

“Don’t Panic – The Facts About Population” a documentary by Hans Rosling.

Introduction: After completing the nine-question survey, you will watch a 60-minute documentary about world population. **Please answer the following questions as you watch the video.** The answers to the questions 1-32 can be found by watching the first half of the video. The answers to questions 33-51 can be found by watching the second half of the video. http://www.gapminder.org/videos/dont-panic-the-facts-about-population/#.U3Di_1VdUuc

1. When was Earth's population first estimated to reach 10 million people?
2. Find a country other than Sweden that has about 10 million people.
3. In the year 1800, Earth’s population reached 1 billion people. How would you describe the rate of change for Earth’s population up to 1800?
4. What is the average rate of change in population from 10,000 BC to 1800? 1800 to 1900?
5. What was causing the population to grow so quickly?
6. How would you describe the rate of change of Earth’s population when it reached 7 billion people?
7. Where has the greatest amount of population growth happened in the world?
8. Define *fertility rate*.
9. Why was 1972 an important year for Bangladesh?
10. In Bangladesh in 1972, how many babies were born per woman, on average? What was the predicted life span of each of those babies born in 1972?
11. In Bangladesh 50 years later, how many babies are born per woman, on average? What is the predicted life span of each of those babies born now?
12. Worldwide in 1963, how many babies were born per woman, on average? Do you think this average is a mean, median, or mode? Justify your reasoning.
13. Describe the differences between families in *developed* countries and families in *developing* countries in 1963.
14. Worldwide today, how many babies are born per woman, on average?

15. What has been the cause of this drastic change in fertility rate from 1963 to today?
16. If you randomly pick an answer to a multiple-choice question with four answer choices, what is the probability that you will guess the correct answer?
17. What is the difference between answering a question with a lack of knowledge versus with preconceived ideas?
18. Why do you think Hans says the shift in family size is one of the most important in his lifetime?
19. Fill in the blank: In 1972, 1 out of every ____ Bangladeshi children died before reaching the age of five.
20. What has caused the increase in child survival rate in Bangladesh?
21. Why did Earth's population grow so slowly before the 1800s?
22. Does a two-parent family with an average size of six children imply fast population growth?
23. Fill in the blank: Worldwide in 1963, a two-parent family had an average size of ____ children and on average ____ children survived. This resulted in a ____ population growth.
24. Worldwide today, what is the current makeup of the average family?
25. Why is Earth nearing the end of fast population growth?
26. In the year 2000, how many children were there in the world?
27. Define the *Age of Peak Child*.
28. If the number of children in the world is not increasing, then how can the number of adults be increasing?
29. Fill in the table based on what you have learned in the video.

Age Interval	0-15	15-30	30-45	45-60	60+	Total
Current population in billions						
Next generation						
Next generation						
Next generation						

30. Currently, where do the 7 billion people on Earth live? What is the pin code of the world?
31. In 2100, where will the projected 11 billion people on Earth live? What will the pin code of the world be at that time?

32. In 2100, which two continents will hold about 80% of Earth's population?

Answers to the questions above are from the first 30 minutes of the video. Answers to the questions below are from the final 30 minutes of the video.

33. In the video, how long does it take the African woman to gather water for the household? How far do you think the water source is from her house?

34. In the video, how long did the African man save his money to buy a roof? What is the longest amount of time you have saved to buy something?

35. Describe how bicycles can make a huge difference to the rural poor of Africa.

36. On average, how much do the richest billion people of the world earn per day? The middle billion? The lowest billion?

37. What is extreme poverty? Where is the cutoff among the people of the world for the extreme poverty line?

38. List in order the types of transportation that people can afford to purchase as they have more money.

39. Discuss if you agree or don't agree that the richest billion people of the world, who make about \$100 per day, look down upon everyone else in the world as equally poor.

40. What is the percent of increase from \$1 to \$10? Discuss if the percentage correlates to a percentage of a better life. For instance, if the percent increase in money were 500%, would this correlate to a 500% increase in quality of life.

41. If it took the African man all morning to walk to the market but less than hour to travel there by bicycle, how far away do you believe the market is? How fast do you believe the man was walking? How fast do you believe he can travel by bicycle?

42. How is the path to a better life for the family in rural Africa similar to yours?

43. Describe the graph of "Lifespan versus Income" in the year 1800.

44. Describe what happens in the next 200 years after 1800 for the graph of "Lifespan versus Income".

45. Describe the distribution of wealth in the world in 1963.

46. Describe the distribution of wealth in the world in 2012.

47. In how many years would the United Nations like to eliminate extreme poverty? Why or why not do you think this goal can be reached?

48. According to Hans, what does a good life mean to most people of the world? Why or why not do you agree with this?
49. How much of the fossil fuel does the world's richest billion people use? And the next richest billion? And the next richest billion?
50. What does Hans suggest that the richest billion should do? Discuss whether you agree or disagree with his viewpoint.
51. "The world is much better than many of you think," said Hans. Discuss whether you agree or disagree?