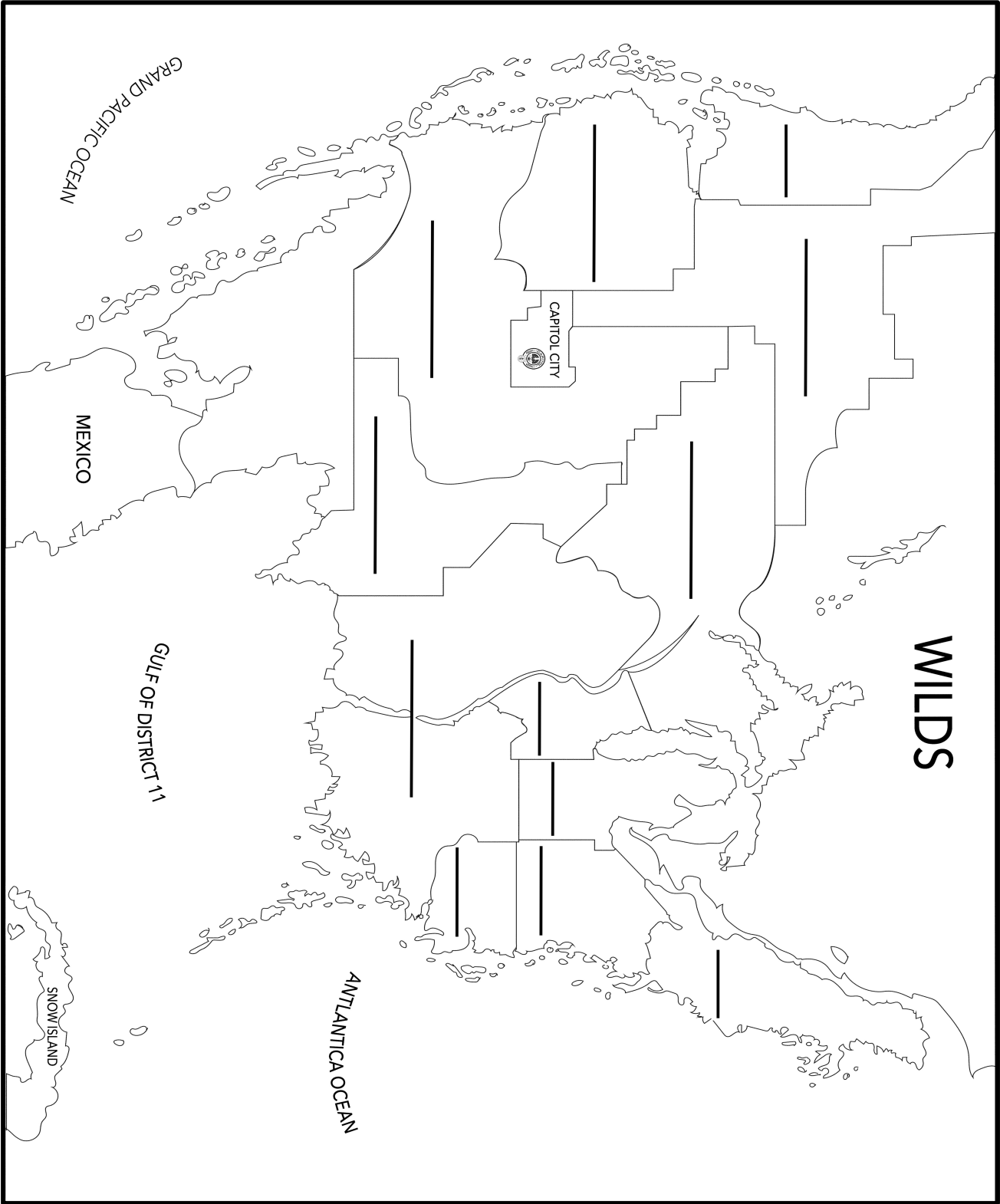


# Map of Panem



Name \_\_\_\_\_

## The Anatomy of Panem Graphic Organizer

Directions: Complete the organizer and add additional notes or ideas for each district as you watch the YouTube [clip](#).



