FAMILY TREE

How many ancestors do you have as you go back in time?

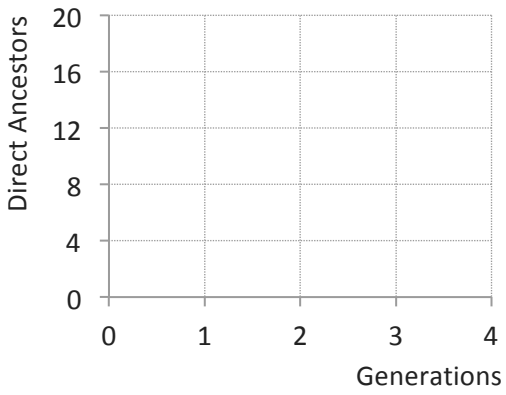
name

date

Act One: Back in Time

1 Your **direct ancestors** are the people you're directly related to in your family tree: parents, grandparents, etc. If you represent generation 0, show how many ancestors you have in each previous generation. As you go back in time, how does this number change?

Gen. 4
Gen. 3
Gen. 2
Gen. 1
Gen. 0



2 How many direct ancestors did you have five generations ago? Ten generations ago? Twenty?

3 Based on your model, how many generations ago were you directly related to 10 million people? What about a billion people…and does this seem reasonable? Explain.

Act Two: Inherit the Earth

4 The table and graph below show how the **human population** has changed over time. Assuming that a generation lasts 25 years, use your model to estimate the number of direct ancestors you had at different points in history.

Based on this, do you think your model accurately reflects how many direct ancestors you had as you go back in time? If so, why? If not, what might account for any discrepancies? Explain.

Historical Event	Year	Est. World Population	Generations Ago	Direct Ancestors
Start of World War II	1939	2.5 billion		
Declaration of Independence	1776	800 million		
Invention of Printing Press	1450	430 million		
Signing of Magna Carta	1215	390 million