

Game Building for Learning and Teaching Process By Using Microsoft Excel Program



Game Building by Using Microsoft Excel Program

Generally, Microsoft Excel program is mostly used for calculation, salary preparation, accumulation of student score, data base management and charges.




This book uses Microsoft Excel program in building up games for the student to practice their knowledge in various subjects such as Mathematics, English, Scientific, Thai and Art. The student needs to apply the capacity of Microsoft Excel Program and their knowledge to design and create their assignment, game to develop their skill knowledge.

The details and steps in game building will be explained to the student to follow by pictures. The student can follow immediately and if the student would like to know the details of some content of the program, they can study from the assigned document on the usage of Microsoft Excel Program in particular the assigned book on **"Microsoft Excel base-game Building Techniques"**. This book provides the summary of steps and methods for game building by using Microsoft Excel Program.



Basic Agreement in Game Building

Assignment presentation on the monitor

1. The work building in this document is supported by Microsoft Office **Version 2003**.
2. The resolution monitor should be at 1024 x 768 pixels.
3. It can be adjusted by click 
4. Select 
5. Select 
Display
6. From **Display Properties**, select **Settings**
7. Define the **Screen resolution** to be at **1024 by 768 pixels** as appears in the picture



8. Click 
9. Click 

Note :Most of the monitors use 1024x 768 pixels, but if the pixels are less or more, the data on the monitor may not be completed or it may be too large, forcing us to use the scroll bar to see the data which do not show in the monitor.



Symbol and Calculation in Microsoft Excel

Calculation symbols

Calculation symbols of Microsoft Excel Program work in the same way as the mathematics symbols, but there are some symbols of which their forms are different, for example multiple, minus, divide and square.

Calculation Symbols

+	is	plus
-	is	minus
*	is	multiple
/	is	divide
^	is	square
%	is	percentage

Comparison Symbols

=	is	equal
>	is	more
<	is	less
>=	is	more or equal
<=	is	less or equal
<>	is	unequal

Symbols to link messages

& Linking the defined cells for example =A1&B1

Reference Symbols

- : (Colon) using for identifying the period of data, for example
- A:A** means the whole of column A
- A2:A8** means from Cell A2 to A8
- 1:3** means the whole row both row 1 and row3
- A:IV** means the whole working table

Sequence of Calculation

The calculation of data in each order set: if many symbols are used in the same order, Microsoft Excel Program will calculate in consequently as following:

Sequence	Symbols	Meanings
1	()	bracket
2	^	square
3	* and /	multiple and divide
4	+ and -	plus and minus
5	&	linking messages
6	= < > <= >= <>	comparison signs

Note : The symbols that are in the same sequence, calculation will start from left to right, if you would like to calculate which part first, please put the bracket () in that part.

Example: Calculation according to the sequence of symbols



=2+5*6 if calculated by mathematics, the result is **42**
(2 plus 5, the result is 7, then multiple with 6, the result is 42).

=2+5*6 if calculated by Microsoft Excel Program, the result is **32**
(5 multiple by 6, the result is 30, then 2 plus 30, the result is 32).

