#### **Nine Countries:**

#### Requirements:

Your choice should include the three (3) countries in North America (Canada, the USA and Mexico) as well as at least six (6) countries from two (2) other subregions of the world. Note that three (3) of these six (6) countries should be classified as developing [3], according to the world development index, while the remaining three (3) should be classified as underdeveloped nations.

North America: 1. Canada, 2. Mexico, 3. USA

Asia(developing): 1. China, 2. India, 3. Vietnam

Africa (underdeveloped): 1. Liberia, 2. Mozambique, 3. South Africa

### Details of dimensions and attributes:

Country: (at least 12 attributes)

- CountryKey
- Name
- Region
- Continent
- Currency
- Capital
- Total Population
- Total Population rank
- Urban Population
- Rural Population
- Birthrate
- Death rate
- Growth rate
- Density

#### Month:

- MonthKey
- Name
- Quarter
- Year
- Decade

#### Education: (at least 12 attributes)

- EducationKey
- Female Literacy Rate (% of people age 15 and above)
- Male Literacy Rate (% of people age 15 and above)
- Total Literacy Rate (% of people age 15 and above)
- Female enrollment in primary school
- Male enrollment in primary school

- Primary school enrollment gross
- Female enrollment in secondary school
- Male enrollment in secondary school
- Second school enrollment gross
- Public Education Spending total (% of GDP)
- Primary completion rate, female(% of relevant age group)
- Primary completion rate, male(% of relevant age group)
- Enrollment in high school
- Enrollment in college/university
- Number of college/university
- Number of professors
- Number of libraries

Source: OECD Data

## Health: (at least 16 attributes)

- HealthKey
- Adults (ages 15+) living with HIV
- Children (ages 0-14) newly infected with HIV
- Children (0-14) living with HIV
- Children orphaned by HIV/AIDS
- Capital health expenditure (% of GDP)
- Prevalence of overweight (% of children under 5)
- Prevalence of overweight (% of adults)
- AIDS estimated deaths (UNAIDS estimates)
- Mortality caused by road traffic injury (per 100,000 people)
- Current health expenditure (% of GDP)
- Low-birthweight babies (% of births)
- Domestic general government health expenditure (% of GDP)
- Hospital beds (per 1,000 people)
- Number of people who are undernourished
- Nurses and midwives (per 1,000 people)
- Domestic general government health expenditure (% of general government expenditure)
- Physicians (per 1,000 people)
- Domestic Health Expenditure
- Number of Surgical Procedures
- Number of infant death
- Number of nurses
- Number of Physicians
- Adults with diabetes
- Children with diabetes
- Adults with overweight
- Children with overweight
- Adults with HIV
- Adults Newly Infected HIV
- Number of adult deaths due to HIV
- Children with HIV

- Children Newly Infected HIV
- Number of children deaths due to HIV
- Total number of infected by Covid-19

## Quality of life: (at least 12 attributes)

- QualityofLifeKey
- People using at least basic drinking water services, urban (% of urban population)
- People using at least basic drinking water services, rural (% of rural population)
- People with basic handwashing facilities including soap and water (% of the population)
- Human capital index (HCI), female (scale 0-1)
- Human capital index (HCI), male (scale 0-1)
- People using safely managed drinking water services (% of the population)
- People using at least basic sanitation services (% of the population)
- People using safely managed sanitation services (% of the population)
- People using safely managed to drink water services, urban (% of urban population)
- Unemployment, total (% of the total labor force)
- Pregnant women receiving prenatal care (%)
- Unemployment, male (% of the male labor force)
- Unemployment, female (% of the female labor force)
- female unemployment rate
- male unemployment rate
- total unemployment rate
- Maternal Leave benefits
- Religious Belief
- Safety
- Air Pollution Level
- Freedom of Speech
- Medical Care
- Access to Drinking Water
- Access to Electricity
- Access to Basic Handwashing Facilities

#### Population: (at least 12 attributes)

- PopulationKey
- The female population of the total population
- The male population of the total population
- Female life Expectancy
- Male life Expectancy
- Age dependency ratio (% of working-age population)
- Urban population in total population
- Rural population in total population
- Urban Population Growth
- Rural Population Growth
- Suicide mortality rate, female (per 100,000 female population)
- Suicide mortality rate, male (per 100,000 male population)
- Number of infant deaths

## Event: (at least 10 events per country)

- EventKey
- Name
- Start-date
- End-date
- Start-Month
- End-month
- Start-Year
- End-Year
- Place
- Description (why did it happen)
- Outcome (what's the result of it)