| District | Industry or Export | Professions | Your Notes |
|----------|--------------------|-------------|------------|
| 1        |                    |             |            |
| 2        |                    |             |            |
| 3        |                    |             |            |
| 4        |                    |             |            |
| 5        |                    |             |            |

| District | Industry or Export | Professions | Your Notes |
|----------|--------------------|-------------|------------|
| 6        |                    |             |            |
| 7        |                    |             |            |
| 8        |                    |             |            |
| 9        |                    |             |            |
| 10       |                    |             |            |
| 11       |                    |             |            |
| 12       |                    |             |            |

# Panem District Cards

## District 7: Timber

"This beautiful district is lush with trees, from which these citizens supply our lumber and paper. The people of District 7 are hardworking and down-to-earth."

—Description from *The Hunger Games: Tribute Guide*

| Year | Timber Exports in Thousands of Tons |
|------|-------------------------------------|
| 2020 | 106                                 |
| 2040 | 34                                  |
| 2050 | 25                                  |
| 2060 | 34                                  |
| 2070 | 61                                  |
| 2080 | 106                                 |
| 2100 | Prediction                          |

**District 7** is one of 13 districts of Panem. The region is covered with trees, therefore it provides lumber and paper to the Capitol. Listed below is their timber production and exportation of timber to the Capitol since 2020.

**Directions:** Use the information provided in the table to...

1. Make some generalizations about the resource's contribution to the Capitol.
2. Use the table (or make your own) to graph the points.
  - a. Label your axis
3. Write an algebraic expression to describe your data.



## District 10: Livestock

| Year | Cattle Head Exports by the Thousands |
|------|--------------------------------------|
| 2020 | 242.4                                |
| 2030 | 243.6                                |
| 2040 | 244.8                                |
| 2050 | 246                                  |
| 2060 | 247.2                                |
| 2070 | 248.4                                |
| 2080 | 249.6                                |
| 2090 | 250.8                                |
| 2100 | Prediction                           |

"The gentle lowing of cattle is the first thing a visitor to District 10 hears. This region raises strong, healthy livestock, which becomes the meat that helps us raise strong, healthy children of Panem." —Description from *The Hunger Games: Tribute Guide*

**District 10** is one of 13 districts of Panem. Its main export is livestock and it provides meat (mostly beef) to the Capitol. Listed below is their head of cattle numbers and exportation to the Capitol since 2020.

**Directions:** Use the information provided in the table to...

1. Make some generalizations about the resource's contribution to the Capitol.
2. Use the table (or make your own) to graph the points.
  - a. Label your axis
3. Write an algebraic expression to describe your data.



## District 12: Coal

| Year | Coal Exports by the Ton |
|------|-------------------------|
| 2055 | 417.8                   |
| 2060 | 417.6                   |
| 2065 | 417.4                   |
| 2070 | 417.2                   |
| 2075 | 417                     |
| 2080 | 416.8                   |
| 2085 | 416.6                   |
| 2090 | 416.4                   |
| 2095 | Prediction              |

*"One of the outer districts, this is a crucial one that provides support for the Capitol. These brave and hard workers descend deep into the earth to mine the coal that keeps Panem running."*

—Description from *The Hunger Games: Tribute Guide*



District 12 is the smallest and poorest of the 13 districts of Panem. Its main export is coal and occasionally provides medicine found in the plants from the surrounding Appalachian mountains. Listed below is their coal exportation numbers for the Capitol since 2020.

**Directions:** Use the information provided in the table to...

1. Make some generalizations about the resource's contribution to the Capitol.
2. Use the table (or make your own) to graph the points.
  - a. Label your axis
3. Write an algebraic expression to describe your data.

