There are various ways we communicate with each other. In person we talk, listen, and make gestures with our face, hands and so on to let someone else know if we are excited, sad, or puzzled.

Over the past 10 to 20 years, there has been another way we have been communicating with each other through technology like smartphones, tablets and computers. You and your siblings probably know a lot about this relatively new way of communicating.

1. What is social media? What are some ways social media is used?

Social media is organized by computer software (like apps) that allow one user to share information with many users, and can be viewed by hundreds, thousands or even millions of people. Social media apps are a way to share information to many, many people across most countries in the world.

One way to share information that is relatively new is sharing a video. There are several apps you can use to upload videos.
2. What are some apps you, your siblings or your parents use to watch videos? What do you think the most popular YouTube video is?
3. On your own, write down some ways to figure out the most popular videos on YouTube. After you have had some time to write down your ideas, share and discuss ways to measure popularity in pairs or groups.

As of July 29, 2022, the most watched YouTube videos were:

4. What is something that these Top 10 most watched videos have in common?

Have you watched any of these videos on YouTube?

5. There are over 10 billion views for the "Baby Shark Dance" video.
a. Does this make sense? Explain.
b. What is the current estimated population of the world?
c. What is the current population of the United States?
d. How many people live in our state?
e. How many students go to our school?

Let's explore how big some of these numbers are.
6. Compare the number of people in our school to the population of the United States and the world.
a. How many of our schools would you need to approximate the population of the United States?
b. How many of our schools would you need to approximate the population of the world?


One of Sam's favorite music videos is "Uptown Funk" by Mark Ronson and Bruno Mars. Gabriel has heard his younger sister watch "Baby Shark Dance" by Pinkfong more times than he can remember. In fact, Gabriel now gets so annoyed when his sister watches "Baby Shark Dance" that he clicks the dislike icon every time his sister listens to the video.

It turns out that Gabriel was not alone. The "Baby Shark Dance" is one of the most disliked videos on Youtube with 15 million dislikes, compared to 36 million likes.

7. What is the ratio of likes to dislikes for the "Baby Shark Dance" video?
8. Write two more ratios that are equivalent to the ratio of likes to dislikes for the "Baby Shark Dance" video.
9. With this information about likes and dislikes, is the "Baby Shark Dance" video popular? Explain.

Alexis is trying to figure out the ratio of likes to dislikes for a video she posted to social media. After 200 views, there were 40 likes and 10 dislikes.

To compare her video data to the "Baby Shark Dance" video, Alexis makes a ratio table to show step-by-step, each of her calculations.

| Likes | Dislikes |
| :---: | :---: |
| 40 | 10 |
| 80 | 20 |
| 120 | 30 |
| 360 | 90 |
| 36 | 9 |


10. Explain how Alexis found the last ratio, 36 to 9, in her ratio table.
11. Is the ratio of likes to dislikes better for Alexis' video or "Baby Shark"? Discuss this in pairs or groups and be ready to share your reasoning.

## Summary

When using a ratio table, you can use many different types of operations to make new rows. You can multiply or divide both numbers to get a new pair. You can also add or subtract ratios to make new equivalent ratios. Ratio tables can be used to keep track of information when you solve problems.

In Alexis' ratio table showing Views : Likes, you could multiply the second row by 5 to get the third row. You can also add row 1 and row 2 to get row 3 . It's the same result. It's like math magic!

## Exit Ticket

Alexis makes a different ratio table that compares the number of views for her video to the number of likes.

| Views | Likes |
| :---: | :---: |
| 200 | 40 |
| 50 | 10 |
| 250 | 50 |
|  |  |
|  |  |

12. Explain how Alexis found the numbers in the second and third rows.
13. Use the information in Alexis' ratio table to estimate the number of likes she might get for 600 views.
