Developing and Organizing Ideas: Webbing, Mapping and More

MATHEMATICS Grades 7, 8, and 9

Effective thinkers use different strategies to sort the ideas and information they have gathered in order to make connections, identify relationships, and determine possible directions and forms for their thinking and writing. This strategy gives students the opportunity to reorganize, regroup, sort, categorize, classify and cluster their notes.

Purpose

- Identify relationships and make connections among ideas and information.
- Select ideas and information for possible topics and subtopics.

Payoff

Students will:

- model critical and creative thinking strategies.
- learn a variety of strategies that can be used throughout the writing process.
- reread notes, gathered information and writing that are related to a specific task.
- organize ideas and information to focus thinking.

Tips and Resources

- Strategies for webbing and mapping include:
  - *Clustering* – looking for similarities among ideas, information or things, and grouping them according to characteristics.
  - *Comparing* – identifying similarities among ideas, information, or things.
  - *Generalizing* – describing the overall picture based on the ideas and information presented.
  - *Outlining* – organizing main ideas, information, and supporting details based on their relationship to each other.
  - *Relating* – showing how events, situations, ideas and information are connected.
  - *Sorting* – arranging or separating into types, kinds, sizes, etc
  - *Trend-spotting* – identifying things that generally look or behave the same.
- See Student/Teacher Resource, *Webbing Ideas and Information*.
- See Student/Teacher Resource, *Webbing, Mapping and More – Sample.*
- *Info Tasks for Successful Learning*, pp. 23-32, 87, 90, 98

Further Support

- Provide students with sample graphic organizers that guide them in sorting and organizing their information and notes e.g., cluster (webs), sequence (flow charts), compare (Venn diagram).
- Have students create a variety of graphic organizers that they have successfully used for different tasks. Create a class collection for students to refer to and use.
- Provide students with access to markers, highlighters, scissors, and glue for making and manipulating their gathered ideas and information.
- Select a familiar topic (perhaps a topic for review). Have students form discussion groups. Ask about the topic. Taking turns, students record one idea or question on a stick-on note and place it in the middle of the table. Encourage students to build on the ideas of others. After students have contributed everything they can recall about the topic, groups sort and organize their stick-on notes into meaningful clusters on chart paper. Ask students to discuss connections and relationships, and identify possible category labels. Provide groups with markers or highlighters to make links among the stick-on notes. Display the groups' thinking.

