

Name \_\_\_\_\_  
Period \_\_\_\_\_  
Date \_\_\_\_\_

## *Hip Hop Mix Problem*

1. What is the problem in the story?
2. What was the students' hypothesis?
3. How did they test their hypothesis?
4. What was the variable?
5. What were the groups that were tested (the experimental groups)?
6. What results did they obtain?
7. What was their conclusion?
8. How did they communicate their results?



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### Hip Hop Mix by Kyla and Jenna

We've been taking dance lessons for years. We've noticed that some tunes are easier to dance to than others and we guessed that it has something to do with a song's tempo. Tempo is measured in beats-per-minute (BPM). Our DragonflyTV question was: How does the BPM of hip hop music affect the way a dancer dances?

#### What did we do?

We thought that slow music would make the dancers move slowly and fast music would make them more active. To find out, we marked the dance floor with grid lines then we grabbed a DJ to spin 4 different BPM tunes (90, 110, 130, and 150) and invited some of our friends (two girls and two boys) to dance to each tune. To measure how active their dancing was, we recorded how many times they stepped in each square during the different songs.

#### What did we find out?

We found that girls and boys prefer different dance styles. At 90 BPM, both groups danced somewhat quickly. The boys seemed most energetic at 110 BPM, but the girls were most energetic at 130 BPM. The boys completely lost energy at 150 BPM, while the girls kept up the pace. We figured out that a fast tempo doesn't automatically mean faster dance moves or more area covered on the dance floor.