

MATH WITH BEYONCÉ

Est. Time: 60 minutes

Subjects: General Music, Math

Age Range: Elementary School

★ *TEACHROCK* ★



How can math be used to demonstrate Beyoncé's success?

In this lesson, you will:

- Learn about Beyoncé's career and successful tours
 - Investigate the numbers behind Beyoncé on social media
 - Formulate equations that relate to numeric information regarding Beyoncé
- 



Beyoncé

Considered by many to be one of the greatest contemporary entertainers, Beyoncé Knowles-Carter is a multi-platinum, Grammy Award-winning artist. She first captured the public's attention as lead vocalist of the R&B group Destiny's Child, and went on to become one of the most nominated and most awarded female artists in history.

Read more about Beyoncé's career and influence [here](#).





Awards

As of June 2020, Beyoncé has received the following awards:

- 9 American Music Awards (24 total nominations)
 - 30 BET/BET Hip Hop Awards (65 total nominations)
 - 22 Billboard Music Awards (78 total nominations)
 - 24 Grammys (70 total nominations)
 - 13 MTV Video Music Awards (37 total nominations)
- 



On a scratch piece of paper, answer the following questions based on the above list:

- How many awards total has Beyoncé received?
 - How many total award nominations has she received?
 - What's the percentage of times Beyoncé has won the awards she's nominated for? (Hint: divide the total awards by the total number of nominations.)
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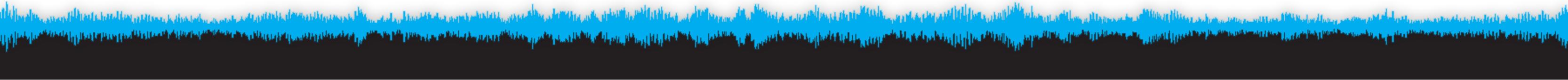


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Bonus Questions:

- Which of the following awards listed on the previous slide has Beyoncé had the highest percentage of winning?
 - Which of the following awards has she had the lowest percentage of winning?
 - Can you think of anything that might explain why Beyoncé has had a higher percentage chance of winning some awards, and not others?
- 



Beychella

Beyoncé is dedicated to her craft. Only two months after giving birth to twins, she began preparing for her headline performance at the 2018 Coachella Music Festival.

The performance, now known as “Beychella,” was the first headline performance by a Black female at Coachella. It was two hours long, and featured the largest set design ever installed at the festival.





To prepare for the performance, Beyoncé rehearsed with her team for 8 hours a day, five days a week, for eight months.

- How many hours in all did Beyoncé and her team rehearse?
 - Why might have Beyoncé felt the need to put so much effort into creating an historic performance?
- 



Social Media

Beyoncé understands the power of social media! She has the 9th most followed Instagram account, at 148,000,000 followers! Her 2017 announcement that she was pregnant with twins received over 11,000,000 likes.

Beyoncé's posts receive an average of 3,054,577 likes, and she typically receives 25,176 comments per post.

On average, how many people who like Beyoncé's posts are not commenting?





Social Media

- Beyoncé's YouTube Channel has 20,600,000 subscribers.
 - Her channel had 6,231,279 views during the month of May 2020.
 - Total Views for Beyoncé 's channel are 867,588,429.
 - Beyoncé 's most popular YouTube Video is "Halo" with over 1,000,000,000 views. Her second most popular video is "Single Ladies" with over 762,000,000 views.
 - Create a math problem using this information from YouTube.
- 



Touring

- Beyoncé has amassed a staggering amount of wealth throughout her career, especially through touring. In 2020, Beyoncé was named one of the most successful touring artists of the decade with earnings of over \$857,000,000.
 - In support of her groundbreaking 2016 album *Lemonade*, Beyoncé embarked on the “Formation” World Tour in 2016, which earned \$256,000,000.
 - How much money did all of Beyoncé’s tours earn in total?
- 



Giving Back

Individually and through her organization BEYGOOD, Beyoncé supports multiple charities.

Here are some examples of her generosity:

- \$6 million to support communities of color and essential workers during COVID
- \$7 million to support people displaced as a result of Hurricane Katrina
- \$4 million to Phoenix House, a rehabilitation center
- \$100,000 to four HBCUs to provide scholarships for students

How much money has Beyoncé given to these charities?



Math with Beyoncé

Use this handout which details some of Beyoncé's numbers to create three or more math problems of your own to share with a friend or family member.

You can **use this page** to create your problems and illustrate them to make it more fun!



SUMMARY

- Beyoncé is an award-winning recording artist who is known for her vocals, videos, and live shows
- Beyoncé is one of the most popular celebrities in the world, with a strong social media presence on Instagram and YouTube
- Beyoncé's success and generosity can be calculated using math along with her cultural impact that celebrates her roots and the Black experience



BE CREATIVE

- Using this fact sheet, create your own fun and colorful Beyoncé Infographic using **this page**.
- Imagine that you are a dancer who is on tour with Beyoncé! Write a creative Math Story in which you tell about your experiences in mathematical terms. How many hours are you dancing each week? How many dance shoes do you go through? Include some fun word problems at the end of your story.

BE CREATIVE

- Beyoncé generously donates money to charity for causes she believes in. But you don't need money to make a difference. List some ways you can fight for a cause you believe in right now.

BE CURIOUS

In the song “NICE,” Beyoncé raps:

“My success can't be quantified
If I [cared] about streaming numbers
Would have put Lemonade up on Spotify”



BE CURIOUS

Consider or ask a friend:

- What does “quantify” mean?
- What might Beyoncé mean when she says her “success can’t be quantified”? How might Beyoncé define success?
- In your opinion, what is the definition of success? Is it relegated to things that can be quantified, like money or social media followers? Or are there other indicators of success that can’t be as easily measured?

CONNECT

Share with us! Either you or an adult in your life can share your story problems, infographic, or creative math story with TeachRock on **Instagram** or **Facebook**, email to **info@teachrock.org**, or Tweet it to **@TeachRock**



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