

Amanda Bean's Amazing Dream
by Cindy Neuschwander

Parts of the Lesson	Materials Needed
<p>I. Pre-activity: Explore multiplication</p> <ul style="list-style-type: none"> -Making Arrays. Have children make as many rectangles as they can find, using their blocks, & record findings. - Making Groups. Have children make groups and demonstrate how how 2 groups of 5 is the same as $5+5$, or 2×5 (connecting addition to multiplication). 	<p>I. Pre-activity: Explore multiplication</p> <ul style="list-style-type: none"> -Each child gets a minimum of 20 <u>Multilink cubes</u> or <u>Linkit cubes</u>. (These cubes can be linked to make rectangles.)
<p>II. Read the book (Talking points)</p> <ul style="list-style-type: none"> -Read the story, enjoy the pictures. -Discuss how Amanda is either counting or adding to find totals, then switches to multiplication. -Why doesn't she want to learn multiplication? (Discuss how people learn new things every day, lifelong.) 	<p>II. Read the book.</p> <ul style="list-style-type: none"> -At least one copy of <u>the book</u>. <p>Metacognitive opportunity! As you read, discuss how new ideas (like multiplication) are built on old ideas (like counting and adding). Everything you know helps you learn new things!</p>
<p>III. Do the math: Explore using the multiplication chart.</p> <ul style="list-style-type: none"> -Have children use 1-in. graph paper to cut out different size rectangles. -Enter numbers on a big chart. -Put the rectangles on 12"x18" charts labeled "1" through "30" -Do as many as you can in the time allotted. [Note when all combinations are found, the charts can be used to discuss prime and composite numbers with older students.] 	<p>III. For the activities</p> <ul style="list-style-type: none"> -Photocopies of <u>1-in. graph paper</u> -<u>Pencils, scissors, scotch tape</u> -<u>30 pieces of 12x18" paper labeled "1" through "30</u> -<u>a large blank multiplication chart on one-inch graph paper - or a transparency</u>, so that the group can see patterns emerge on the chart.
<p>IV. Wrap Up (Debrief)</p> <ul style="list-style-type: none"> -Use the chart to count by 1's, 2's, 5's and 10s both horiz and vertically. Look up multiplication facts. Look for the square numbers. 	<p>IV. Wrap Up</p> <ul style="list-style-type: none"> -(optional) Have children work on the <u>Funbook pages 1-2</u>. Let children <u>take home 20 cubes</u> to build, or to find more multiplicative arrays.

