

# MATH WITH THE GRATEFUL DEAD

## FOLLOWING THE GRATEFUL DEAD FOR 30 YEARS



Est. Time: 60 minutes

Subjects: General Music, Math

Age Range: Elementary



● Concert Venue

— Tour Path

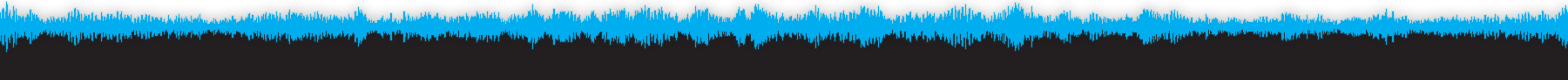
**TEACHROCK** ★






How can math be used to better understand the Grateful Dead's success?

In this lesson you will:

- Discover the band the Grateful Dead and their popularity
  - Investigate the ways the Grateful Dead maintained and supported a large and growing fanbase
  - Formulate equations that relate to numeric information regarding the Grateful Dead
- 



Think about your favorite musical artist or band. Would you consider them “famous” or “popular”?

On a scratch piece of paper, make a list of the steps this artist or band might have taken to achieve their popularity.





This picture shows the audience at the Grateful Dead's "Fare Thee Well" concert in 2015 at Chicago's Soldier Field. This series of 5 concerts was attended by close to 362,000 people and made 52.2 million dollars.

How did the band achieve this level of popularity?










Examine **this chart** on the Grateful Dead.

Consider or ask a friend:

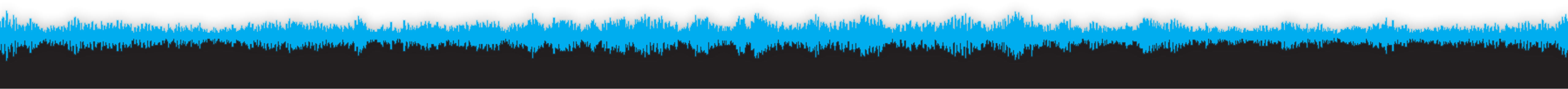
- What is this chart showing?
  - Do you recognize the band logos shown in the illustration? What bands are being represented?
  - In the chart, what do the different color records denote?
- 

- 
- Based on the chart, how would you compare the Grateful Dead to the other bands listed?
  - What might you conclude from this chart about the Grateful Dead?
  - What are some other ways the Grateful Dead might have achieved success, outside of selling their music?
- 



Examine **this map** related to the Grateful Dead.

Consider or ask a friend:

- What is being shown in this image?
  - Approximately how many concerts did the Grateful Dead perform in the state you live in?
  - Do you have relatives or friends in another state? How many concerts did the Grateful Dead perform in that state?
  - What might be the result of all this touring? How might doing so many concerts have contributed to the Grateful Dead's success?
- 






## NOT THE BAND, BUT THE DEADHEADS

Watch [this clip](#) about Grateful Dead fans.





Consider or ask a friend:

- Who are “The Deadheads”?
  - Why might these Grateful Dead fans go to concerts?
  - What kinds of things might the Grateful Dead do to attract people to come to their concerts?
- 





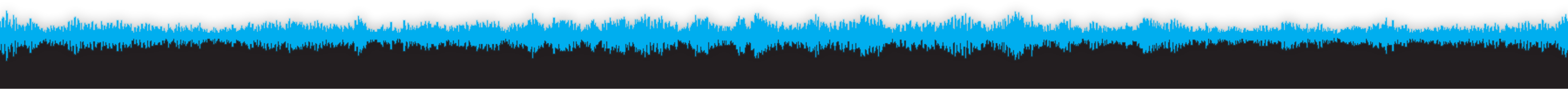
## THE FAN MANDALA

Next, watch [this clip](#) about Grateful Dead concerts.





