





Names of students in this group:

How does the environment affect the growth and survival of plants?



Let's Investigate!

Step 1 - Planning the experiment

- Independent variable: amount of sunlight
- **Dependent variable:** survival of plant
- *Controlled variables:* type of plant (genetic makeup), number of seeds, availability of water, time
- *Inquiry question:* What is the effect of the amount of sunlight on plants' growth and survival?

Step 2 - Planning and carrying out the experiment

For example:

- Select the plant with purple flowers.
- Seed 4 plants in each row with a different amount of sunlight.
- Click *play* button.
- Observe and record the plants' survival.











Step 3 – Analyzing data

Run your experiment. At the end of each run, record the results in the *Result Table*. Run your investigation several times, until you think you have collected enough data.

Type of		Number of				
Type of plants	Full sun	A lot of sun	mid sun	Little sun	Shade	surviving plants
					_	

Plot the graph here:

Number of surviving plants

	Th	ne effect of sunlight	on plant growth	and survival	
	full sunlight	a lot of sunlight	mid sunlight	little sunlight	shade
		Th	e amount of sunlig	ht	
ımber	of surviving purpl	e plants 📕 number o	of surviving lilac pla	nts 📕 number of sur	viving pink plants











Step 4 – Interpreting data and communicating information

1.	What pattern can you find in the data? Discuss with your partner the trends and record them here.
2.	What claim can you make about the effect of environmental factors on plants' growth and survival? What evidence do you have that support your claim? What is your reasoning?
3.	How does your investigation help explain Monique's diabetes ?
4.	How can your investigation help answer the driving question: What controls my health ?