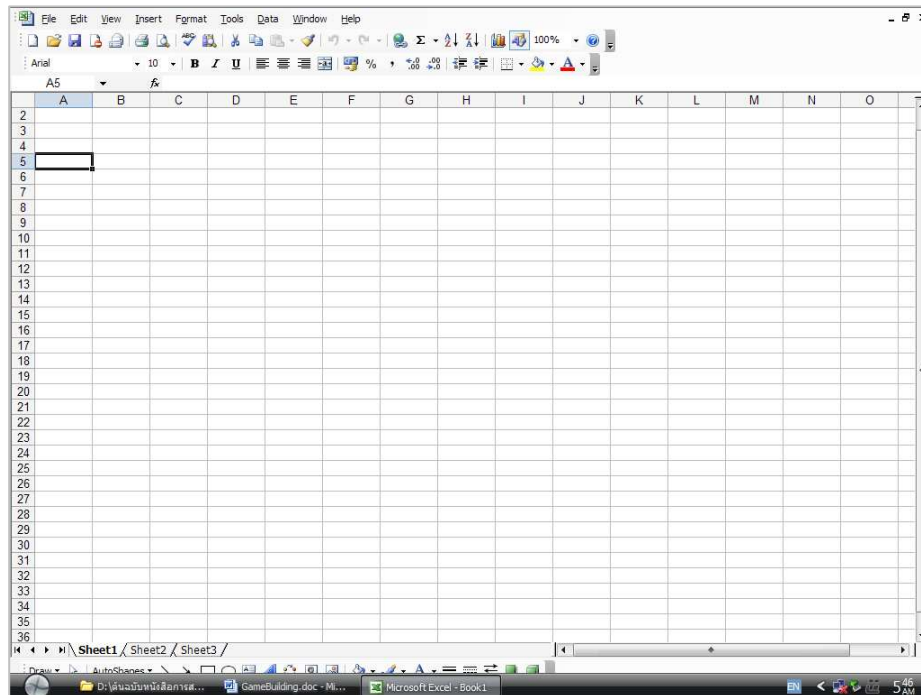
From the example question, if you would like to have the result to be 42, then you have to change question to be =(2+5)*6.



Start using Microsoft Excel Program

1. Click 
2. Select the program  Microsoft Office Excel 2003
3. **Microsoft Excel Program Work Sheet Window** will be displayed, use 100% working view.
4. **Arial Font** will be displayed (To prevent the change of Font when open the program at other computer.)

Example: Window of Microsoft Excel Program when it starts.






Methods to Name a Game

1. Type the game name into the defined cell, then adjust Font to suit the space and color it as you like.

	A	B	C	D	E	F	G	H	I	J	K
1		Number Finding Puzzle Game									
2											

2. Design the Font in the game name by using WordArt  from Drawing Toolbars.

The Colorful Balloons

3. Use Adobe Photoshop Program to design the Font in the name game, then record the game name using .gif or .jpg families. Insert picture into the work sheet.

Cursed Angel Game

4. Format the Size of Font of the game name to be in the proper position.



Decoration of the Working Table



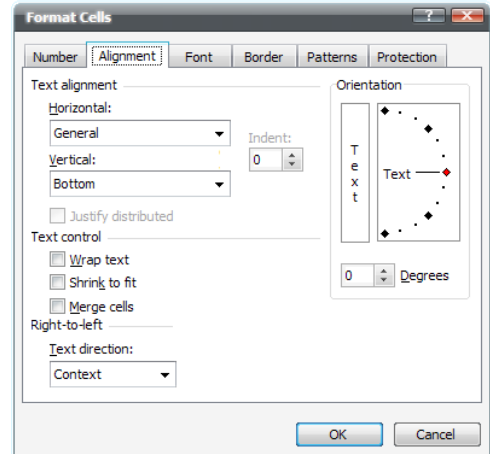
Format the Font

Format the Font by using Font from **Formatting Toolbar**



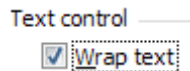
Data Alignment

1. Click menu **Format**.
2. Select **Cells**.
3. Window will appear as in the picture.
4. Click **Alignment**
5. Align the data in both **horizontal** and **vertical** Directions.
6. **Adjust** the degree of data as needed.
7. Click **OK**



Note : If you would like to align the data to be more than one line.


Click **Wrap text**.

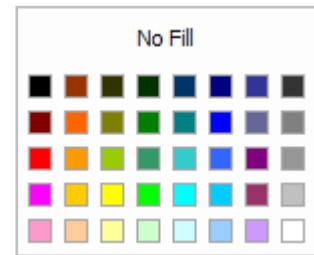


Click **OK**.


1. Please observe the red gap. If your answer is right, the colour of each gap will change into the same colour as it is in the fixed gap.							

Determining the Color of the Table

1. Select the space.
2. Click the pointer after the sign **Fill Color**  on the toolbars.
3. The program will present colors to choose.
4. Click to choose the required color.