Consider or ask a friend:

- What were some of the different groups of fans the clip mentions?
  - What does the presence of these various groups say about a Grateful Dead concert? Do you think the band welcomed different types of people?
  - Deadheads are known for following the band on tour, to see many Grateful Dead concerts in the same year. How might the Grateful Dead keep their concerts interesting for fans who want to see them multiple times?
- 





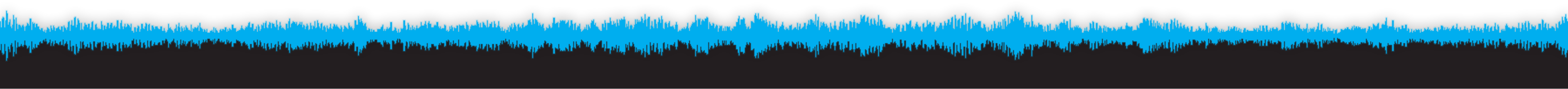
Examine **this picture**, listing the setlists of songs performed by the Grateful Dead during four consecutive shows in 1970.








Based on the setlists, make the following calculations:

- How many songs in total did the Grateful Dead perform over these four concerts?
  - What is the average number of songs the Grateful Dead performed each night? (Hint: average= total number of songs performed/number of concerts.)
  - How many unique songs did the Grateful Dead perform during these four concerts?
  - Which songs were played the most during the four concerts? Which songs were played the least?
  - How did you determine your answer to question 4?
- 







Consider or ask a friend:

- Based on your calculations, can you make any conclusions about how the Grateful Dead approached their live concerts? How did they keep their concerts interesting for their most devoted fans?
- 






Use math to understand more about the Grateful Dead's success. Read or print out **this handout**, and use a scratch piece of paper to answer the questions on page 2 of the handout.





Return to the list you made at the beginning of the lesson on steps an artist or band might take to achieve success.

Consider or ask a friend:

- Which steps on your list did the Grateful Dead pursue? Which one's did they not pursue?
  - Based on what you learned about the Grateful Dead, what would you add to your list?
- 



# SUMMARY

- The Grateful Dead was one of the most successful bands of all time
- They achieved this success through hard work, playing 2318 concerts over their 30 year career
- Their concerts were events that welcomed all sorts of people, and by varying the songs they played constantly, each concert became a unique experience
- You can use mathematical knowledge to understand a band's musical journey and cultural impact

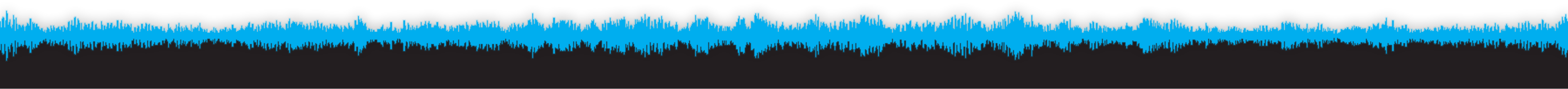


# BE CREATIVE

Using the information on **this handout**, create your own Grateful Dead word problems, either on a scrap piece of paper or page 4 of the handout.

Create a fun and colorful infographic using some of the numbers in this lesson to tell the story of The Grateful Dead. You may use **this page**.

Design your own Grateful Dead T-shirt using some of the numbers in this lesson. **Here is an example**.





# BE CURIOUS

Read [this brief article](#) about a conference just for Grateful Dead Fans:  
Imagine that you are a person at this conference. Write an imaginary journal entry describing your experience at the conference.



# CAREER CONNECTIONS

Interested in the music business? You might be interested in pursuing careers in:

- Performing Arts
- Production and Managerial Arts
- Marketing
- Entrepreneurship/Self-Employment
- Business Management





# CONNECT

Share with us! Either you or an adult in your life can share your infographic, t shirt design, or journal entry with TeachRock on **Instagram** or **Facebook**, email to **info@teachrock.org**, or Tweet it to **@TeachRock**





★ *TEACHROCK* ★  
•ORG

Visit us at [teachrock.org](https://teachrock.org) for hundreds of other free arts-rich resources for every age range and classroom.

Please check back to [teachrock.org/distancelearning](https://teachrock.org/distancelearning) frequently as we will update the material daily!