

Support for Causal Mapping

The following prompts are to help teachers guide their students' thinking as they organize and generalize their concrete examples into categories.

Create Categories of Factors

Questioning Strategies	Assessment Checklist
<ol style="list-style-type: none"> 1. Separate the _____ from the _____. 2. What kind of a _____ is this? 3. Which one doesn't belong in this group? 4. What is the relationship between _____ and _____? 5. How is _____ like _____? 6. How are _____ and _____ different? 7. Distinguish between _____ and _____. 8. Can you separate these factors into more distinct categories? 9. Ask them to think of names for the categories (intermediary factors) they create. 10. Why are you grouping them that way? For example: Why are you putting the radio and the cell phone together? Why are you putting old drivers and teen-agers together? 	<p>Circle the letter of the skill or strategy that is apparent in each group's discussion.</p> <ol style="list-style-type: none"> 1. Students can identify common features and compare and contrast items. 2. Students can differentiate between general categories and specific examples. 3. Students can generate reasonable categories and explain their reasoning. 4. Students can create appropriate names for categories. <p>Team 1 1 2 3 4</p> <p>Team 2 1 2 3 4</p> <p>Team 3 1 2 3 4</p> <p>Team 4 1 2 3 4</p> <p>Team 5 1 2 3 4</p> <p>Team 6 1 2 3 4</p> <p>Comments:</p>

Refine Categories of Factors

Questioning Strategies	Assessment Checklist
<ol style="list-style-type: none"> 1. Are you sure you want to categorize them that way? 2. Are there ways that factors in the same category are different? Are these important differences? Would this make a difference in your categories? 3. Take two factors that could create a new category and put them together and ask them what new category they might belong to. 4. Try recategorizing the factors into different group? Do these groups more accurately reflect their characteristics? 	<p>Circle the letter of the skill or strategy that is apparent in each group's discussion.</p> <ol style="list-style-type: none"> 1. Students can see flaws in their reasoning. 2. Students can see multiple ways of categorizing. 3. Students can evaluate the best categories and explain their reasoning. <p>Team 1 1 2 3</p> <p>Team 2 1 2 3</p> <p>Team 3 1 2 3</p> <p>Team 4 1 2 3</p>

	<p>Team 5 1 2 3</p> <p>Team 6 1 2 3</p> <p>Comments:</p>
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Finalize Categories

Questioning Strategies	Assessment Checklist
<ol style="list-style-type: none"> 1. What is the overall theme of _____ ? 2. What generalization can you make from this information? 3. Think of good names for your categories. <ul style="list-style-type: none"> • Are they short with just a few words? • Do they accurately describe the factors in it? 4. Do all of the factors fit in the category or do you need to move some to other categories or create a new one? 5. Now go back and see if you can think of any other concrete examples that would fit in the category. 6. Do your categories show what is important about the concrete examples or what is superficial? 7. Do you need to refine the title of your category to fit the new examples? Do you need to create a new category or eliminate one? 	<p>Circle the letter of the skill or strategy that is apparent in each group's discussion.</p> <ol style="list-style-type: none"> 1. Students can generalize categories that include multiple items. 2. Students can prioritize items based on the degree to which their features relate to the category description. 3. Students can finalize their category descriptions to include all appropriate items and exclude all irrelevant ones. 4. Students can elaborate the categories by generating additional appropriate items and describing those items in more detail. <p>Team 1 1 2 3 4</p> <p>Team 2 1 2 3 4</p> <p>Team 3 1 2 3 4</p> <p>Team 4 1 2 3 4</p> <p>Team 5 1 2 3 4</p> <p>Team 6 1 2 3 4</p> <p><u>Comments:</u></p>