Pseudocode for Chemistry Calculator Program

```
Program ChemistryCalculator

  // Define a dictionary to store the atomic weights of chemical elements
  Initialize elementWeights as a dictionary
  Populate elementWeights with element symbols and their corresponding atomic weights:
    elementWeights["H"] = 1.008
    elementWeights["He"] = 4.0026
    elementWeights["C"] = 12.01
    elementWeights["N"] = 14.01
    elementWeights["O"] = 16.00
    elementWeights["F"] = 19.00
    elementWeights["Na"] = 22.99
    elementWeights["S"] = 32.06
    elementWeights["Cl"] = 35.45
    elementWeights["Fe"] = 55.85
    // add at 10 more elements symbols and their corresponding atomic weights:



  // Function to calculate molar mass from a chemical formula
  Function calculateMolarMass(formula)
    Declare totalMass as 0.0
    Define regex pattern to identify elements and their counts in the formula

    For each match in formula
      Extract element from the match
      Extract count from the match, default to 1 if no count is specified
      If element is in elementWeights
        Retrieve atomic weight for the element
        Add (atomic weight * count) to totalMass
      Else
        Display error "Element not recognized"
        Exit function
      End If
    End For

    Return totalMass
  End Function

  // Main execution block
```

```
  Begin
    Prompt user "Enter a chemical formula (e.g., H2O, NaCl):"
    Read formula from user input

    Try
      Declare molarMass as calculateMolarMass(formula)
      Display "The molar mass of [formula] is [molarMass] g/mol"
    Catch any errors
      Display "An error occurred: [error message]"
    End Try
  End
End Program
```