Name: \_\_\_\_\_

## Natural Resources of Panem

Directions:

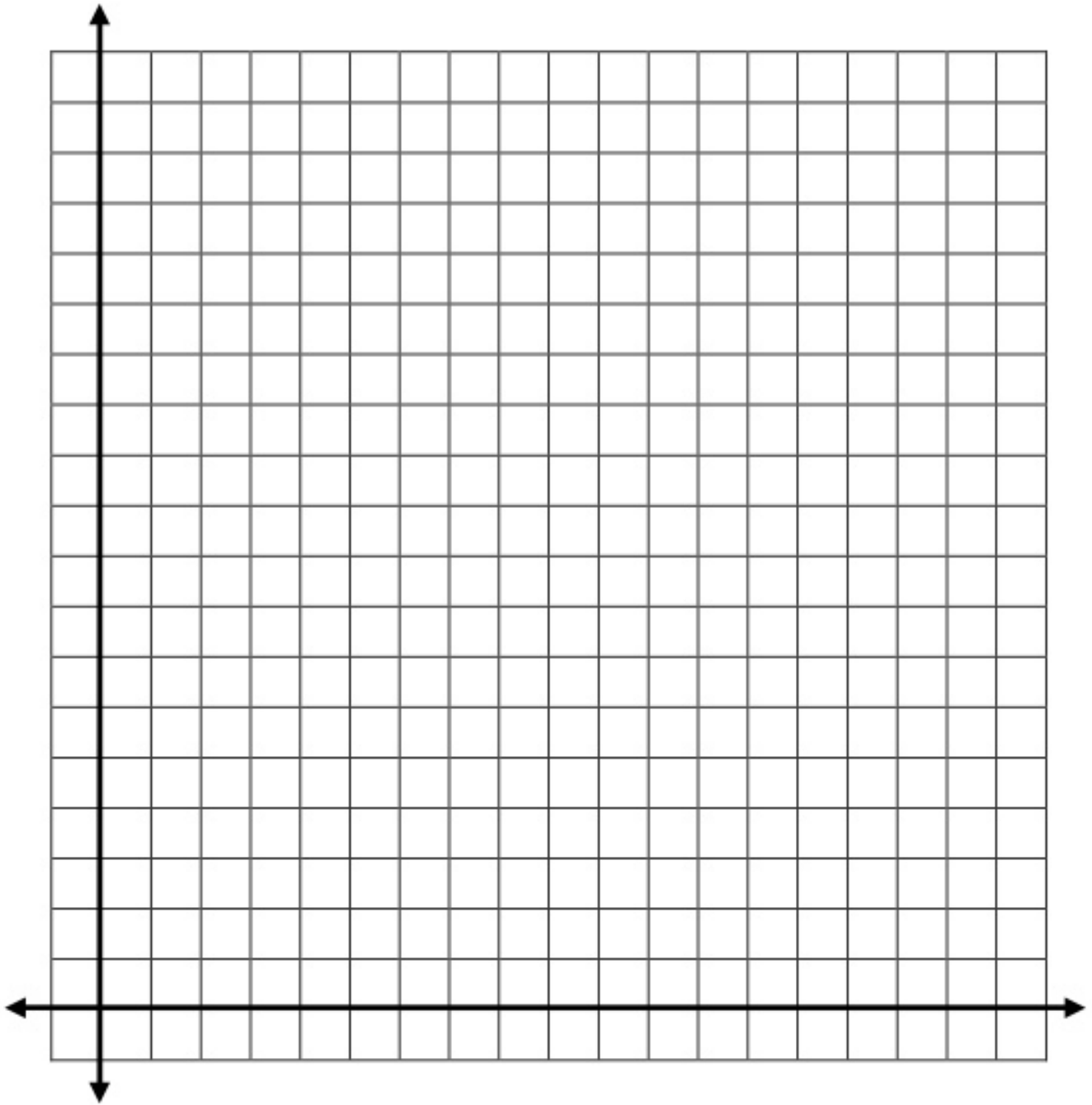
1. Each group will receive a Panem District Card,
2. Cards will provide a data table and basic information about the district and how it supports the Capitol.
3. In your groups, work collaboratively to answer the questions below.
4. You may use a calculator and any tools needed to support your thinking and process.



