Unit 6 Lesson 2: Plotting Data
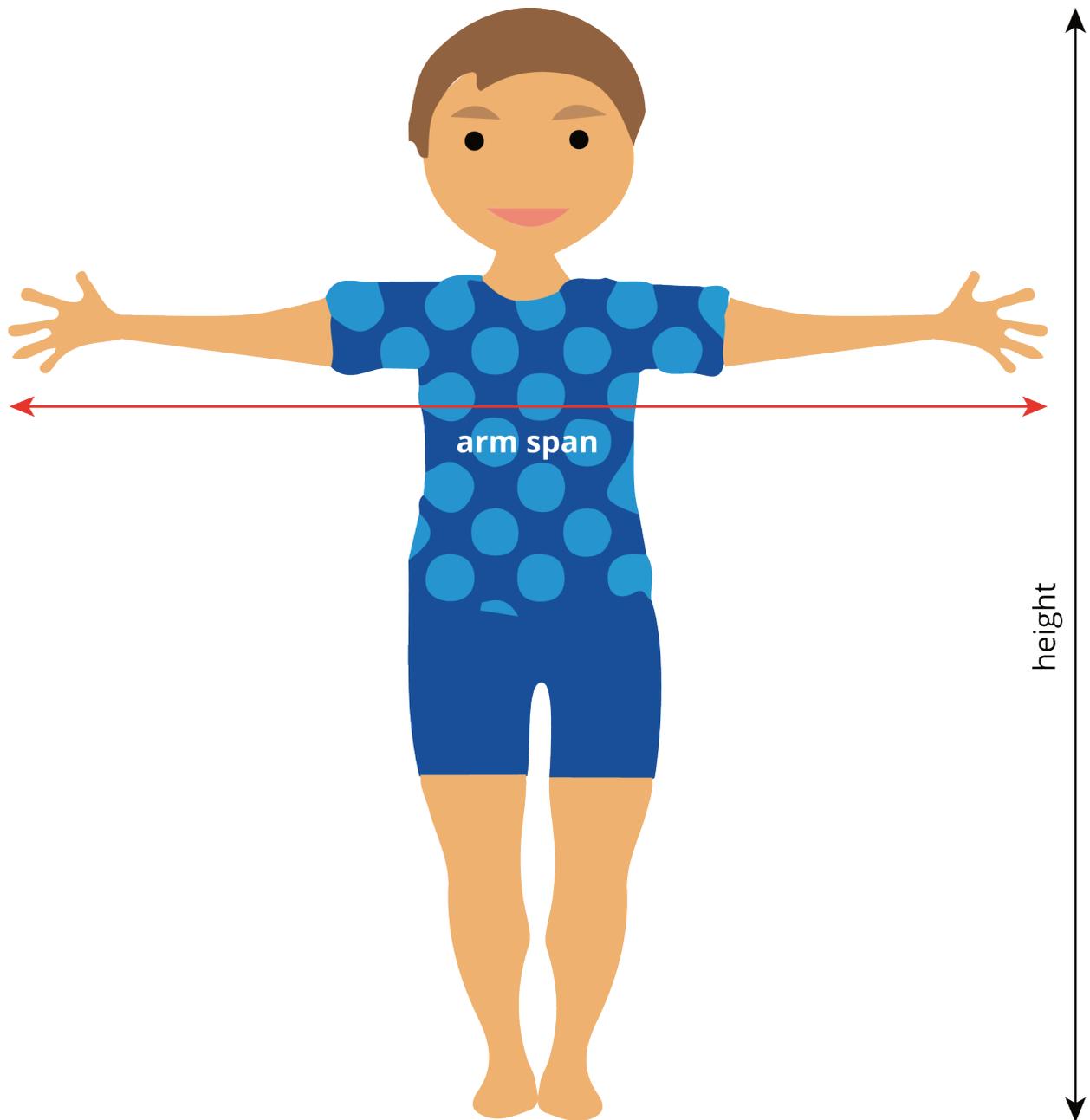