# LEARNING PLAN

## Exploratory Activities
- *Too Many Kangaroo Things To Do* (6, 11, 14)
- *Amanda Bean’s Amazing Dreams* (11, 14, 18)

## Concept Development Activities
- Birthday Bash (1, 2, 3, 4, 5, 6, 8, 10)
  - Workstation - Multiplication Power Tower (1, 2, 3, 4, 7, 9, 10, 13, 14, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 32, 35, 36, 40, 41)
- Amanda Bean (8, 11, 30)
  - Workstation - Multiplication Story Boards (11, 15, 19, 32, 38)

## Concept
- Multiplication (2nd grade)

## Materials and Resources
- * indicates created by writers
1. Interactive white dry erase board
2. Multiplication Power Tower data sheets
3. Anchor chart paper
4. Markers
5. Crayons
7. Number generators (dice)
8. Plicker Multiplication Assessment*
9. iPad
10. Math Journals
11. Beans
12. Unifix cubes
13. Animal picture sheet*
14. Cups
15. Kathy Richardson (Story Boards) *Discovering Number Concepts Book 1*
16. *Go Math Grade 2,* HMH
17. Plicker QR codes created by www.plickers.com
18. Book, *Amanda Bean’s Amazing Dreams* by Marilyn Burns
19. Pencils
20. LCD projector
21. Package of 1 birthday crown
22. Package of 2 treat boxes
23. Package of 3 decorations
24. Package of 4 trophies
25. Package of 5 saxophones
26. Package of 10 treat bags
27. Package of 8 birthday hats
28. Package of 6 jacks
29. Color counters
30. Amanda Bean’s Story Problems (question stems)*
31. QR Code Reader created by Scan, Inc
32. Story Board Multiplication data sheets*
33. *Go Math Grade 2 Student Workbook* pp. 387-404
34. QR codes created on www.the-qrcode-generator.com by writer*
35. Multiplication concept organizer created by writer*
36. Color tiles
37. Equal groups graphic organizer*
38. Story board multiplication directional guides created by Kathy Richardson
39. Summative assessment directional guide*
40. Math Power Tower Directional Guide*
41. Storyboard Multiplication Directional Guide Source*
42. Math mystery #2 pages – Mr. Peterson on Teachers Pay Teacher

## Procedural Knowledge Activities
- *Go Math Grade 2* (16, 33)
  - Topic 12, Lessons 1-3, pages 387-404
- Math Mystery #2 (6, 7, 8, 42)
<table>
<thead>
<tr>
<th>Assessment</th>
<th>Originality and Creativity</th>
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<tbody>
<tr>
<td><strong>Formative:</strong> (8, 17, 31, 34)</td>
<td><strong>Student Products</strong></td>
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<tr>
<td>Students will use their math journal to show work and personalized Plicker QR code to record answers while taking a 5 question (plus bonus) test assessing their knowledge of multiplication using real world situations.</td>
<td><strong>Written</strong></td>
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<td><strong>Summative:</strong> (4, 7, 15, 39)</td>
<td>The student will choose a story board then write a multiplication story problem that describes the quantity within the equal groups. (11, 12, 15)</td>
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<td>Students will use two number generators to develop an expression in order to create a multiplication word problem. On the assessment sheet, the student will create a picture (equal groups) develop a word problem, use repeated addition, skip counting and an array model that directly correlates to the problem made from the number generators.</td>
<td><strong>Oral</strong></td>
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<td>Students will use facts from <em>Amanda Bean’s Amazing Dreams</em> or <em>Too Many Kangaroo Things to Do</em> and generate questions to develop an oral presentation on the different ways to count the objects in the story. (6, 18)</td>
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<th>Kinesthetic</th>
<th>Visual</th>
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<td>Students will use the video component on the iPad to demonstrate how to work through a multiplication problem using strategies learned in class. The prompt is: <em>We just got a new student in our class from the dwarf planet Pluto and s/he has no idea what multiplication is. Using your number generators, create multiplication problems and prepare a video that will demonstrate how to use manipulatives to work the problems.</em> (7, 9)</td>
<td>Students will create a drawing that utilizes groups of items (using arrays, equal groups, clusters of items, etc.). Students will explain the mathematics behind their drawings. (4, 5, 7, 10)</td>
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**Related TEKS**

2.6.A

Model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined.