# Grade 1 Advanced/ Gifted and Talented (GT) Mathematics

## “Oh, The Places You’ll Go:” A Unit in Operations and Algebraic Thinking

### Lesson Seed 4. To The Zoo We Will Go

### Domain: Operations and Algebraic Thinking

<table>
<thead>
<tr>
<th>Standards</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.OA.C.6</td>
<td>Add and subtract within 20</td>
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<tr>
<td>2.OA.A.2</td>
<td>Fluently add and subtract within 20 using mental strategies</td>
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<tr>
<td>2.OA.B.3</td>
<td>Determine whether a group of objects has an odd or even number of members</td>
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### Purpose/Big Idea:
Many different combinations of addends result in the same sum. Even numbers plus even numbers result in an even sum.

### Materials:
- Resource Sheet *At the Zoo* (teacher can display on overhead or document camera or distribute a copy to pairs or individual students)
- Manipulatives such as play dough and straws or marshmallows and pretzels to show models of solutions
- Chart paper and markers or dry erase boards and dry erase markers to record drawings of the different possible solutions

### Activity:
- Display or distribute a copy of Resource Sheet *At the Zoo*
- Distribute a variety of manipulatives for students to choose from to create models

### Guiding Questions:
What kinds of animals would be seen in a zoo?  
How many legs do these animals have?  
What do you notice about the number of legs each animal has?  
Can you have an odd number of animals even though the number of legs is even?  
What if the zookeeper saw a different amount of legs?  
Would this problem work if the zookeeper said he saw an odd number of legs walk by?  Why or why not?
At the Zoo

The zoo keeper at The Maryland Zoo in Baltimore saw 20 legs walk by.

A. How many animals do you think the zoo keeper saw?

B. How many ways can you represent the animals that walked by the zookeeper? Show the different possibilities with your manipulatives. Use chart paper or a white board to record each solution you find.

NAME: ____________________________________________________________