

UNIT 1: WINGSPAN

Your **wingspan** is defined as the distance between your left fingertip and right fingertip if you hold your arms out straight horizontally. In this activity we will be looking at how your wingspan compares with your height.

Purpose: The purpose of this activity is to:

- Gain more practice in measuring length
- Practice representing data in tables
- Learn how to graph data from a table
- Look for patterns in your graph

Materials: Each lab team should have:

- A meter stick
- Graph paper
- String

Procedure:

1. Measure the height of each member of your lab team using the string. Then measure the length of the string in cm with the meter stick. Record this in the data table. Label the column appropriately, including units.
2. Measure the wingspan of each member of your lab team in cm the same way. Record this in the data table. Label the column appropriately, including units.
3. Now calculate wingspan divided by height, and record this in the appropriate column. Label the column appropriately.
4. After taking data and recording it in the table, one member of the group should copy the data onto the board. We want to look at the data from the entire class.
5. Proceed to the “Evaluation of Data” section to learn how to create a graph with this data.

Data:

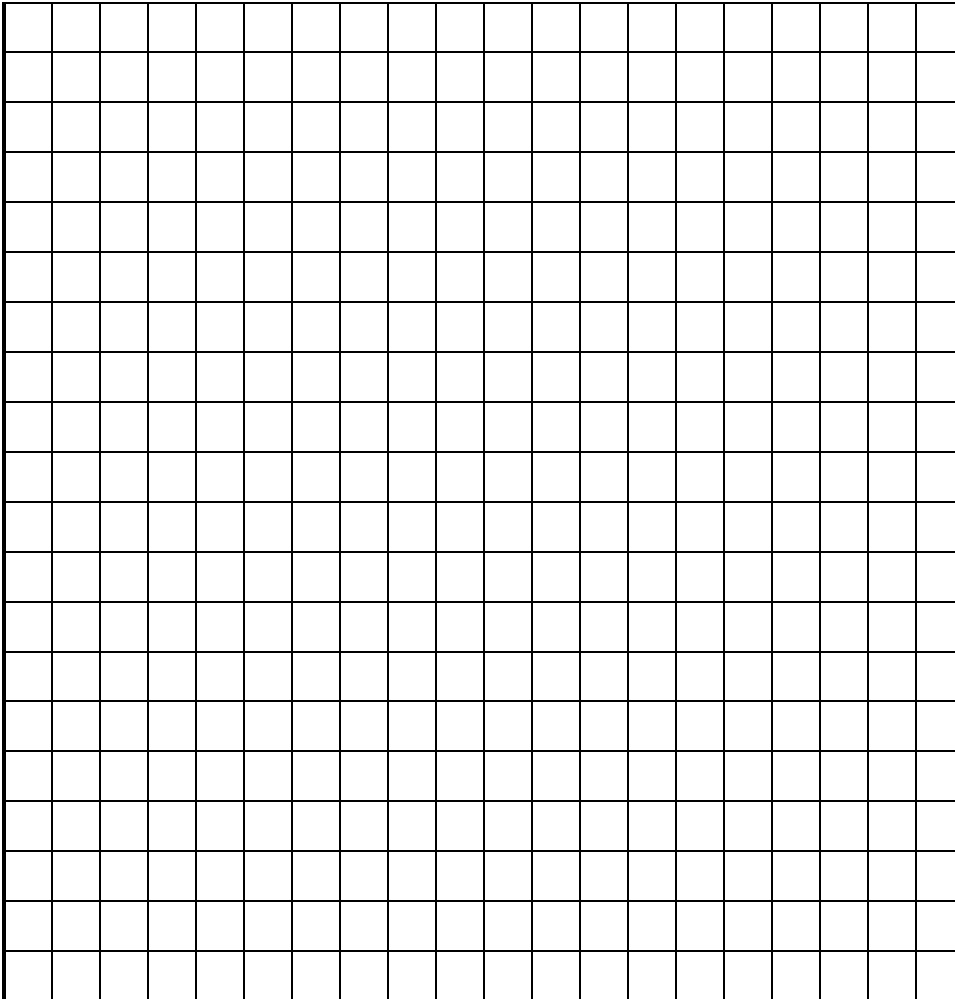
Group Member			

Evaluation of Data:

Now that we have represented our data in a table, we are ready to learn how to create a graph to represent this data.

1. Label each axis of your graph. We want height (in cm) on the horizontal axis, and wingspan (in cm) on the vertical axis.
2. Mark the scale of the graph along both axes.
3. Plot the data.
4. Sketch the “best fit line.”

wingspan vs height graph



Questions:

1. Look back at your table of data. Do you see any pattern(s) emerging? If so, what pattern(s) do you see?
2. Where does your best-fit line cross one of your axes? What does this mean?
3. Where would you expect the line to cross the axes? Why?
4. Describe how you could use a graph to predict a person's wingspan.
5. An average 3 year-old is about 91 cm tall. Use your best-fit line to predict his wingspan.