



GROWING MARIGOLDS

and Studying Their Pest-Repelling Properties



— HOMESCHOOL SCIENCE EXPERIMENT LAB SHEET —

OVERVIEW

Marigolds are known to help repel certain garden pests. In this experiment, you will grow marigolds and test whether they reduce the number of pests on nearby plants compared to plants without marigolds.



QUESTION

Do marigolds help reduce the number of pests on nearby plants?



HYPOTHESIS

If marigolds repel pests, then plants grown near marigolds will have fewer pests than plants grown without marigolds.



MATERIALS

- Marigold seeds or seedlings
- Seeds or seedlings of a target plant (e.g., lettuce, cabbage, or beans)
- 2 identical pots or garden containers (or equal spaces in a garden bed)
- Potting soil
- Watering can
- Ruler
- Magnifying glass (optional)
- Notebook or data sheets (this lab sheet)
- Pencil



EXPERIMENT SETUP

Set up two identical plant groups:

- Group A (with marigolds): Plant marigolds alongside your target plant.
- Group B (without marigolds): Plant only the target plant.

Keep all other conditions the same: soil, sunlight, watering, and location.

Tip: Keep the groups close together so pests have equal access to both.



PROCEDURE

1. Plant marigold seeds or seedlings in Group A.
2. Plant your target plant seeds or seedlings in both Group A and Group B.
3. Place both groups in the same area with equal sunlight and water.
4. Wait for plants to grow and for pests to appear.
5. Check both groups every 2–3 days for 2–4 weeks.
6. Count and record the number of pests you see on the target plants in each group. (Focus on similar pests, such as aphids, cabbage worms, or leaf beetles.)
7. Observe and record any other differences between the two groups.

WHAT COUNTS AS A PEST?

Insects or other small animals that eat or damage your plants, such as aphids, caterpillars, beetles, or slugs.



DATA TABLE – NUMBER OF PESTS OBSERVED

Observation Day	Group A (With Marigolds)	Group B (Without Marigolds)	Difference (B – A)	Notes
Day 1				
Day 3				
Day 5				
Day 7				
Day 10				
Day 14				
Day 21				

OBSERVATIONS

What did you notice about the number of pests on the plants in each group?

CONCLUSION

Was your hypothesis supported? Why or why not? What do your results suggest?



EXTENSION IDEAS

- Try different target plants.
- Test different numbers of marigolds.
- Research which pests marigolds repel best.