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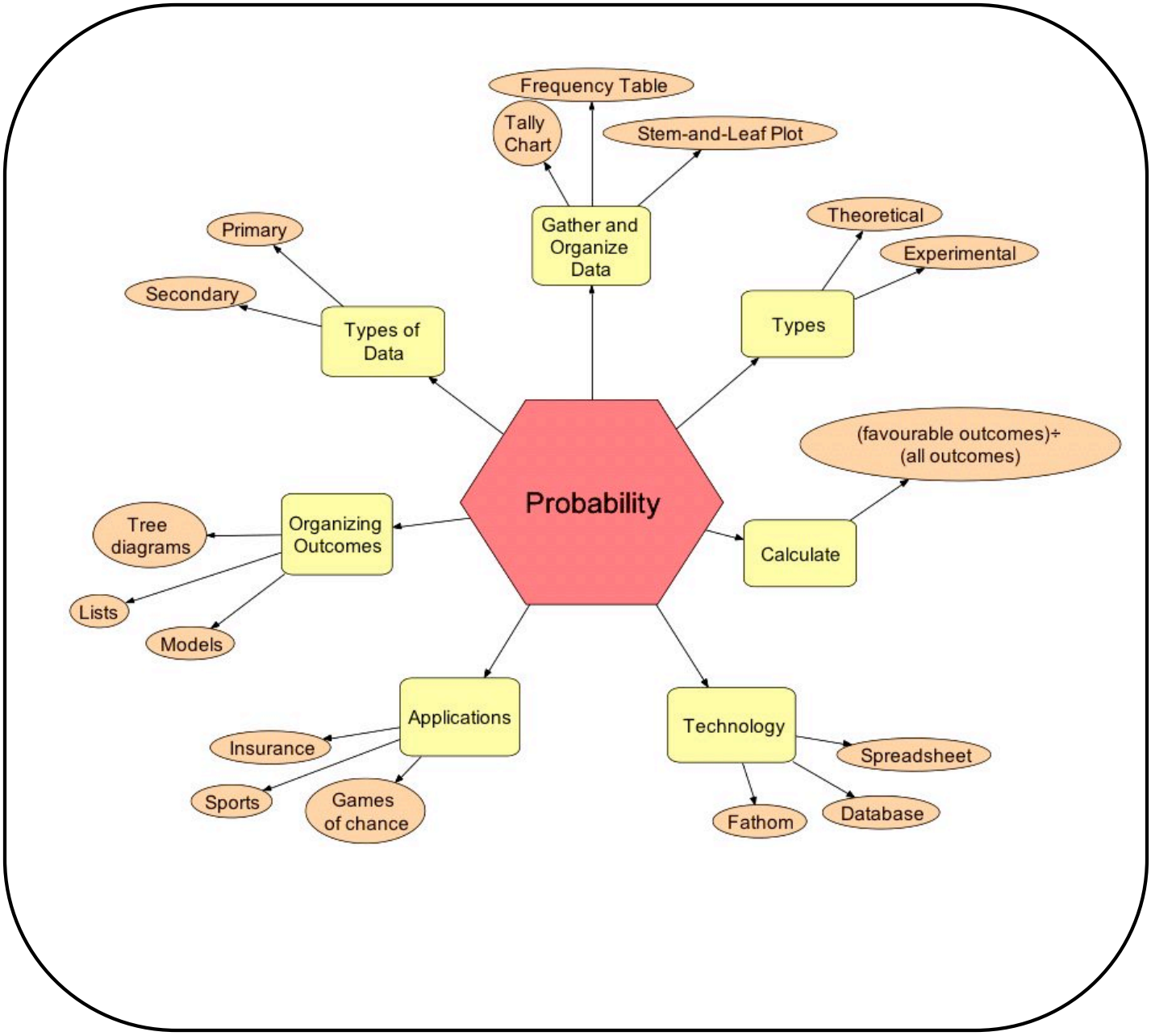
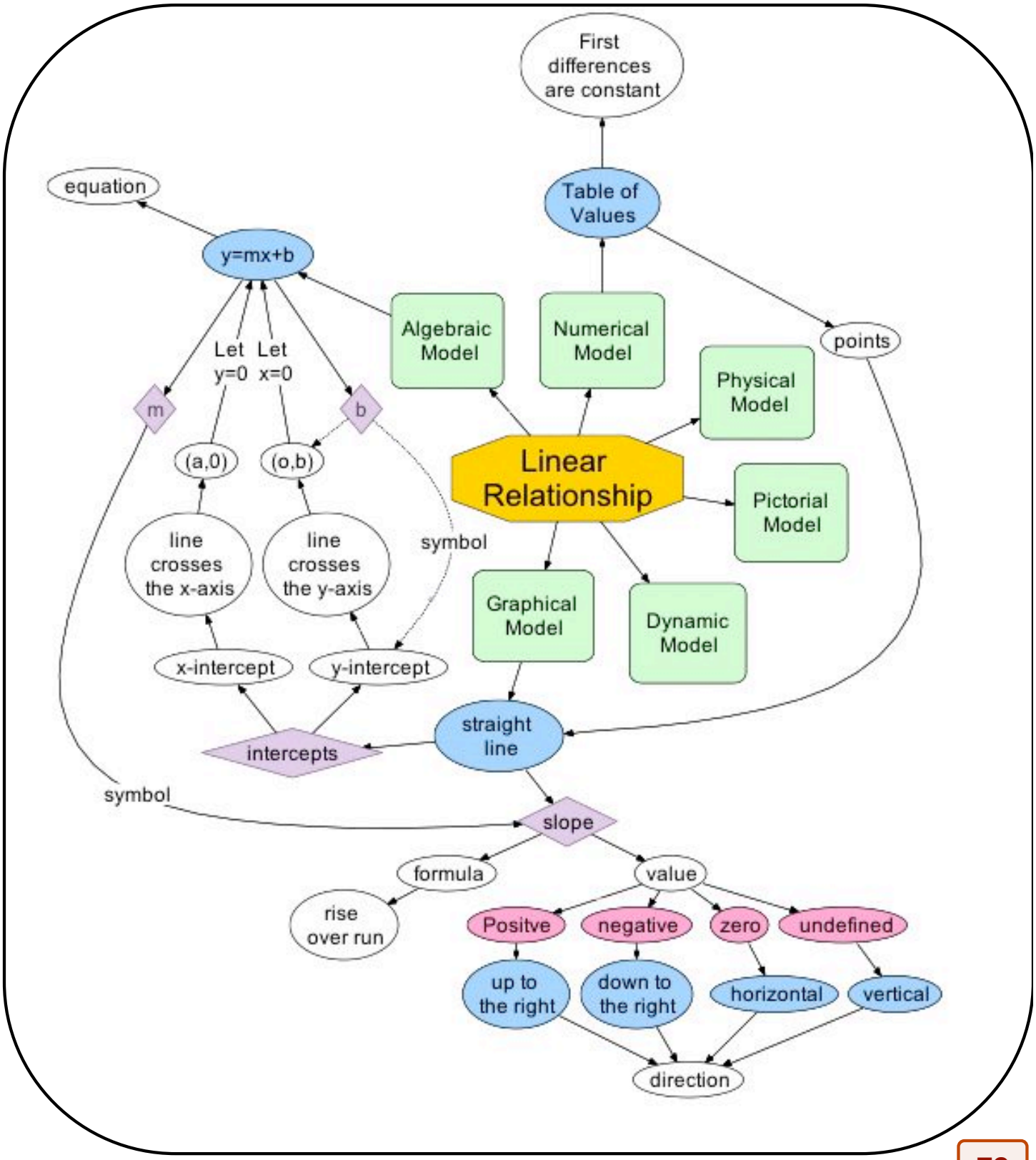
What teachers do	What students do
Before • Select a unit/topic for review. • Prepare an overhead transparency with some of the concepts listed. • Model for students how to make connections among the ideas and information (e.g., number, circle, colour-code, draw arrows). • Model the process of rereading notes and arranging key points to show the connections and relationships.	• Recall what they already know about the topic. • Bring notes to class. • Make connections to their own notes.
During • Ask students to contribute to the mind map by identifying additional important ideas and key information and by suggesting how to place the points into the mind map. • Ask students questions to clarify the decisions. For example: - What does this mean? - Is this important? Why? - How does this connect to …? - What is the relationship between …? - Does this connect to other parts of the mind map?	• Contribute to the discussion. • Look for connections and relationships between the mapping concepts. • Look for important information and ideas in their notes and textbooks.
After • Ask students to find examples for the concepts in the mind map. • Ask students to create a mind map for a different topic or a sub-topic by organizing their ideas and information. • Discuss how students can use their mind maps for review before an assessment. • Ask students to reread their mind maps and use them for review.	• Contribute examples. • Create a mind map. • Share and compare mind maps. • Use the mind maps for review.