District #: \_\_\_\_\_ Industry/ Natural Resource: \_\_\_\_\_

Generalizations about the Data Provided:

Graph: You may use this one, or paste your own on TOP!



Algebraic Expression / Linear Function?

Questions to Ponder...

1. What type of data did your graph produce?

2. What equation was used to represent your data?

My Notes from Class Discussion



## Session 1: Exit Ticket

Directions: Answer the following using complete sentences. Be sure to provide support for your claim.

Why do you feel the Capitol divided the old states into “Districts” with a focus on natural resources?



## Success Criteria for Grading

- ☐ I have answered the question. (1 point)
- ☐ I have provided at least 2 reasons to support my response. (2 points)
- ☐ I have used accurately at least 2 of my vocabulary words in my response. (1 point)
- ☐ I have used complete sentences in my response. (1 point)

Name \_\_\_\_\_

## Peer Evaluation Success Criteria Checklist

Directions: Place a check in the box next to each success criteria.



| Success Criteria            |   | Complete | Partially Complete | Missing |
|-----------------------------|---|----------|--------------------|---------|
| <b>Graph</b>                | Graph is titled.  |          |                    |         |
|                             | Both axis are labeled.  |          |                    |         |
|                             | Points are plotted correctly.   |          |                    |         |
|                             | Points are connected.   |          |                    |         |
| <b>Algebraic Expression</b> | The expression has been recorded using variables to represent the x and y points on the graph.              |          |                    |         |
|                             | The expression has been PROVEN.   |          |                    |         |
| <b>Prediction</b>           | The prediction for the future year given has been recorded AND proven.                                      |          |                    |         |
| <b>Written Evaluation</b>   | The group has recorded their thoughts regarding their success and an explanation of their process to solve. |          |                    |         |

## Glows and Grows

| List 3 glowing aspects of the project. | List 3 grows or areas for improvement. |
|--|--|
|  |  |
|  |  |
|  |  |

Name \_\_\_\_\_

## End Assessment

Directions: Answer the following using complete sentences. Be sure to provide support for your claim.

