

Plant Study Investigation

Please complete the four terms below as they relate to the project you have selected.

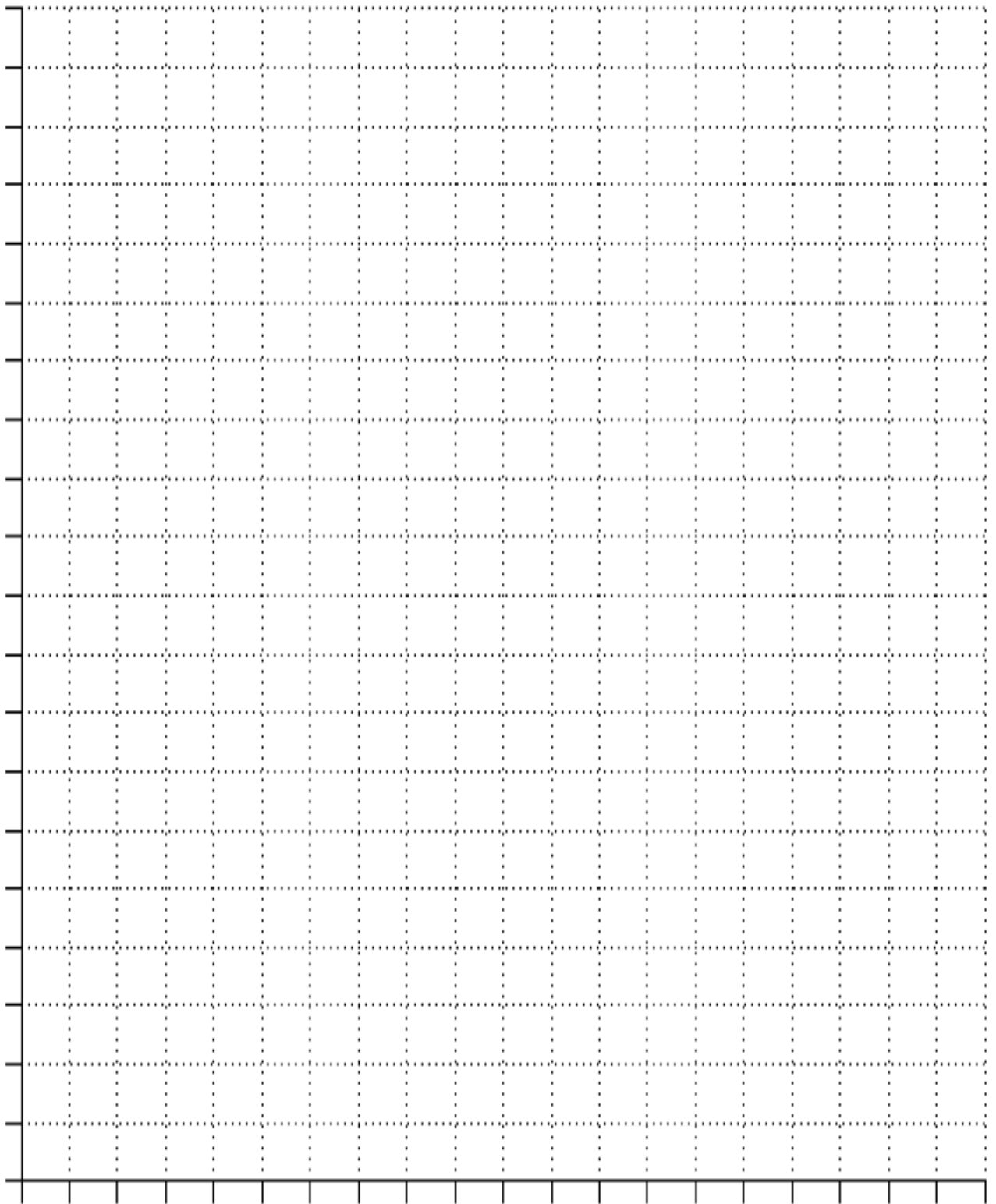
Problem: _____

Independent Variable: _____

Dependent Variable: _____

Control: _____

Please describe your set-up with visuals.



Suggested Topics for Experimentation

Water

- Type of water used: tap, distilled, pond?
- Alter the amount of water used.
- How often watering is done: once a day, twice a day **or** water only when needed?
- Method of watering: Flood the dish with water or add water slowly with pipette

Seeds

- Amount of seeds used
- Type of seeds used
 - i. Will larger seeds take longer to grow than smaller seeds?
 - ii. Will the shape of the seed affect germination
- Will pre-soaked seeds germinate better or faster than non-soaked seeds?
- Will the number of seeds growing in the dish affect the percent of germination of the seeds?
- Will the location of the seeds being planted affect their germination?
- Will the depth of the seed affect its percent of germination?

Possible Pollutants

- What effect will acid rain play in seed germination?
 - i. What concentration or pH value should you use?
 - ii. What effect does the presence of salt have on seed germination. (this simulates the salting of roads during snowstorms)
 - iii. How much salt should you use?
 - iv. What effect does adding some coke or seven-up have on seed germination?

Effect of other Abiotic (non-living) Factors:

- What effect does temperature have on seed germination?
- What effect does light have on seed germination?
- What effect does gravity have on seed germination?
- What happens if you plant a seed upside down? Will it still grow?

Effect of Fertilizer on Seed Germination

- What type of fertilizer do you use?
- When do you apply the fertilizer?
- How much fertilizer do you apply?