

Grade 6 Computing Flowcharts Worksheet

Name: _____ Date: _____

Reminder: Flowchart Symbols

- Oval (Terminator): Start / End
- Rectangle (Process): Action / Process
- Diamond (Decision): Question (Yes / No)

Instructions:

Read each scenario carefully and draw a flowchart to solve it. Make sure to use the correct symbols for Start/End, Process, and Decision.

Questions

1. Vending Machine Drink
A vending machine sells drinks. Draw a flowchart:
 - Insert money → Choose drink → If available → Dispense drink → End.
 - If not available → Show "Out of stock" → End.
2. Math Quiz Check
The computer asks a math question. If the answer is correct, it shows "Well done!" otherwise "Try again" and repeats the question.
3. Password Login with Attempts
A user has 3 attempts to enter the correct password. If correct → Access granted. If wrong after 3 tries → Account locked.
4. Bus Ride to School
You wait for the bus. If the bus is full, wait for the next one. If not full, get on and go to school.
5. Weather and Activity Choice
Decide what to do:
 - If sunny → Play outside.
 - If raining → Take umbrella and play outside.
 - If not sunny → Read a book inside.
6. ATM Withdrawal
Draw a flowchart: Insert card → Enter PIN → If correct → Enter amount → If balance is enough → Dispense cash. If not enough balance → Show "Insufficient funds".
7. Online Quiz Results
If score ≥ 80 → Show "Excellent".
If score ≥ 50 → Show "Pass".
If score < 50 → Show "Fail".
8. Pizza Order
Choose pizza size → Choose toppings → If confirmed → Make and deliver pizza.
If not confirmed → Cancel order.

9. 9. Light Sensor System

If it is dark AND motion is detected → Switch light on.

If not → Keep light off.

10. 10. Computer Shutdown Check

Save work → Close programs → Ask "Do you want to shut down?"

- If yes → Shut down.

- If no → Return to desktop.

Challenge Extension (Optional):

Pick one real-life routine (e.g., brushing teeth, playing a video game, or buying ice cream).

Create your own flowchart for it!