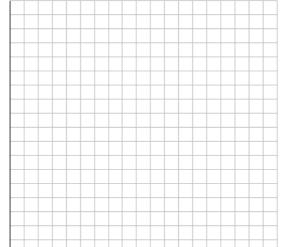
Light and photosynthesis

Below is a table of results obtained by a year 10 student who was looking at how different light intensity affected the rate of photosynthesis in two different types of plant.

Light Intensity (Lux)	Photosynthesis Rate (Photosynthetic Unit)		
(Lux)	Plant Type A	Plant Type B	
10	5	5	
20	9	29	
30	16	41	
40	23	49	
50	32	54	
60	42	58	
70	55	60	
80	72	60	

Draw line graphs for the above data on the grid below. Remember to give the graph a key, and scales for both axis.

Photosynthesis	Rates	of Two	Plant	Type
-----------------------	-------	--------	-------	------



a) **Photosynthesis rate** (Photosynthetic unit)

Light Intensity (Lux)

b)	What was the rate of photosynthesis for Plant Type B when the light intensity was 45 lux?
c)	On your graph, draw and label a line for plant type C. Plant type C has a lower rate of photosynthesis than Plant Type A for light intensities up to 40 lux. Above 40 lux, Plant Type C has a faster rate. Why is Plant Type B more likely to live on a forest floor with little light?
d)	

Published on Assessment Resource Banks (https://arbs.nzcer.org.nz)