Name: _____

BIGGEST EMITTERS

In “Marching for the Planet” (p. 18), you read about students who are urging governments to take action on climate change. Scientists have determined from extensive evidence that Earth’s atmosphere is warming because of greenhouse gas emissions due to human activities. The table below shows different sources of greenhouse gas emissions in the U.S. Use the data in the table, along with the information from the article, to complete the skills sheet.

U.S. GREENHOUSE GAS EMISSIONS BY SECTOR (2017)

Sector	Percentage of Total Emissions
Transportation	29
Electricity Production	28
Industry	22
Commercial and Residential	12
Agriculture	9

(SOURCE: EPA, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2017)

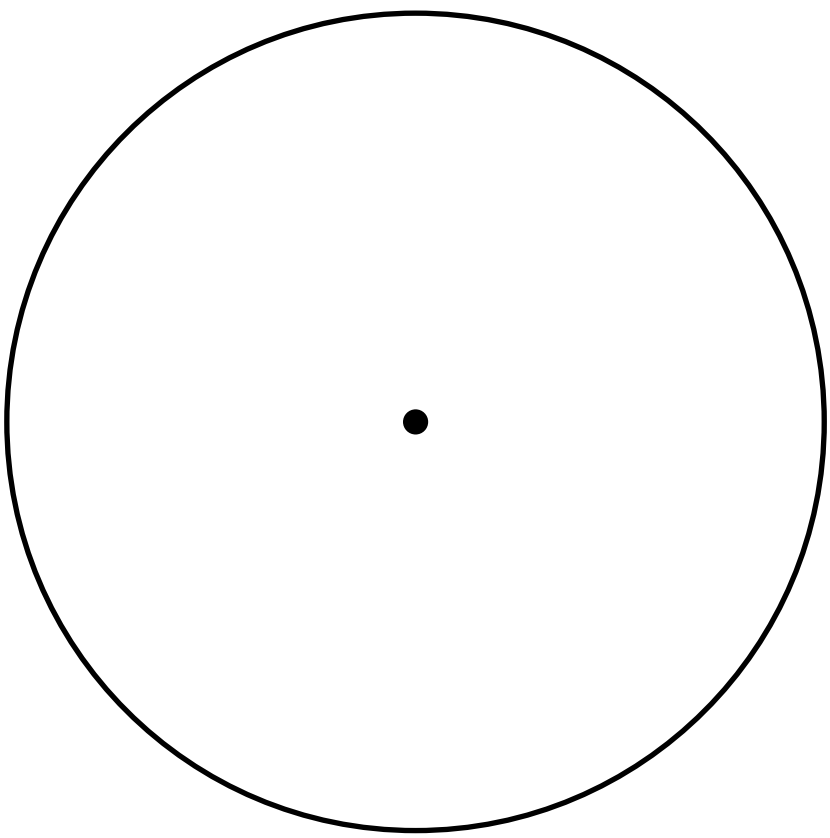
GRAPH IT

Use the data to create a circle graph showing the percentage of emissions from each sector.

Tips for creating a circle graph:

1. Convert the percentages into angle degrees. Example: If 29% of emissions are from transportation, the pie wedge for “transportation” would be 29% of the 360 degree circle or 104 degrees (360 x .29 = 104).
2. Draw a straight line from the middle to the outside of the circle.
3. Use a protractor to draw wedges inside the circle using the angles you calculated in Step 1.
4. Be sure to give your graph a title and label each section, including the percentage.

Title: _____



Name: _____

BIGGEST EMITTERS

ANALYZE IT

1. Which sector produced the largest share of greenhouse gas emissions in 2017? Describe two actions that could reduce those emissions.

2. What percentage of emissions are related to electricity production? What could governments and businesses do to decrease those emissions? What could individuals do?

3. In the article, the author suggested that people should buy less new stuff to help reduce greenhouse gas emissions. Explain how this action could affect the emissions of two sectors listed in the table.

4. The article mentions switching from fossil fuels to renewable energy sources as a way to reduce greenhouse gas emissions. Which sectors would this solution most apply to? What sectors would have a harder time implementing this solution than others? Use evidence from the article to explain your answer.

TAKE IT FURTHER: Calculate your own *carbon footprint*—the total amount of greenhouse gases created by a person, group, or product—using an online calculator, such as **https://coolclimate.berkeley.edu/calculator**. How does your carbon footprint compare with the data in the table? For example, what percentage of your carbon footprint comes from traveling (transportation)? From the food you eat (agriculture)?