Math Ideas for the Dance Class

Using: Can't Jump Josie, Grand March, Seven Jumps (SL1), Butterfly (SL2)

Counting/Addition/Subtraction /Multiplication/Division
- ***Can't Jump Josie:*** How many people are in the inside circle? Outside circle?
- After we have done the dance twice, how many people will be in the outside circle?
- How many times can our class do the dance before there is no one left in the outside circle?
- If the whole school did this dance, how many times would we sing the song before the dance was over.
- If your class is doing the ***Butterfly*** (a three-person dance), will everyone have a group? How many people will be left over?
- Your class is dancing with two other classes, and the teacher instructs you to do the Butterfly with one person from each class dancing together. How many dancing groups will there be? Will anyone be left out? How many? From which class?
- If the teacher made your class dance in boy/girl partners, would everyone have a partner? How many people would not? Would the leftovers be boys or girls?
- If everyone in your class (school, town, province) were to do the ***Grand March***, and you continued until you have sixteen people across, how many lines would there be? Would all the lines be the same length? What size gym would you need?

Patterns
- Describe the seven moves in ***Seven Jumps***.
- Can you make up a different pattern? Sitting down? Using only your eyes? Arms? With two people?

Geometry
- In a circle of people holding hands, what is the circumference? Without using a measuring tape, how could you measure this?
- What is the area of your gym? If everyone in your class is dancing, how much space does each person have? If the whole town showed up for the evening dance, how much space would each person have? Could everyone spin around with their arms outstretched?
- In a star formation, what is the radius of the circle? Estimate the circumference.
- For the Friday assembly, the gym was very full, but we still had room to dance in the centre. Why?

Predictions/Hypotheses/Statistics
- How many people do you think will attend the evening dance?
- After the evening dance, estimate the number of people who came. What information do you need? How can you find it out?
- In a room full of dancers, the caller says "Swing your partner!" How many couples will use their right arms? Left? Why do you think this is so?
- If you tell a room full of people to step sideways, how many will step right, and how many will step left? Why?
- Which is longer, a line of girls holding hands, or a line of boys holding hands? What other information do you need to know in order to answer this?