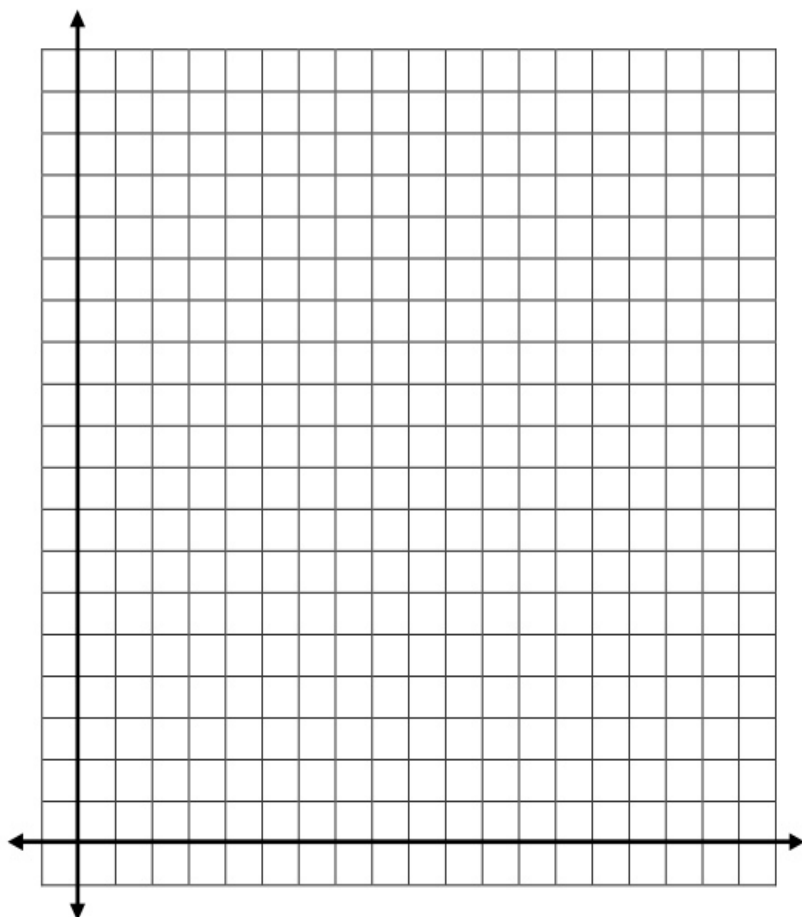


President Snow has declared District 11 will be split in 2 Districts. The western side of the Mississippi (District 11.1) will continue to farm and provide agriculture for the Capitol. The eastern side of the Mississippi (District 11.2) will now focus on oil production. How might this split of the larger District 11 impact the region and its surrounding environment? (5 points)

### Success Criteria for Grading

- |   |            |
|---|------------|
| <input type="checkbox"/> I have answered the question.  | (1 point)  |
| <input type="checkbox"/> I have provided at least 2 reasons to support my response.               | (2 points) |
| <input type="checkbox"/> I have accurately used at least 2 of my vocabulary words in my response. | (1 point)  |
| <input type="checkbox"/> I have used complete sentences in my response.                           | (1 point)  |

1. In District 11.2, the Capitol has tracked the first 12 months of the oil barrel shipments they have received. Based on the table, please complete the following for the Capitol's analysis:
  - a. A graph of oil production. (9 points)
  - b. An algebraic expression to represent the trend. (2 points)
  - c. A prediction for the oil production (if the data continues at this rate for the end of the 2<sup>nd</sup> year. (2 points)
  - d. An explanation on how I know the above is correct. (2 points)



| Month | Barrels of Oil by the Thousands |
|-------|---------------------------------|
| 0     | 4                               |
| 3     | 10                              |
| 6     | 16                              |
| 9     | 22                              |
| 12    | 28                              |

### Success Criteria for Grading

- |  |            |
|--|------------|
| <input type="checkbox"/> I have titled my graph.   | (1 point)  |
| <input type="checkbox"/> I have labeled my x and y axis.   | (2 points) |
| <input type="checkbox"/> I have graphed the points correctly.  | (5 points) |
| <input type="checkbox"/> I have connected the dots on my graph.                                      | (1 point)  |
| <input type="checkbox"/> I have written an expression using variables for x and y.                   | (1 point)  |
| <input type="checkbox"/> I have proven my expression to be true.                                     | (1 point)  |
| <input type="checkbox"/> I have made a prediction for the 2 <sup>nd</sup> year of oil production.    | (1 point)  |
| <input type="checkbox"/> I have proven my prediction for the 2 <sup>nd</sup> year of oil production. | (1 point)  |
| <input type="checkbox"/> I have explained how I know my information to be true.                      | (2 points) |

Name \_\_\_\_\_

## Vocabulary Test

Directions: Match the vocabulary word to its definition.

| Vocabulary Word                | Definition  |
|--------------------------------|---|
| _____ 1. linear function       | A. gains that occur involving money   |
| _____ 2. natural resource      | B. a process that weighs the benefit of a decision as it relates to the cost of the decision, often used to make political and business decisions |
| _____ 3. thermal expansion     | C. increase in water volume due to rise in temperatures   |
| _____ 4. cost benefit analysis | D. an equation with 1 or 2 variables that will form a line when graphed on a coordinate plane   |
| _____ 5. economic advantage    | E. materials that occur in nature, often used for an economic gain  |

Name \_\_\_\_\_

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