## Keywords (add more words):

collect/collected data highest value instrument lowest value measure

1. Examine- What are the data (information) about?
a. The data (information) are about

Example: air temperature, precipitation, plants, etc.
b. By looking at the datal see $\qquad$
2. Search and Find- How were the data measured?
a. The data were collected by $\qquad$ .
Example: me, scientist, satellite, etc.
b. The instrument used to measure this data was a/an $\qquad$ .

Example: thermometer, ruler, etc.
3. Analyze- What do the data show?
$\qquad$ -.
a. The place on Earth where the data were collected is

Example: city, state, latitude/longitude, global, etc.
b.l observe that the time when the data were collected is

Example: month, year, day, etc.
4. Ask- Write your own questions using the data.
a. Why $\qquad$ ?
b. How $\qquad$ ?
5. Connect- How can we use this information to help us?
a. These data help us understand $\qquad$ .
b. These data can help scientists by $\qquad$ .
6. Assess- What does the information tell you? Calculate or estimate using the data.
a. The highest value is $\qquad$ . The lowest value is $\qquad$
b. Graph the data (use graph paper or create your own graph to show your information).

# Data Cube Questions 

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## Name:

Data Cube Questions

## Keywords (add more words):

collect/collected data lowest value time range unit
highest value

1. Examine- What are the data (information) about?
a. The unit used for the data is $\qquad$ .
b. The data represent (are about)

Example: ${ }^{\circ} \mathrm{C}, \mathrm{cm}, \mathrm{kg}$, etc.
Example: temperature, distance, mass, etc.
2. Search and Find- How were the data measured?
a. The data were collected every $\qquad$ .
b. The data were collected by

Example: day, week, month, year, etc.
Example: me, scientist, satellite, etc.
3. Analyze- What does the information tell you? Calculate or estimate the numbers. using the data.
a. The highest value is $\qquad$ and represents $\qquad$ .
b. The lowest value is $\qquad$ and represents $\qquad$ .
c. The pattern/s I see
in the data is/are $\qquad$ .
Example: the most, the least, etc.
4. Ask- Write your own questions using the data.
$\qquad$
b. How can?
$\qquad$ ?
5. Connect- How can we use this information to help us?
a. These data help us understand
b. These data help explain why
c. These data can help scientists understand $\qquad$
6. Assess- What do the data show?
a. The geographic area of Earth where the data were collected is $\qquad$ . Example: city, state, latitude/longitude, global, etc.
b. The time range (when did it happen?) is from to
Example: Monday, October, 12:00, etc.
c. Graph the data. (Use graph paper or create your own graph to show your information.)

## Name:

Date:
Data Cube Questions

## Keywords (add more words):

collect/collected data
lowest value
geographic area
highest value time range unit

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Keywords (add more words):

| centraltendency data | Earth System | mean median mode |  |  |
| :---: | :---: | :---: | :---: | :---: |
| phenomenon | sphere | time range | variable | unit |

1. Examine- What are the data about?
a. The variable is $\qquad$ . It represents $\qquad$ .
b. The independent variable is $\qquad$ .
c. The dependent variable is $\qquad$ .
2. Search and Find-How were the data measured?
a. The $\qquad$ instrument collected these data.
b. The data are collected every $\qquad$
Example: day, week, month, quarter, year, etc.
c. The unit used to describe the data is $\qquad$ .
Example: ${ }^{\circ} \mathrm{C}, \mathrm{cm}, \mathrm{kg}$, etc.
3. Analyze- What does the data show?
a. The geographic area of Earth that is represented is $\qquad$
b. The time range is from $\qquad$ to $\qquad$ .
c. This variable belongs in the $\qquad$ sphere of the Earth System. Example: Hydrosphere, Atmosphere, etc.
4. Ask- Write your own questions using the data.
a. How do..., Why..., What is... $\qquad$ .
b.I would like to compare $\qquad$ with these data because $\qquad$ .
c. How do these data affect another sphere in the Earth System?
5. Connect- How can we use this information to help us?
a. These data help us understand $\qquad$
b. These data can explain the phenomenon of $\qquad$ because $\qquad$ .
6. Assess- What does the information tell you? Calculate or estimate the numbers using the data.
a. The range of the data is $\qquad$ .
b. The data's mean is equal to $\qquad$ median $\qquad$ mode $\qquad$ .
c. The measure of central tendency that best represents the data is the
mean, median or mode
. This is because $\qquad$ -.
d. Graph the data (use graph paper or create your own graph to show your information).

Keywords (add more words):

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. This is because $\qquad$ .
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7. Examine- What are the data about?
a. What does the variable represent?
b. What is the range of the data?
c. In which sphere of the Earth System does this variable belong?
8. Search and Find-How were the data measured?
a. What instrument/s collected these data?
b. How frequently were the data collected?
c. What unit describes the data?
9. Analyze- What does the data show?
a. What geographic area on Earth do the data represent?
b. What time range do these data represent?
c. What area and time data would you like to collect to help you analyze these data?
10. Ask- Write your own questions using the data.
a. Identify a question related to these data that you could research.
b. Identify another scientific variable that you could evaluate with these data.
c. How do you think this area compares to other geographic provinces in your region?

> (i.e., coastal plain, highlands, etc.)
5. Connect- How can we use this information to help us?
a. What kinds of research questions could we use these data for?
b. Describe how you may use these data to explain a naturally occurring event.
c. How is technology connected to these data?
6. Assess- What information do you see on the graph?
a. Are there any outliers? If so, what are they?
b. Do the outliers meet your expectations? Why/Why not?
c. Graph the data (use graph paper or create your own graph to show your information).


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