Determining the Color of Font

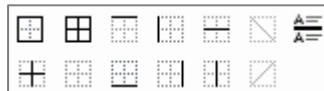
1. Select the cell that you would like to color the Font.
2. Click the pointer after the sign **Font Color**  on the Toolbar.
3. Click the color of Font as you like.

Insertion of Symbols

1. Select the cell that you would like to have symbols.
2. Click menu **Insert**.
3. Click **Symbols**.
4. Select the Font which has symbols such as Wingdings.
5. Click **Insert**.

Determining Border of the Table

1. Select the cell that you would like to have border.
2. Click the icon  on the Toolbar to select the border.



Note : If you would like to determine more details, right click in the cell and select **Format Cells**.

Changing Gridline


1. Click menu **Tools**.
- 2.. Click **Options**.
3. Select **View** from Toolbar.
4. Select the **gridlines color**.
5. Click **OK**.




Cancelling Gridline

1. Click menu **Tools**.
2. Click **Options**.
3. Select **View**.
4. Click the symbol **Gridlines** out.
5. Click **OK**.

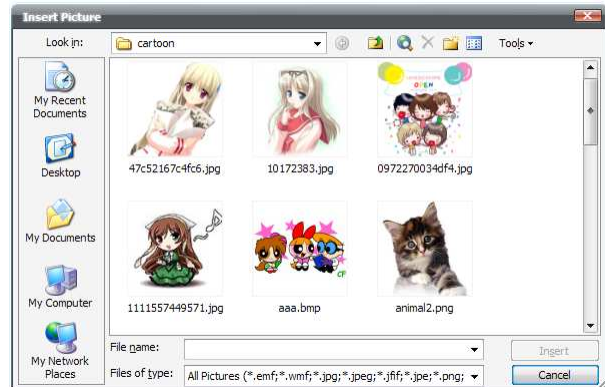
To Use the Tool Format Painter

1. Click to select the cell which has been formatted.
2. Click **Format Painter**  on the tool bar.
3. Move your mouse to click on the position that you would like to format as the example cell.
4. The format of that cell will change according to the selected example cell.

Note : If you would like to use the format in various places at the same time , you can double click at **Format Painter**.  This will result in placing the format continually until you click the icon again.

Insertion of Picture into the Table

1. Click menu **Insert**.
2. Select **Picture**.
3. Select **From File**.
4. Select the folder which has pictures.
5. Click to select the required picture.
6. Click **Insert**.



Note: If you would like to have Animation picture, select the pictures with .gif family and try it first before, Saved it on the webpage.

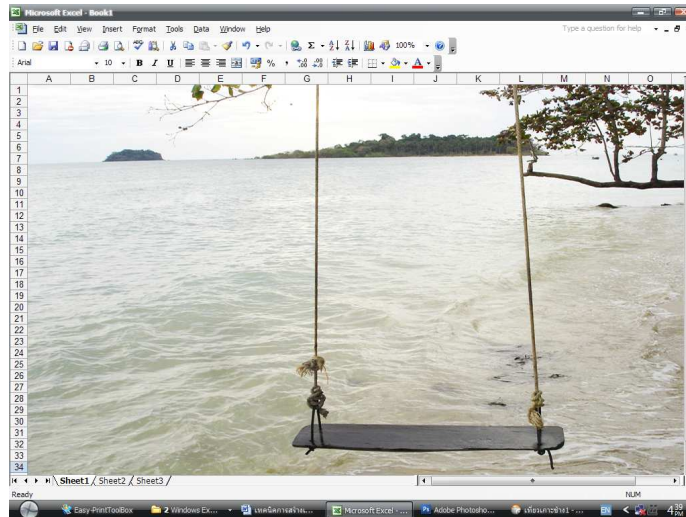
To Save the Worksheet on Webpage

1. Select the worksheet that you would like to present on the internet.
2. Click menu **File**.
3. Select **Save for web**.
4. Determine the file name such as **Solution to the Ladder Puzzle**.
5. Click **Save**.

