

General Algorithm — Spot the Pattern Worksheet

Name: _____ Date: _____

My Scenario: A / B / C (circle one)

Part 1: My Specific Algorithm

Write a numbered step-by-step algorithm for YOUR scenario:

1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____
-

Part 2: Group Comparison

Share algorithms with your group. What steps appear in ALL THREE solutions?

Step description	In A?	In B?	In C?
	Y/N	Y/N	Y/N

The common steps are: _____

Part 3: The General Algorithm

Write ONE algorithm that works for all three scenarios. Use placeholders: [ITEMS] for the things being processed | [DESTINATION] for where they go | [CAPACITY] for limits | [CRITERIA] for how to choose | [OVERFLOW] for when capacity is exceeded

1.

2.

3.

4.

5.

6.

7.

8.

Part 4: Test Your General Algorithm

Scenario	Works?	Any adjustment needed?
A – Crowd Evacuation	Yes / Mostly / No	
B – Library Books	Yes / Mostly / No	
C – Subject Allocation	Yes / Mostly / No	

Part 5: Reflection

Lines saved: 3 specific algorithms × ~10 steps = ___ steps. General algorithm = ___ steps. Saved: ___ steps.

A fifth real-world scenario that fits the same pattern:

In your own words, what is pattern recognition and why is it useful in programming?