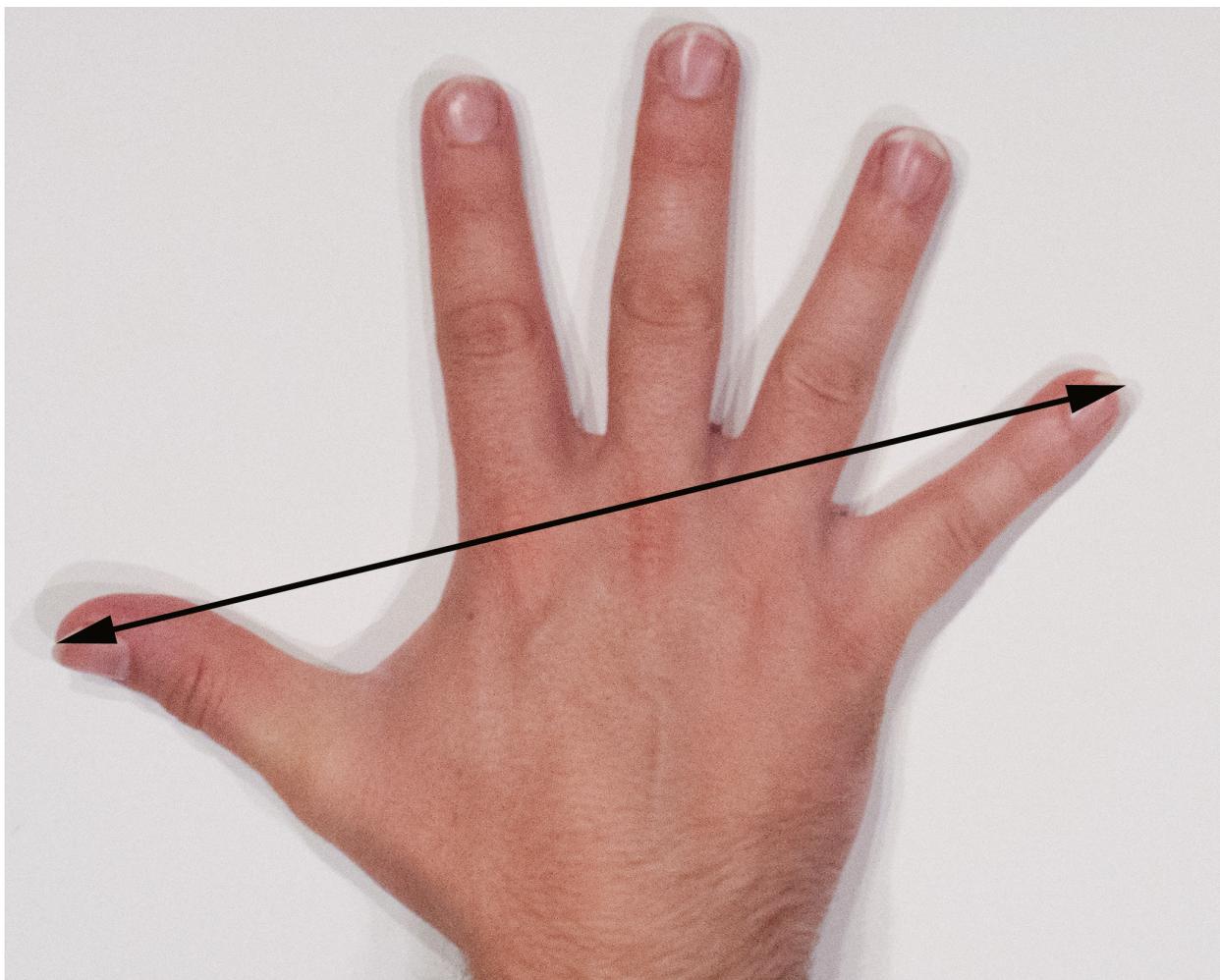
1 Representing Data (Warm up)

