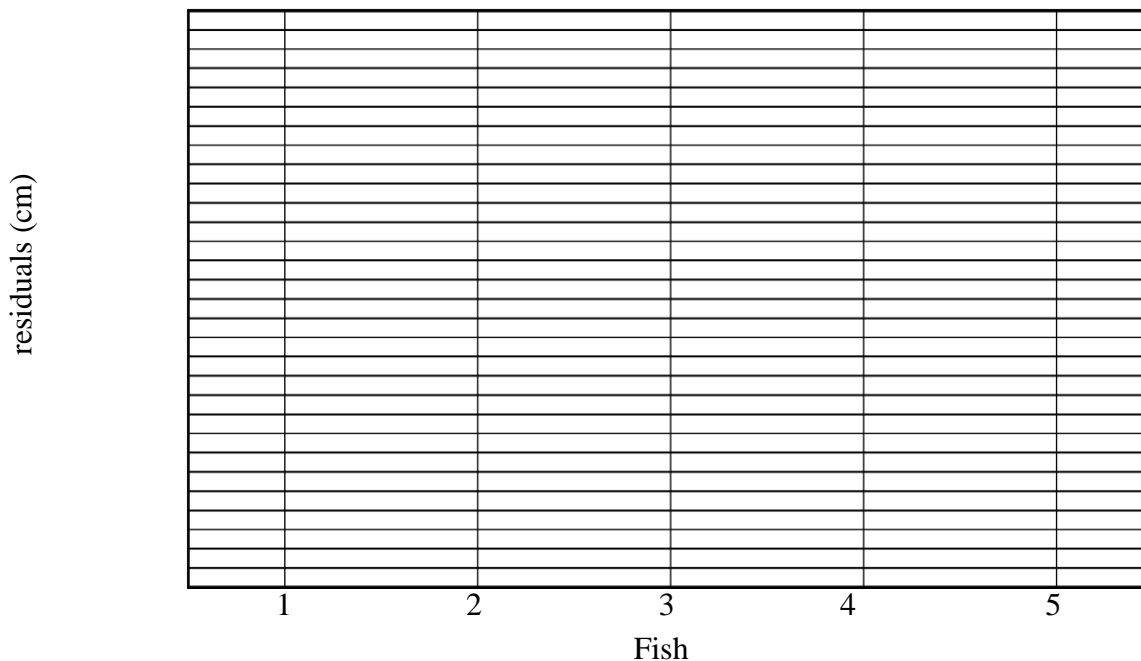

LAB 1 PRE-LAB

1. The table below records measurements of the lengths l of five goldfish. Calculate the average length l_{avg} of this population of goldfish, and the “residual,” or deviation from average length $l - l_{\text{avg}}$, for each fish.

Fish	Length l (cm)	$l - l_{\text{avg}}$ (cm)
1	5.83	
2	5.88	
3	6.37	
4	4.82	
5	5.71	
Average		

2. Make a scatter plot of the residuals below. Scale your graph to use most of the space.



3. The “reaction time” activity requires you to use formula (3) to calculate time from a measured distance. Use that formula to calculate the times corresponding to the distances in the table below and enter the calculated times into the table.

	Time (s)
10.0	
20.0	
30.0	
40.0	