New Connections Questions
Mathematics for Elementary Teachers: An Activity Approach
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Activity Set 2.3

1. **Math Concepts:** Fiona has eight pets of varying ages. Can you use the given clues to order the pets from youngest to oldest and match the pets name to the pet type? The pets; in alphabetical order, are Billy, Buff, Tycho, Red, Freckles, Polly, Ralph, Sylvester,

   **Clues**
   - The Gila Monster, Ralph, is older than all but one other pet.
   - The goldfish is the youngest pet and the parrot is the oldest pet.
   - There is one pet older than Sylvester the ferret and younger than the chicken Buff.
   - There are six pets older than Polly and younger than Red.
   - There are two pets younger than Billy.
   - There is one pet older than Freckles and younger than Red.
   - There are five pets older than the goat.
   - There is no pet older than the cat but younger than the dog.
   - Ralph and Red are the only pets older than Freckles.

2. **Math Concepts:** Four students have majors, jobs and methods of transportation as noted in the following unordered table. Use the given clues to match the jobs, majors and method of transportations with the correct student? Describe and show your solution path.

<table>
<thead>
<tr>
<th>Students</th>
<th>Freshman</th>
<th>Sophomore</th>
<th>Junior</th>
<th>Senior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>Coffee Shop</td>
<td>Library</td>
<td>Theatre</td>
<td>Tutor</td>
</tr>
<tr>
<td>Major</td>
<td>English</td>
<td>Computer Science</td>
<td>Math</td>
<td>Psychology</td>
</tr>
<tr>
<td>Transportation</td>
<td>Bike</td>
<td>Bus</td>
<td>Car</td>
<td>Skateboard</td>
</tr>
</tbody>
</table>

   **Clues**
   - The English major rides a bike.
   - The tutor is a junior and won’t ride a skateboard.
   - The sophomore takes the bus.
   - The freshman won’t work in the coffee shop or drive a car.
   - The skateboarder is a psychology major.
   - The computer science major works in the library.
   - The math major works in the coffee shop and won’t drive a car.
   - The senior drives a car.