Jingle Dress- Designing the Dress

Subject: Mathematics Creator: Ashley Pennington and Harley Weston
Strand: Patterns and Relations Grade:6

Content (topic)	
Factors and Multiples	
Outcomes	**Indicators**
P6.2 Demonstrate understanding of factors and multiples (concretely, pictorially, and symbolically) including: • determining factors and multiples of numbers less than 100 • relating factors and multiples to multiplication and division • determining and relating prime and composite numbers	**P 6.2h:** Solve situational questions involving factors, multiples, and prime factors.
Lesson Preparation: Equipment/materials: • Activity sheet (Appendix A) for each student	
Presentation Development • Tell your students about the origin of the jingle dress as described in the references or have them explore the websites themselves. • Show your students one of the videos on Youtube of dancers performing the Jingle Dress Dance. • Two videos are in the references but Youtube contains many more. • If possible show the students a jingle dress or a jingle. • Have the students complete the activity sheet. (Appendix A)	

References
http://www.tpt.org/powwow/womjingle.html
http://en.wikipedia.org/wiki/Jingle_dress
http://www.youtube.com/watch?v=BZFefZKlR3g
http://www.youtube.com/watch?v=4iCNVcxEs9U

Appendix A
Activity Sheet

You are making a Jingle Dress for a doll with rows of jingles around the skirt. Each row is to have the same number of jingles and since the doll is short there must be fewer than 10 rows of jingles.

a. Suppose you have 69 jingles. How many rows of jingles can you make? How many jingles are in each row? Is there more than one possibility? Describe all that you can find.

b. Suppose you lose a jingle so now you only have 68. How many rows of jingles can you make? How many jingles are in each row? Is there more than one possibility? Describe all that you can find.

c. Suppose you lose another jingle so now you only have 67. How many rows of jingles can you make? How many jingles are in each row? Are there any other possibilities? Why or why not? Explain.

d. Suppose you start with 60 jingles. How many rows of jingles can you make? How many jingles are in each row? Are there any other possibilities?

e. You want to make a jingle dress that has 5 rows and no more than 12 jingles per row. What are some possibilities for the number of jingles in total that you will need?