Note: To save the worksheet on webpage, it will show the output only. It is suitable for presenting the content, or game solution as it cannot retype nor correct the data in the Cell.

 To use the pictures as the background of the worksheet.


1. Click **Format**.
2. Click **Sheet**.
3. Select **Background**.
4. Select the pictures that you would like to put on, click **Insert**.
5. The selected pictures will appear as the background of the worksheet.

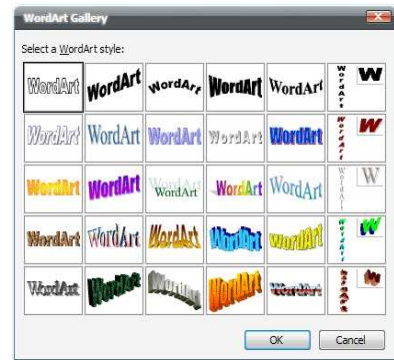


 To Cancel the Background Pictures

1. Click menu **Format**.
2. Click **Sheet**.
3. Select **Delete Background**.

To design WordArt.

1. Click **Insert WordArt**  on Drawing Toolbar.
2. A window with WordArt will come up as in the picture.
3. Click to select the required format.
4. Click **OK**.
5. Type the wordings in the set frame.
6. Click **OK**.



To Use AutoShapes

1. Click **AutoShapes** on the Toolbars on drawing.




2. Select the required shape.
3. Press the mouse and hold it for a while to draw the shape.
4. Right click in the shape and select **Add Text**.
5. Type the selected wordings in the shape.

Example: To Use AutoShapes.



Insertion of Pictures into the AutoShape

1. Click the **AutoShapes** which you have built.
2. Click at **Fill Color**  and select **Fill Effects**.
3. Select **Picture** tab to select picture.
4. Select the required picture.
5. Click **OK**.

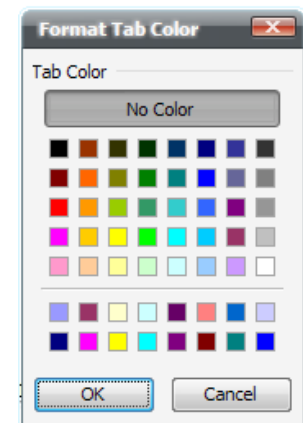


To Rename the Sheet

1. Click menu **Format**.
2. Select **Sheet**.
3. Click **Rename**.
4. Type the required name.

To change the Color of the sheet name plate

1. Click menu **Format**
2. Select **Sheet**.
3. Click **Tab Color**.
4. Click to select the required color from the table.
5. Click **OK**.

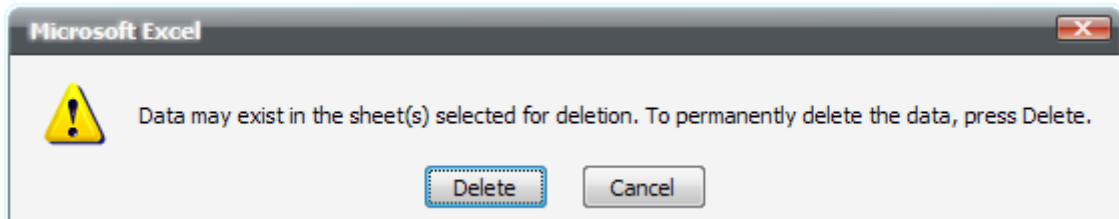


To Add Sheet

1. Click menu **Insert**.
2. Select **the sheet**.
3. Sheet will show up.

To Delete Sheet

1. Click menu **Edit**.
2. Select **Delete Sheet**.
3. If that sheet has data on it, it will pop up in your window, you have to **confirm Delete**.



4. Click **Delete**, the sheet will be deleted immediately.


To change the position of the Sheet

1. Click to draw the bar of the required sheet such as Sheet 3 moves left or right as required.
2. Notice position pointer which will move to and flow, when it comes to the required position, you can release the mouse.

