USING ALGEBRAIC EXPRESSIONS TO ANALYZE CONCERT SCHEDULES

Est. Time: 60-90 minutes
Subjects: Math
Age Range: Elementary (6th Grade)

View the classroom lesson version
How can writing and evaluating expressions be used to explain the scope of an artist’s concert schedule?

In this lesson you will:

• Write and evaluate expressions in which letters represent numbers
• Explore The Beatles’ early development and examine their concert schedule
• Examine Little Richard’s concert schedule and identify his influence on The Beatles
Consider or ask a friend:

- What’s something that you do well? *(For example, mastering academic skills such as reading or memorizing basic math facts, mastering a sports skill, or learning to play an instrument or become a better artist).*

- How did you learn to do it well?
Read TeachRock’s *Trace It Back biography on The Beatles.*

Consider or ask a friend:

- Prior to reading about The Beatles, had you heard of them?
- Do you know any of their songs?
- Do you know how they developed as a band?
Watch **this video**.

According to the video, before The Beatles’ achieved international success, they had “all this development,” consider or ask a friend:

- What do you think “development” means in this context?
- How long did it take?
Read the quote by Malcolm Gladwell about The Beatles’ early development.

Thinking about the quote and also the notion that anyone who aspires to do something well has to practice at it, consider or ask a friend:

- Noticing the numbers in the quote, can you think of a method for examining those numbers?

- How could you use math to better understand The Beatles’ concert schedule?

“The Beatles ended up traveling to Hamburg five times between 1960 and the end of 1962. On the first trip, they played 106 nights, of five or more hours a night. Their second trip they played 92 times. Their third trip they played 48 times, for a total of 172 hours on stage. The last two Hamburg stints, in November and December 1962, involved another 90 hours of performing. All told, they performed for 270 nights in just over a year and a half. By the time they had their first burst of success in 1964, they had performed live an estimated 1,200 times, which is extraordinary. Most bands today don’t perform 1,200 times in their entire careers. This is what set the Beatles apart.”

-Malcolm Gladwell
Work through the instructions in Handout - The Beatles’ 1961-1962 Hamburg Performances. Write and evaluate the expressions, and answer the questions.
The Beatles weren’t the first and only musicians or musical group to work hard to achieve success. In fact, their grueling concert schedule was similar to what many of the Rock and Roll pioneers, like Little Richard, had been doing for years.
Work through the instructions in **Handout - Little Richard’s 1962 England Tour**. Write and evaluate the expressions, and answer the questions.
Review the quote by Malcolm Gladwell.

Thinking about the quote again, especially that “most bands today don't perform 1,200 times in their entire careers. This is what set the Beatles apart.” Consider of ask a friend:

• After examining Little Richard’s concert schedule, do you agree with Gladwell’s statement about The Beatles extraordinary performance numbers?

• Thinking about contemporary artists that you’re a fan of and their concert schedules, do you agree with Gladwell’s statement about The Beatles extraordinary performance numbers?

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SUMMARY

• In order to do something well, you often have to practice at it frequently for an extended period of time

• Math expressions are an excellent way to evaluate data, in particular, concert schedule numbers

• The Beatles musical excellence greatly benefitted from the several years they spent performing live on stage in Hamburg, Germany

• Little Richard is a Rock and Roll pioneer whose musical excellence also greatly benefitted from his rigorous concert schedule
Discover how The Beatles improved musicianship also benefited their songwriting. Explore the **Dueling Data Interactive Infographic**. Analyze the data, then create a bar graph showing all four of The Beatles and which member wrote most of their songs.
Spend more time with Little Richard! Check out TeachRock’s Little Richard Trace It Back to learn more about this pioneer of Rock and Roll and one of the biggest influences on The Beatles. Create an infographic illustrating Little Richard’s fundamental role in the development of Rock and Roll. Be sure to include some brief biographic information, his most famous songs, and the numerous musicians and bands he influenced.
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Visit us at teachrock.org for hundreds of other free arts-rich resources for every age range and classroom.