this problem? Why or why not?</p>	<p>L. How can you determine if your answer is reasonable to the situation?</p>
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