ACTIVITY 6.

Individual Prediction and Observations

Cuisenaire rods come in ten colors and ten metric sizes as follows: 1 cm x 1 cm x 1 cm, 1 cm x 1 cm x 2 cm,   1 cm x 1 cm x 3 cm, .. ., 1 cm x 1 cm x 10 cm. Look for a functional model for the relationship between a rods' longest dimension and its surface area. Right now make a sketch predicting what you think will be the shape of that function's graph.

Complete the following table

Rod's Color	Longest Dimension (cm)	Surface Area (sq cm)	Change in Surface Area
white	1		
red	2		
lt green	3		
purple	4		
yellow	5		
dk green	6		
black	7		
brown	8		
blue	9		
orange	10		

Make a difference table for this data. What does the difference table suggest to you?

Group Prediction and Observations

Discuss within your working group each individual's predictions. Prepare a graph and functional model representing the groups final prediction. Define the meaning of any symbols you introduce and record your functional rule and draw the graph in Figure 9.