Student Task Statement

Lin surveyed 30 students about the longest time they had ever run. Andre asked them about their favorite color. How could Lin and Andre represent their data sets? Would they represent them in the same way? Why or why not?

2 Gathering Data

Images for Launch

Student Task Statement

Are older students always taller? Do taller students tend to have bigger hands? To investigate these questions, the class will gather data.

- A person's *arm span* is the distance between the tips of their index fingers, when their arms are fully spread out.
- A person's *hand span* is the distance from the tip of their thumb to the tip of their little finger, when their fingers are fully spread out.

1. Each partner should:

   - Measure the other partner's height, arm span, and hand span for their right hand to the nearest centimeter.

   - Record the other partner's measurements and age (in months) in the table.

	height (cm)	arm span (cm)	hand span (cm)	age (months)
partner A				
partner B				

2. One partner records the data from your table in a table of data for the entire class.

3 Scatter Plots

Student Task Statement

1. What types of graphical representations could be used to show the class's height measurements? Make a graphical representation of the class's height measurements.

2. Choose a color and use it to plot a point on the coordinate plane that represents your own height and hand span. Then, in the same color, plot a second point that represents your partner's height and hand span.
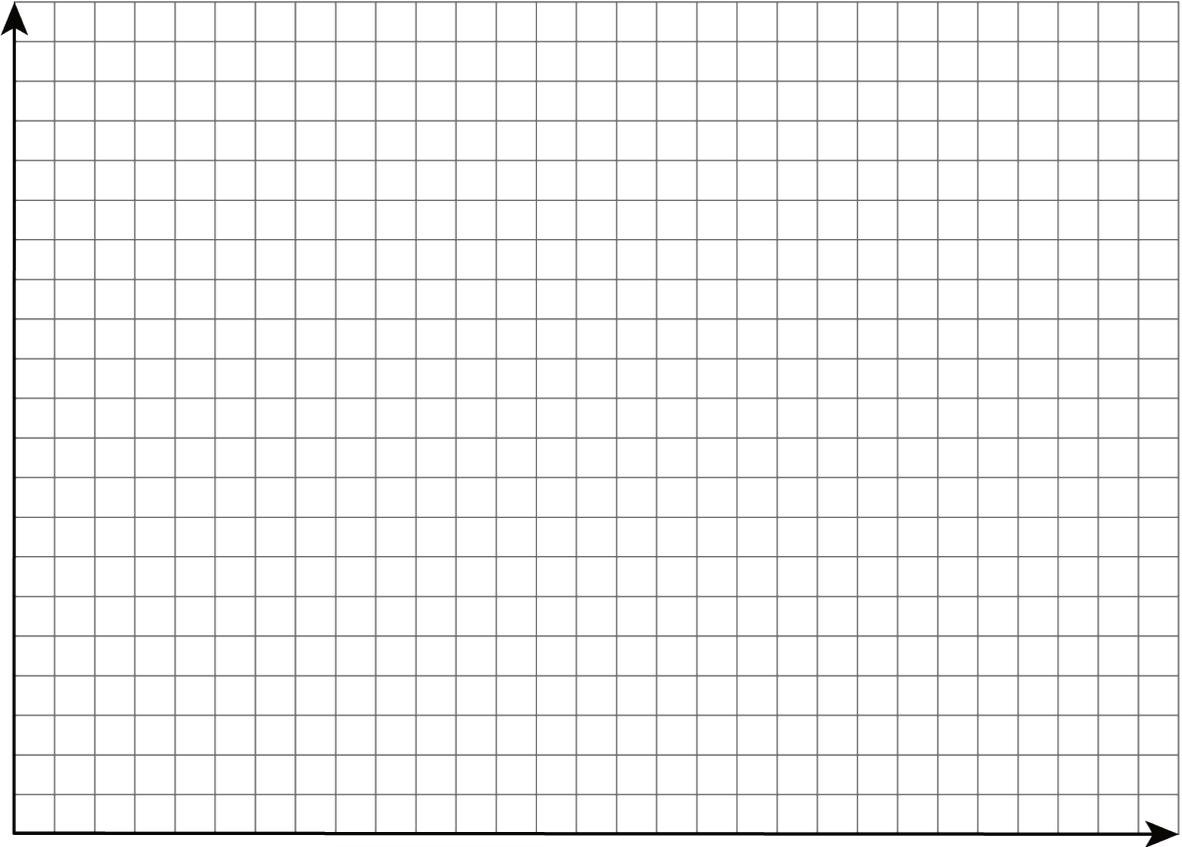
3. In a different color, plot the height and hand span of each student in your class, making a scatter plot of the heights and hand spans for the entire class.

4. Based on your scatter plot, answer these questions:

    a. Do taller students in your class tend to have bigger hands? Explain how you know.

    b. Is hand span a linear function of height? Explain how you know.