Focus Standards and Claim

Claim 4
4.OA.C.5

Stimulus

Picking a Pet
Your class is trying to decide what type of animal to get for the class pet. Your teacher is letting the class vote to choose a goldfish, a turtle, or a hamster as the class pet.

All 20 students in your class voted for both their 1st choice and their 2nd choice for the class pet. The results are shown in Table 1.

Table 1. Class Pet Votes

<table>
<thead>
<tr>
<th>Student</th>
<th>1st Choice</th>
<th>2nd Choice</th>
<th>Student</th>
<th>1st Choice</th>
<th>2nd Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Turtle</td>
<td>Hamster</td>
<td>11</td>
<td>Turtle</td>
<td>Hamster</td>
</tr>
<tr>
<td>2</td>
<td>Goldfish</td>
<td>Hamster</td>
<td>12</td>
<td>Turtle</td>
<td>Goldfish</td>
</tr>
<tr>
<td>3</td>
<td>Goldfish</td>
<td>Turtle</td>
<td>13</td>
<td>Hamster</td>
<td>Turtle</td>
</tr>
<tr>
<td>4</td>
<td>Hamster</td>
<td>Turtle</td>
<td>14</td>
<td>Hamster</td>
<td>Goldfish</td>
</tr>
<tr>
<td>5</td>
<td>Goldfish</td>
<td>Turtle</td>
<td>15</td>
<td>Turtle</td>
<td>Goldfish</td>
</tr>
<tr>
<td>6</td>
<td>Turtle</td>
<td>Goldfish</td>
<td>16</td>
<td>Goldfish</td>
<td>Turtle</td>
</tr>
<tr>
<td>7</td>
<td>Hamster</td>
<td>Goldfish</td>
<td>17</td>
<td>Turtle</td>
<td>Goldfish</td>
</tr>
<tr>
<td>8</td>
<td>Turtle</td>
<td>Goldfish</td>
<td>18</td>
<td>Turtle</td>
<td>Goldfish</td>
</tr>
<tr>
<td>9</td>
<td>Goldfish</td>
<td>Hamster</td>
<td>19</td>
<td>Turtle</td>
<td>Hamster</td>
</tr>
<tr>
<td>10</td>
<td>Goldfish</td>
<td>Hamster</td>
<td>20</td>
<td>Goldfish</td>
<td>Hamster</td>
</tr>
</tbody>
</table>

Item Prompt

Create your own method for using the votes to decide a winner. Explain your method using the information from Table 1 to determine the winning pet.
### Sample Responses

| Sample Response A | I believe that the hamster won since two and four are both factors of 20. 
20/40 / 10 = 2/4 
I have shown that they both equal to 20. I made a table and simplify 20 over 40. |
| Sample Response B | My method is to have the first votes be worth 2 points, and the second choice of votes be worth 1 point. Whenever animal has the most points wins. The winning pet would be the turtle using my method because it has the most points. 
Goldfish 14 + 8 = 22 
Hamster 8 + 7 = 15 
Turtle 18 + 5 = 28 |
| Sample Response C | So you add each number of vote from 1st choice votes + 2nd choice votes. You will get the winner. |
| Sample Response D | My method to determine a winner would be to add the votes up for each animal, then seeing which animal was voted for the most. After the calculation, I would determine that turtles won. 
G = 7 + 8 = 15 
H = 4 + 6 = 10 
T = 9 + 9 =18 |
| Sample Response E | 1st choice: 
Goldfish – 7 
Turtle – 9 
Hamster – 4 
2nd choice: 
Goldfish – 7 
Turtle – 9 
Hamster – 7 |
| Sample Response F | Goldfish 14 + 7 = 21  
Hamster 8 + 7 = 15  
Turtle 9 + 5 = 14 |
| Sample Response G | The goldfish won because it had the most votes. |
| Sample Response H | The turtle is the winner because the turtle beat the goldfish by 1 and beat the hamster by 4. I added all first and second votes together for each animal.  
Goldfish = 7 + 8 = 13  
Hamster = 4 + 7 = 11  
Turtle = 9 + 5 = 14 |
| Sample Response I | Well to decide a winner I first made a chart of all the students first and second choices. The turtle won from a score of 9 votes. |