



Republic of the Philippines
Department of Education
REGION III
SCHOOLS DIVISION OFFICE OF NUEVA ECIJA

LEARNING ACTIVITY SHEET
IN SPICAL PROGRAM IN ICT 10
ADVANCED PROGRAMMING 10
Third Quarter, Week 1

Name: _____

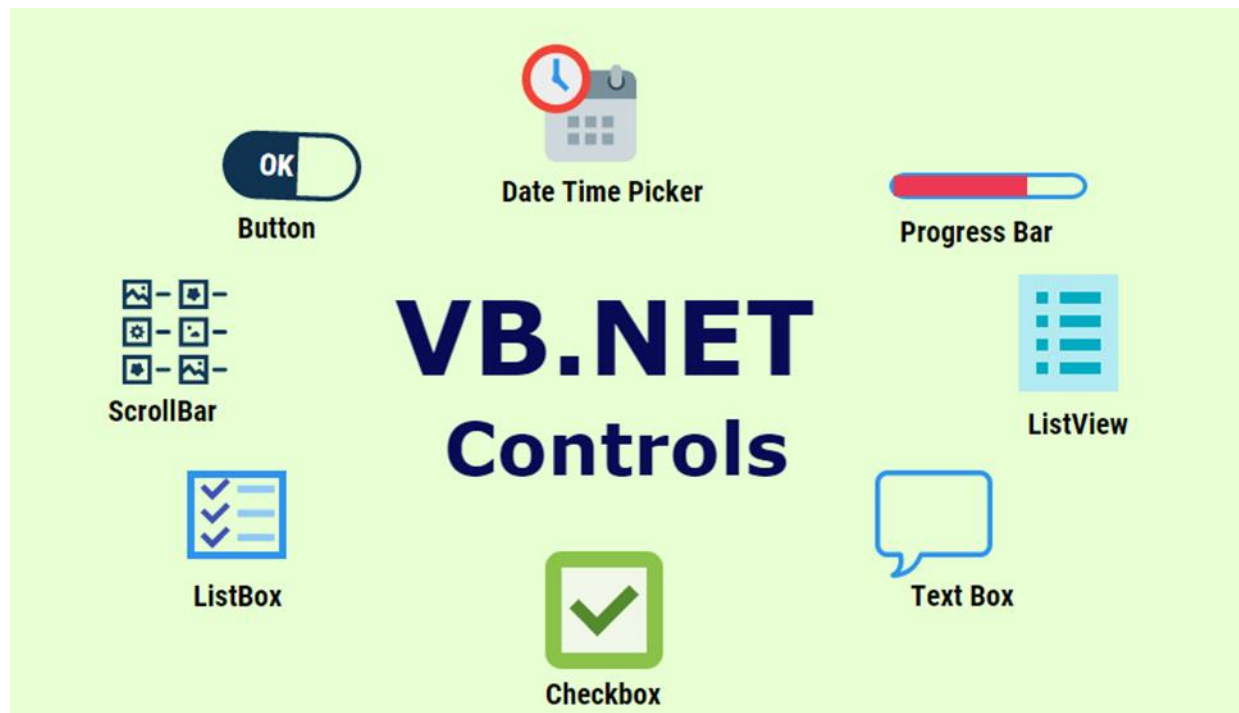
Date: _____

Grade Level / Section: _____

CLASSES AND OBJECTS

BACKGROUND INFORMATION FOR LEARNERS

Object is a combination of codes and data that can be treated as a unit. It can be a piece of an application. Like a control or a form in applications. An entire application can be an example of an object.



What is Class?

A **Class** is a collection of method and variables. It is a blueprint that defines the data and behaviour of a type. It is also a software components that defines and implements one or more interfaces.



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Class Definition

A class definition starts with the keyword **Class** followed by the **class name**; and the **class body**, ended by the **End Class** statement.

Public Class Test

Variables

Methods

Properties

Events

End Class

Class Members

1. Data Members / Variables

Data members includes member variables and constants.

2. Event Members

Events are procedures that are called automatically by the Common Language Runtime in response to some action that occurs, such as an object being created, a button being clicked, a piece of data being changed, or an object going out of scope.

3. Methods / Function members

This refers to both functions and subroutines.

4. Property Members

A property member is implemented as a Private member variable together with a special type of VB function that incorporates both accessor functions of the property



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Example 1. Create a program that displays contact information of clients using class.

VB Code:

```
Module Module1
    Class contact
        Public fname As String
        Public add As String
        Public mob As String
        Public em As String
    End Class
    Sub Main()
        Dim cinfo As contact = New contact
        cinfo.fname = "Juan Dela Cruz"
        cinfo.add = "Caloocan, Carranglan, Nueva Ecija"
        cinfo.mob = "098776541234"
        cinfo.em = "juan.delacruz@deped.gov.ph"
        Console.WriteLine("Name: {0}", cinfo.fname)
        Console.WriteLine("Address: {0}", cinfo.add)
        Console.WriteLine("Mobile No.: {0}", cinfo.mob)
        Console.WriteLine("Email Address: {0}", cinfo.em)
        Console.ReadKey()
    End Sub
End Module
```

Output:

```
file:///c:/users/eugene/documents/visual studio 2010/Projects/Examp
Name: Juan Dela Cruz
Address: Caloocan, Carranglan, Nueva Ecija
Mobile No.: 098776541234
Email Address: juan.delacruz@deped.gov.ph
```



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LEARNING COMPETENCY

1. Use Classes and Objects in creating a program.

ACTIVITIES

1. Create a console application that computes for the area of 3 rectangle and displays its results. Use class to create this program. (10pts.)

REFLECTION

1. In your own understanding. What is Classes and Objects?

REFERENCES

Electronic Resources:

<https://www.pdfdrive.com/mastering-microsoft-visual-basic-2010-e43922330.html>

Master Microsoft Visual Basic 2010

https://www.tutorialspoint.com/vb.net/vb.net_classes_objects.htm

VB.Net Programming Language Reference

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KEY TO CORRECTIONS

Activity1

```
Module Module1
Class area
Public length As Double
Public width As Double
End Class
Sub Main()
Dim ar As area = New area
Dim a As Double
ar.Length = 5.0
ar.Width = 6.4
a = ar.Length * ar.Width
Console.WriteLine("The area of the First Rectangle is {0}", a)
ar.Length = 6.0
ar.Width = 7.4
a = ar.Length * ar.Width
Console.WriteLine("The area of the Second Rectangle is {0}", a)
ar.Length = 7.0
ar.Width = 8.4
a = ar.Length * ar.Width
Console.WriteLine("The area of the Third Rectangle is {0}", a)
Console.ReadKey()
End Sub
End Module
```