How Many Stars?

Target Standard Problem Solving

- Build new mathematical knowledge through problem solving
- Solve problems that arise in mathematics and in other contexts
- Apply and adapt a variety of appropriate strategies to solve problems
- Monitor and reflect on the process of mathematical problem solving

Prior Knowledge

• One to one correspondence

Teaching Plan

Implementation

Give students the **Ursa Major** activity sheet, and ask them to count the number of stars on the paper. For younger children you may want to cut the paper in half or fourths (or draw a circle to indicate which group of stars is to be counted) to reduce the total number of stars the children count. When the students have found their total number ask them to explain their strategies for finding this number. Allow several children to explain their problem solving to the entire class. Encourage students to come up with other strategies that might work for this type of a problem. (For example; skip counting, grouping etc.) Then provide students with the **Star Map from Out of this World** and ask them to use their new counting strategies.

Teacher Questions:

- 1. How did you find the total number of stars on the page?
- 2. Can you tell me another way you could have counted the stars?
- 3. Can you teach/explain to someone else how to count the stars?
- 4. Can you give a real life example of when you would need to count a large number?





