Preparation

- Download "Population Data Introduction"
- Access to the "World Population Since 10,000 BCE" chart

Purpose

In this activity, you are introduced to the WHP Three Close Reads for Data tool, which will provide you with a method for unpacking the charts you will encounter in this course and identifying the various elements of data visualizations. Instead of simply accepting data visualizations as truth, you will learn to evaluate the quality of data and the ways that data can be manipulated in charts. This will help you throughout this course, as well as encourage you to be thoughtful and inquisitive when coming across visual representations of data in your everyday life.

Process

The Three Close Reads strategy for articles may already be familiar to you. In order to help you develop your ability to "read" data, the Three Close Reads for Data process is *solely* focused on the charts and graphs in the data articles.

Project X includes several articles that will introduce you to a series of charts from the <u>Our World in Data</u> website. While the articles provide historical context and an overview of the information contained in the charts, the Three Close Reads for Data tool will guide you through the process of reading, understanding, and evaluating each chart you encounter. Before you begin the Data Explorations, be sure to read the article, "A Guide to Reading Charts."

Even though charts and maps are graphics—they're essentially pictures—they still need to be "read" in much the same way you read text. Three Close Reads for Data is a helpful tool for getting all the information you need from the charts. Don't worry—you'll get faster and faster with each reading!

Take a look at the Three Close Reads for Data worksheet and quickly review the process for opening and reading the charts linked in the article.

Overall question or idea to think about as you read:

Before you read the article or open the chart, your teacher will give you a question or idea to think about as you read. Write this question or idea in the box provided at the top of the Three Close Reads for Data worksheet. Keep this framing question or idea in mind as you explore the charts.

Reading 1— What do we have?

The first close read is really meant to be a quick scan of the chart to identify its labels, variables, and scale. It should be very quick and allow you to identify what the chart is measuring. You should be looking at the title, labels, and captions. You should determine whether this is an interactive chart, but don't start playing with any interactive functions just yet. On the Three Close Reads worksheet, look at the "Questions" section for the first close read and see which questions you can answer quickly.

Reading 2— What do we know?

Now, look at second section of the worksheet. Here, you're trying to understand the "story" the chart is telling by identifying its arguments and evaluating its presentation of data. Review the "Pay Attention to..." and "Questions" sections of the worksheet so you know what to keep in mind as you start to examine the chart and play with any interactive elements. If the chart is interactive, what elements can you change? Does that change your understanding of the chart's story?

By the end of the second close read, you should be able to answer the following questions:

- 1. How has the global human population changed in the last 12,000 years?
- 2. In what 50-year period did the human population increase most dramatically?
- 3. Has the global human population ever shrunk? When? What events might have caused this?
- 4. What argument is this chart is making? How did the creator of this chart want you to feel after seeing it?
- 5. What dates do we seem to have the best data for? Do you think you can trust the population data used in this chart?

Reading 3— What does this tell us?

Now, it's time for the third and final read. For this read, focus on why this chart matters, how it can inform us about the past and prepare us for the future. At the end of every Reading 3, you should make a prediction about how the topic covered by the chart will change during your lifetime. How might the global population change in the next 25 years? 50 years? 100 years?

At the end of the third read, discuss the following questions with your class:

- Why does this chart matter? What do global changes in population tell us about human communities, networks, and production and distribution?
- Using this chart, make one prediction about how the global human population will change in your lifetime. What evidence from the chart supports your prediction? Is there any evidence that challenges it?

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Directions : Before you read, look at the "Pay Attention to" and "Questions" lines. Write your answers in the text box.
Chart Title:
Data Exploration Author:
Overall question or idea to think about as you read:
Reading 1: Preview – What do we have?
This will be your quickest read. It should help you get the general idea of what the graphic biography will be about.
Pay attention to: Labels Question: What is the title? How are the axes labeled? Is anything else on the chart labeled?

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Pay attention to: Data representation
Question: How many variables are there and what are they? What are the scales? What time period does the chart cover? Is the chart interactive?
Pay attention to: <i>Data source</i> Question: Where did the data for this chart come from? Do you trust it? Who created the chart?

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Reading 2: Key ideas – What do we know?

In this read,	you will ı	pay att	tention to	o the	informati	on that	most	helps	you und	erstand	the char	t and tl	he int	format	ion i	t is tr	ying	to conve	٠y.

C	ay attention to: Claim(s) Ruestion: What can you say about the data? What story does it tell? Can you make any claims about this data? Does it change when you zoom in compared when you look at the data as a whole?
	ay attention to: Evidence Ruestion: What data from the chart supports this story? Does this change if you change the scale or variables?

Name: Date:

Pay attention to: Presentation Question: How does the way this chart is presented influence how you read it? Has the author selected certain variables or scales that change the conclusions that can be drawn? Is there anything missing from this chart?
Reading 3: Making Connections - What does this tell us?
The third reading is really about why the chart is important and what it can tell us about the past and help us think about the future.
Pay attention to: Significance Question: Why does this matter? Does this impact me, and if so, how? How does it connect what is going on in the world right now? How does it relate to what was happening at the time it was created?

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Pay attention to: Back to the future Question: How does this data compare t years from now?	to today? Based on what you nov	v know, what are your thoughts (on this phenomenon 25 years	s, 50 years, and 100