

## Monitoring Student Thinking

Use this Assessment Checklist to monitor and guide student thinking as students work in teams to classify items into categories.

### Create Categories

Questioning Strategies	Assessment Checklist																														
<ol style="list-style-type: none"> <li>1. What kind of an item is this?</li> <li>2. What is the relationship between _____ and _____?</li> <li>3. How is _____ like _____?</li> <li>4. How are _____ and _____ different?</li> <li>5. Can you distinguish between _____ and _____?</li> <li>6. Can you separate the _____ from the _____?</li> <li>7. Which one doesn't belong in this group?</li> <li>8. Why are you grouping the items that way?</li> <li>9. Can you separate these items into more distinct categories?</li> <li>10. Why are you putting _____ and _____ together?</li> <li>11. Can you think of descriptive names for the categories you've created?</li> </ol>	<p>Circle the letter of the skill or strategy that is apparent in each group's discussion.</p> <ol style="list-style-type: none"> <li>1. Students can identify common features and compare and contrast items.</li> <li>2. Students can differentiate between general categories and specific items.</li> <li>3. Students can generate reasonable categories and explain their reasoning.</li> <li>4. Students can create appropriate names for categories.</li> </ol> <p style="text-align: right;"><b><u>Comments</u></b></p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 15%;"><b>Team 1</b></td> <td style="width: 5%; text-align: center;"><b>1</b></td> <td style="width: 5%; text-align: center;"><b>2</b></td> <td style="width: 5%; text-align: center;"><b>3</b></td> <td style="width: 5%; text-align: center;"><b>4</b></td> </tr> <tr> <td><b>Team 2</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> <td style="text-align: center;"><b>4</b></td> </tr> <tr> <td><b>Team 3</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> <td style="text-align: center;"><b>4</b></td> </tr> <tr> <td><b>Team 4</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> <td style="text-align: center;"><b>4</b></td> </tr> <tr> <td><b>Team 5</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> <td style="text-align: center;"><b>4</b></td> </tr> <tr> <td><b>Team 6</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> <td style="text-align: center;"><b>4</b></td> </tr> </tbody> </table>	<b>Team 1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Team 2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Team 3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Team 4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Team 5</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Team 6</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
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### Refine Categories

<ol style="list-style-type: none"> <li>12. Are you sure you want to categorize the items that way?</li> <li>13. Are there ways that items in the same category are different? Are these important differences? Would this make a difference in your categories?</li> <li>14. Take two items that could create a new category and put them together and ask them in what new category they might belong.</li> <li>15. Try re-categorizing the items into different groups. Do these groups more accurately reflect the characteristics?</li> </ol>	<ol style="list-style-type: none"> <li>1. Students can see flaws in their reasoning.</li> <li>2. Students can see multiple ways of categorizing.</li> <li>3. Students can evaluate the best categories and explain their reasoning.</li> </ol> <p style="text-align: right;"><b><u>Comments</u></b></p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 15%;"><b>Team 1</b></td> <td style="width: 5%; text-align: center;"><b>1</b></td> <td style="width: 5%; text-align: center;"><b>2</b></td> <td style="width: 5%; text-align: center;"><b>3</b></td> </tr> <tr> <td><b>Team 2</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> </tr> <tr> <td><b>Team 3</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> </tr> <tr> <td><b>Team 4</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> </tr> <tr> <td><b>Team 5</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> </tr> <tr> <td><b>Team 6</b></td> <td style="text-align: center;"><b>1</b></td> <td style="text-align: center;"><b>2</b></td> <td style="text-align: center;"><b>3</b></td> </tr> </tbody> </table>	<b>Team 1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Team 2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Team 3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Team 4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Team 5</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Team 6</b>	<b>1</b>	<b>2</b>	<b>3</b>
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### Finalize Categories

<p>16. What is the overall theme of this category?</p> <p>17. What generalization can you make from this information?</p> <p>18. Think of good names for your categories.</p> <ul style="list-style-type: none"> <li>• Are they short with just a few words?</li> <li>• Do they accurately describe the items in them?</li> </ul> <p>19. Do all of the items fit in the category or do you need to move some to other categories or create new ones?</p> <p>20. Can think of any additional items that would fit in the category?</p> <p>21. Are some of your items more important to the category than others?</p> <p>22. Are your categories as refined as they can be?</p>	<ol style="list-style-type: none"> <li>1. Students can generalize categories that include multiple items.</li> <li>2. Students can prioritize items based on the degree to which their features relate to the category description.</li> <li>3. Students can finalize their category descriptions to include all appropriate items and exclude all irrelevant ones.</li> <li>4. Students can elaborate the categories by generating additional appropriate items and describing those items in more detail.</li> </ol> <p style="text-align: right;"><b><u>Comments</u></b></p> <p><b>Team 1</b>      1      2      3      4</p> <p><b>Team 2</b>      1      2      3      4</p> <p><b>Team 3</b>      1      2      3      4</p> <p><b>Team 4</b>      1      2      3      4</p> <p><b>Team 5</b>      1      2      3      4</p> <p><b>Team 6</b>      1      2      3      4</p>
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