People Behind Totals

Compare regional population trends with the world total.

ES.11.a "Analyze and interpret data on human population trends in developing and developed countries and in the global population as a whole."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two numbers that show a change in each regional group, then circle two world totals from the same years. Number the pairs 1 and 2 so you can compare how regional changes relate to world growth.

Who Is Behind World Population Growth?

(1) Imagine planning water systems for a city while the number of people it serves changes. Population data can help planners spot long-term patterns, but a world total hides differences among regions. The table groups countries using the United Nations' broad "more developed" and "less developed" regional categories. Here, those groups are called developed and developing for brevity.

APPROXIMATE POPULATION BY REGION, IN BILLIONS

Year	Developing regions	Developed regions	World
1950	1.7	0.8	2.5
2000	4.9	1.2	6.1
2020	6.5	1.3	7.8
2050 projection	8.4	1.3	9.7

(2) The numbers are approximate billions of people, based on United Nations 2019 population estimates and its medium projection for 2050. Earlier years are estimates, while 2050 is a projection, not a count. To compare changes fairly, subtract the starting population from the ending population. To compare periods of different lengths, divide each change by its number of years.

(3) A population can grow even when its share of the world total shrinks, if other populations grow faster. To find a group's share in any year, divide its population by the world population for that year. Changes in birth rates, death rates, and migration may alter totals. Look at both regional values and the world total before drawing conclusions.

2 ANSWER WITH EVIDENCE

Use the passage

1. From 1950 to 2020, how much did each regional population increase? Which region contributed more to world growth during that period?

2. Compare the projected changes from 2020 to 2050 in the two regional groups. How do they relate to the projected change in the world total?

3. About what share of the world population lived in developing regions in 1950 and in 2000? What changed?

4. Compare the average yearly increase in world population from 2000 to 2020 with the projected average from 2020 to 2050. Which is larger?

3 YOUR TURN

Your own words

Write a four-sentence note for a museum display. Compare developing regions' share of the world population in 2020 and 2050 using percentages, connect that change to the world trend, and explain one reason the 2050 figures are uncertain.

People Behind Totals

PART 1 · READ AND MARK

Underline two numbers that show a change in each regional group, then circle two world totals from the same years. Number the pairs 1 and 2 so you can compare how regional changes relate to world growth. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	From 1950 to 2020, how much did each regional population increase? Which region contributed more to world growth during that period?	**Developing regions increased by about 4.8 billion; developed regions increased by about 0.5 billion. Developing regions contributed more.**
2	Compare the projected changes from 2020 to 2050 in the two regional groups. How do they relate to the projected change in the world total?	**Developing regions increase by about 1.9 billion, while developed regions stay near 1.3 billion. The world total also increases by about 1.9 billion.**
3	About what share of the world population lived in developing regions in 1950 and in 2000? What changed?	**About 68% in 1950 (1.7 ÷ 2.5) and 80% in 2000 (4.9 ÷ 6.1). The share increased.**
4	Compare the average yearly increase in world population from 2000 to 2020 with the projected average from 2020 to 2050. Which is larger?	**From 2000 to 2020, the average was about 0.085 billion people per year. From 2020 to 2050, the projected average is about 0.063 billion per year, so the earlier rate is larger.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

In 2020, about 83% of the world's population lived in developing regions (6.5 ÷ 7.8). By 2050, the projected share is about 87% (8.4 ÷ 9.7). This rising share helps explain why the world total is projected to grow even though the developed-region total changes little. The 2050 figures are uncertain because future birth rates may differ from those used in the projection.

Accept percentages rounded to the nearest whole number and equivalent explanations of regional contributions. For 2050, responses should identify the values as projections rather than observed counts.