# MATH WITH THE BEATLES!

Est. Time: 45 minutes Subjects: Math Age Range: Elementary & Middle School



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In this lesson you will:

- Explore the pre-fame career of The Beatles
- Use arithmetic to calculate how often The Beatles performed during their residency in Hamburg, Germany
- Discuss how practice helped The Beatles achieve global success





Watch this clip of The Beatles to learn about "Beatlemania" phenomenon that swept the US and UK in 1963 and 1964

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## Before becoming famous, The Beatles spent several years working almost nonstop in clubs in Liverpool, England, and then went to play music in Hamburg, Germany.





Consider or talk with a friend:

- The Beatles traveled from Liverpool to Hamburg by car and boat, how long do you think it took?
- How do you think The Beatles felt about going to Hamburg?





## THE BEATLES' EARLY YEARS

Check out this video which highlights the Beatles journey.

### Consider or talk with a friend:

- slog"?
- slog"?

### What does Paul McCartney mean when he says that Hamburg was "a real

### Have you ever had to practice something so much that it felt like "a real



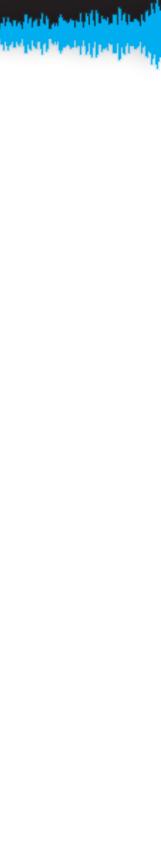
Print this handout to find out more and make some calculations about the time The Beatles invested in making their music great.



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## Click on this two-page timeline to learn more about the Beatles Early Years.

- 1956 John Lennon forms the skiffle group The Quarrymen. Lennon was 16 years old at the time
- October 1957 15-year old Paul McCartney debuts with The Quarrymen at a show in Liverpool.
- Early 1958 15-year old George Harrison joins The Quarrymen
- August 1959 The Quarrymen begin a run of 7 consecutive Saturday nights at the Casbah Coffee Club in Liverpool
- Early 1960 The Quarrymen undergo personnel changes and become "The Silver Beetles"
- May 1960 The Silver Beetles perform as the backing band for vocalist Johnny Gentle on a 7-show tour of Scotland. The repertoire consists almost entirely of American Rock and Roll and Rhythm and Blues songs.
- June-July 1960 The group is advertised both as "The Silver Beetles" and "The Beatles." They perform more than 16 shows at "tough" venues in towns outside of Liverpool. It has been suggested that they were told to "play through the fights."



### Use the **Beatles Timeline** to create your own Beatles Math Problems and share with a friend or family member!

share it with TeachRock!

## Next, try illustrating one of your Beatles Math Problems using this page. And



- By 1964, The Beatles were the most popular band in modern history. However, they had worked for years in obscurity to hone their craft.
- By reading about the regularity of their performances and length of their sets, you can use math to estimate several key concepts regarding their development.

## SUMMARY



## **BE CREATIVE**

Now that you've considered how long The Beatles practiced their craft, think of something specific you've tried to master (a sport, an instrument, a skill), and create your own word problems.

Imagine you practice something X hours a day, 6 days a week for one year.

- How long will you have worked?
- practiced in Hamburg?
- Create an infographic to share your answers!

### How many days will it take you to equal the number of hours The Beatles





## **BE CURIOUS**

Do you have a favorite band, artist, or athlete? Can you find information that will help you calculate how long they've practiced their craft?

## CONNECT

Find a partner, either through video chat, on the phone, or within your home! You'll take turns interviewing each other. It is the year 2050. You are on a TV show that is celebrating your successful career.

- How did you achieve success?
- What has made your career so successful? •
- •
- How did practice make you better at what you do?

Record your interview and share with TeachRock.

What advice would you give someone who hopes to be as successful as you?



# **EXTEND YOUR LEARNING**

- •
- Learn More about The Beatles at this Kiddle
- Learn more about the Beatles with this Interactive Infographic

## Watch TeachRock Founder Steven Van Zandt talk about The Beatles here





### Share with us! Either you or an adult in your life can share your filled in handout, art piece, or signing video with TeachRock on Instagram or Facebook, email to info@teachrock.org, or Tweet it to @TeachRock

## CONNECT





Visit us at **teachrock.org** for hundreds of other free arts-rich resources for every age range and classroom.

Please check back to teachrock.org/distancelearning frequently as we will update the material daily!

