# Population growth

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|---|---|
| **Focus questions** | How fast has population increased over human history?<br>What might help slow the rate of increase? |

## Materials

- Electronic device with internet access

## Procedure

1. Go to `worldpopulationhistory.org/map/2050/mercator/1/0/25/`.
2. Create a table to record the year in which population increased by 1 billion. Add a third column to record the number of years it took to increase by 1 billion. Using the interactive map, determine the year the population increased by 1 billion. Calculate the number of years it took to increase by 1 billion or to double (where appropriate).
3. Graph these results on an app or by hand on graph paper.

## Reflection

1. What might account for the decreasing time between billions?

2. How have humans utilized land resources to increase food production to allow for these increases?

3. What are the effects of technology when used in food production?

4. What factors must be considered to project future growth?

5. How do you explain that resource availability does not seem to limit human population growth?

## Resources

- ourworldindata.org/world-population-growth
- worldpopulationhistory.org/map/2050/mercator/1/0/25/
- theworldcounts.com/counters/shocking_environmental_facts_and_statistics/world_population_clock_live

## Assessments

Analyze and interpret data to provide evidence for the increase in number of the human population.

### Rubric for assessment

| Skill | Beginning | Satisfactory | Exemplar |
|---|---|---|---|
| Student used graphical displays (graphs and/or tables) of human population data sets to identify relationships over time or space. | Student recorded data but not in a table, chart, or graph. | Student created a data table that organizes the data. | Student created a graph from organized data to show relationships. |

### Rubric for self-assessment

| Skill | Yes | No |
|---|---|---|
| I created a table to organize data. | | |
| I created a graph to show relationships between data. | | |