## DAILY BLOOD SUGAR TRACKING

Jacob and Christopher are brothers. Jacob is 18 years old and Christopher is 16 years old. Christopher has just been diagnosed with type 1 diabetes. Type 1 diabetes is an autoimmune disorder, which means that the body has started to shut down the beta cells of the pancreas. The beta cells produce insulin, which helps sugar to enter cells. Jacob does not have diabetes.

Without insulin, the sugar cannot get into the cells and starts to build up in the bloodstream. It is normal for sugar levels to rise and fall throughout the day. Normal levels are between 70mg/dL and 140 mg/dL. (Milligrams per deciliter is a unit of measurement for blood sugar.)

Jacob and Christopher agreed to track their blood sugar levels for a whole day. Use the table of information to create a graph for each brother. Then answer the questions below. Use a different color for each brother and create two lines on the graph.



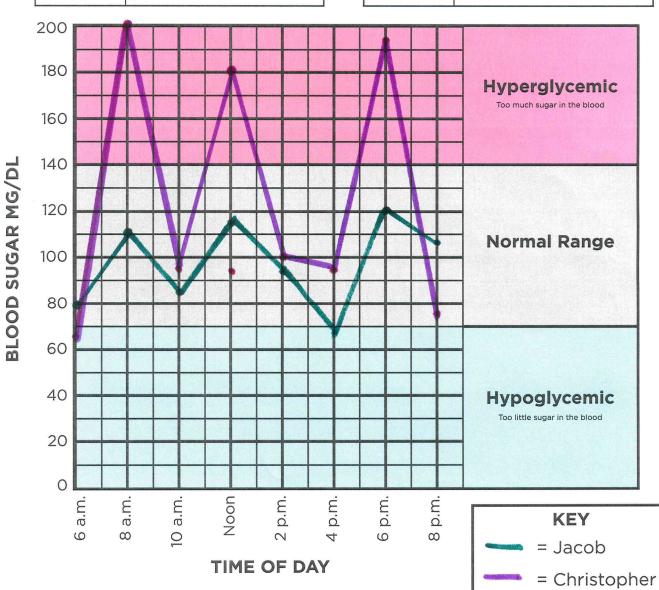
SANF#RD RESEARCH

## Jacob

Time	Blood Sugar (mg/dL)
6 a.m.	80
8 a.m.	110
10 a.m.	85
Noon	115
2 p.m.	93
4 p.m.	74
6 p.m.	120
8 p.m.	106

## Christopher

Time	Blood Sugar (mg/dL)
6 a.m.	65
8 a.m.	200
10 a.m.	92
Noon	180
2 p.m.	100
4 p.m.	95
6 p.m.	195
8 p.m.	75



	nswer the questions about the graph.  How much higher was Christopher's blood sugar than Jacob's at 8 a.m.?	
	Christopher_was_80_points_higher_than_Jacob_at_8am	
2.	Why do you think Christopher's blood sugar was so high at 8 a.m.?	
	That_is_right_after_breakfast_so_all_the_sugar_from_his_breakfast_went_into_his_bloodstream.	
	Christopher took insulin at 8:30 a.m.	
	What did that do to the amount of sugar in his blood?	
	The_insulin_helped_bring_his_blood_sugar_back_into_the_normal_range.It _dropped_by108mg/dL.	
	Christopher's blood sugar went up between 4 p.m. and 6 p.m. How much did it go up by?	
	Christopher's_blood_sugar_went_from_95mg/dL_to_195mg/dL.This_is_a_change_of	
	100mg/dL.	
5.	What is the difference between Jacob's highest and lowest	
	blood sugar during the day?Jacob's_highest_was_120mg/dL_at_6pmHis lowest_was_74mg/dL_at_4pm.The_difference_between_those_is_46mg/dL.	