Notes

Webbing, Mapping and More – Sample (Grade 7)

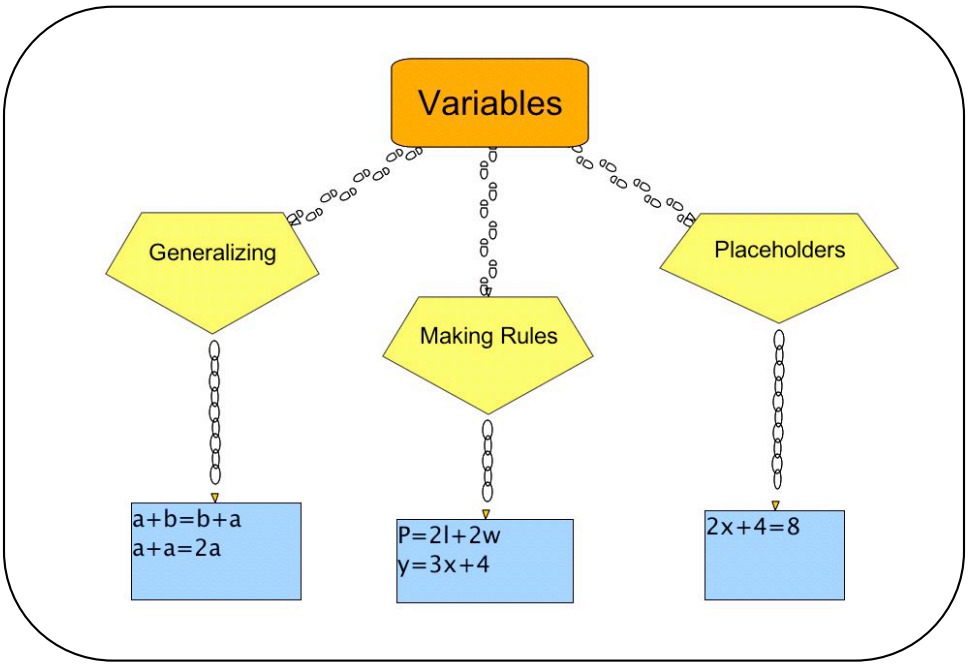
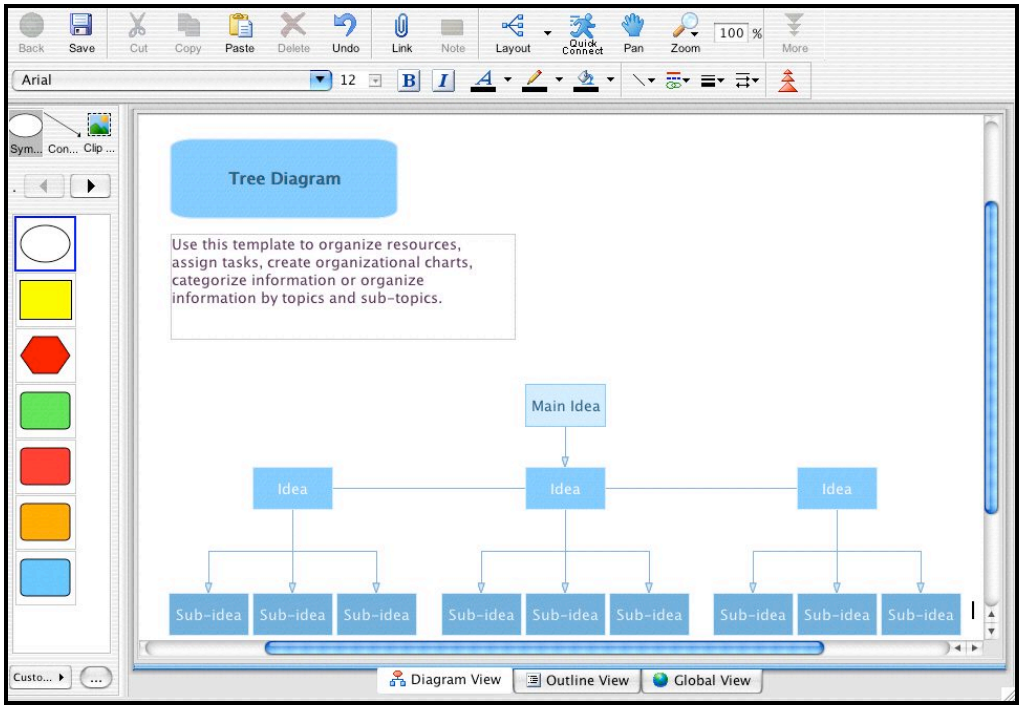


Webbing, Mapping and More – Sample (Grade 9)



Student/Teacher Resource

Webbing, Mapping and More – Sample (Grades 7 – 9)



SMART Ideas ® is concept mapping software which is Ministry licensed and thus available for students and teachers to use. The sample mind maps in this strategy were created with SMART Ideas ®. Creating concept maps with this software is facilitated by the many templates available like the one shown in the screen capture below.