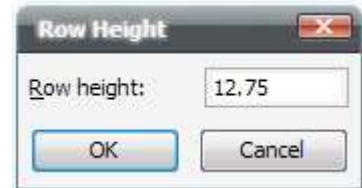
 **To adjust the width of the column**

1. Click menu **Format**.
2. Select **Column**.
the window will appear
as in the picture.
3. Click **Width**, and identify the required width.
4. Click **OK**.



 **To adjust the height of the row**

1. Click menu **Format**.
2. Select **Row**.
the window will appear
as in the picture.
3. Click **Height**, and identify the required height.
4. Click **OK**.



 **To insert row and column**

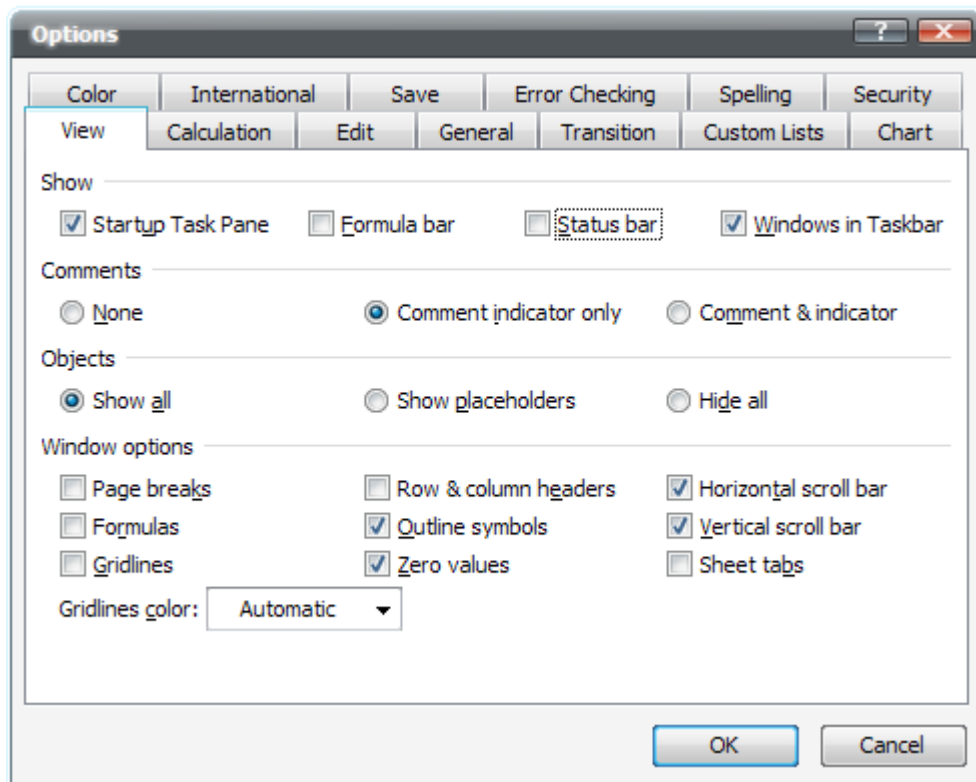
1. Click the name of the row or column which needed to insert.
2. Click menu **Insert**.
3. Select **Row** or **Column**.

 **To delete row and column**

1. Click the name of the row or column which needed to be deleted.
2. Click menu **Edit**
3. Select **Delete**.

 **To Cancel the Details of the Working Timetable**

1. Click menu **Tools**.
2. Select **Options**.
3. Click **View** as shown in the picture.



4. Click the symbol in the provided space out. for example

Formula bar Status bar Gridlines Row & column headers Sheet tabs

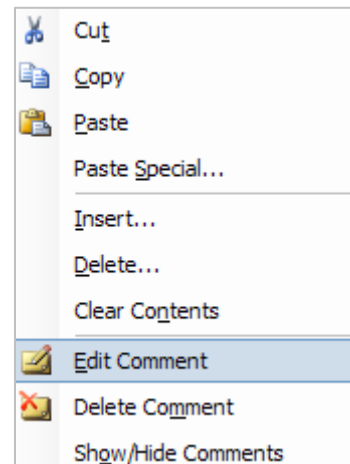
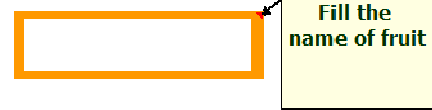
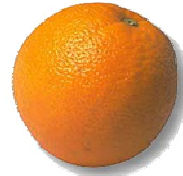
5. Click **OK**.