## **Other Sources:**

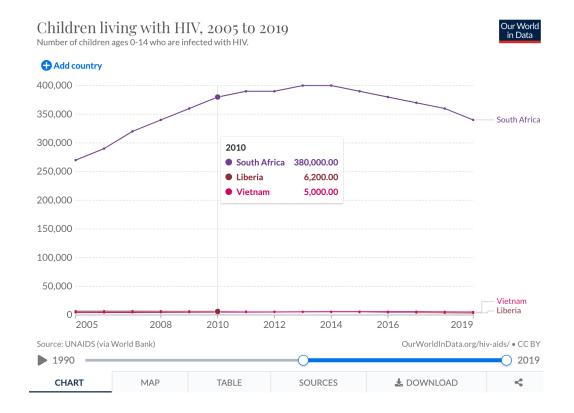
1. <a href="https://worldpopulationreview.com/countries/china-population">https://worldpopulationreview.com/countries/china-population</a>

	• •			• •	
nina Population	by Year (Historical)				Show Sou
					≛ CSV ≛ JSON
Year ▼	Population	Growth Rate	Density (km²)	Population Rank	Density Rank
2022	1,448,471,400	0.38%	154.29	1	80
2021	1,444,216,107	0.42%	153.83	1	80
2020	1,439,323,776	0.39%	153.31	1	79
2019	1,433,783,686	0.43%	152.72	1	79
2018	1,427,647,786	0.47%	152.07	1	79
2017	1,421,021,791	0.49%	151.36	1	79
2015	1,406,847,870	0.55%	149.85	1	79
2010	1,368,810,615	0.56%	145.80	1	79
2005	1,330,776,380	0.62%	141.75	1	73
2000	1,290,550,765	0.79%	137.47	1	71

# 2. <a href="https://www.numbeo.com/quality-of-life/rankings">https://www.numbeo.com/quality-of-life/rankings</a> by country.jsp?title=2022&re gion=142

Rank	Country	Quality of Life Index	Purchasing Power Index	Safety Index	Health Care ^ Index	Cost of Living ^ Index	Property Price to Income Ratio	Traffic Commute Time ^ Index	Pollution	Climate Index
1	Oman	173.68	84.24	80.01	58.23	49.42	4.59	22.76	37.21	67.22
2	Japan	169.48	87.11	77.88	80.49	77.03	11.02	40.65	38.82	85.27
3	United Arab Emirates	160.38	92.17	84.86	68.73	58.33	4.42	36.19	49.71	45.23
4	Qatar	154.53	93.67	86.22	73.53	62.81	6.18	30.15	59.90	36.03
5	Singapore	151.59	91.34	72.36	71.07	83.98	17.49	41.22	33.31	57.45
6	Saudi Arabia	149.54	91.85	75.28	60.92	50.41	2.79	28.33	63.80	45.98
7	Cyprus	147.10	57.31	67.88	51.98	59.03	6.40	22.93	56.85	93.34
8	Israel	146.06	75.58	67.88	73.83	88.05	13.51	36.37	57.72	94.01
9	Taiwan	140.15	58.35	84.13	86.43	62.35	21.81	31.71	64.68	81.60
10	South Korea	125.04	76.85	73.51	82.72	73.22	29.40	40.02	62.42	68.39

3. <a href="https://ourworldindata.org/hiv-aids">https://ourworldindata.org/hiv-aids</a>



- 4. About education: http://data.uis.unesco.org/index.aspx?queryid=121#
- 5. These attributes of a country from 2005 to 2020 could be found here: <a href="https://www.macrotrends.net/countries/CHN/china/population">https://www.macrotrends.net/countries/CHN/china/population</a>



6. Median age: <a href="https://www.worldometers.info/world-population/china-population/">https://www.worldometers.info/world-population/china-population/</a>

Year	Population	Yearly % Change	Yearly Change	Migrants (net)	Median Age	Fertility Rate	Density (P/Km²)	Urban Pop %	Urban Population	Country's Share of World Pop	World Population	China Global Rank
2020	1,439,323,776	0.46 %	6,495,181	-348,399	38.4	1.69	153	60.8 %	875,075,919	18.47 %	7,794,798,739	1

## List of data quality issues:

- Missing data
  - Drop attribute
    - Female/male age at first marriage: half of the data is missing
  - Replace with a median value

- Data inconsistency
- Data duplication
  - Female population (% of the total population): 2016-2020 is the same
  - Male population (% of the total population): 2016-2020 is also the same