To Add Text to Cell

Sometimes it may be necessary to put in the explanation or comments in one of the Cells, which normally will be hidden until the mouse points out at that Cell or there is an order to show it all the time.

To Insert Comments

1. Click right on the cell that you would like to put the explanation.
2. Select **Insert Comment**.
3. Type the explanation in the appeared space.
4. Click in the empty space in the table.
5. There is a symbol of red triangle showing that the Cell has the explanation.
6. When the mouse is put on the Cell, it will show the explanation.



To correct and Delete Comments

If correction, decoration, and delete is needed, click right in the cell and select the required menu.

To decorate, click at the border of comment which will enable you to brief up or enlarge and change the background color or the font color.

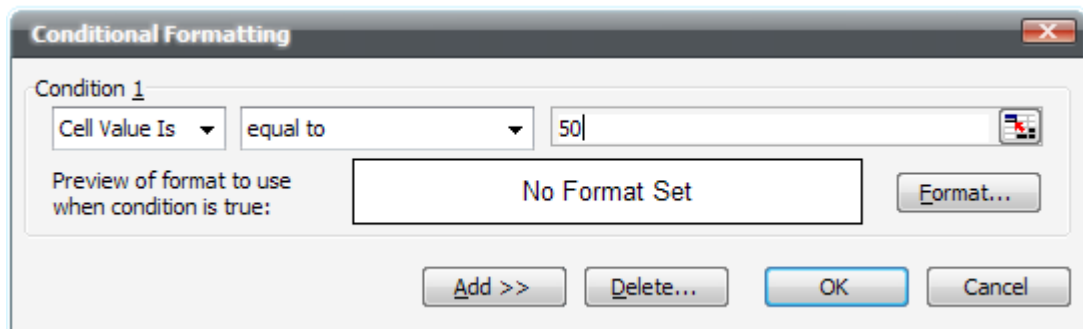


Conditional Cell Formatting

Generally, Cell decoration or Cell Formatting depends upon the player. If the player decides to have the background color to be yellow, the program will show yellow color. This kind of cell decoration is considered to be unconditional, but if we would like it to show color that is based upon the data value in the Cell which show the score for example. if the score is low it will be in red color, and if the score is average, the Cell will be in orange. And if the score is good or excellent, the Cell will be green. This kind of conditional Cell formatting needs to use comparison with the following methods:

Conditional Cell Format

1. Click the Cell that you would like to have conditional formatting.
2. Click background color of the Cell for example, blue
3. Click menu **Format**.
4. Select **Conditional Formatting**.
5. When the window is appeared, you can set up 1st condition.



6. Select the data that will be used for comparison.

Cell Value Is ▼

7. Select the Cells for comparison.

equal to ▼

8. Determine the value for comparison.

50| 

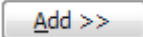
9. Click to select 

10. Determine the required format for example

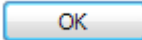
* Font * Border * Design(Color of the Cell background)

11. Click **OK**

12. If you would like to set up the second condition

Click 

Then repeat steps 6-11 again.

13. When you have no further condition, click 

To Cancel the Conditional Cell Formatting

1. Click the Cell that you would like to cancel conditional formatting.

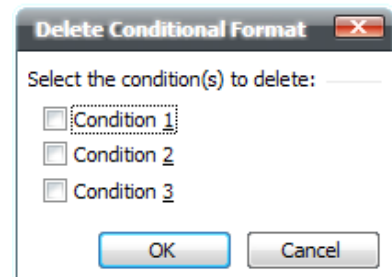
2. Click menu **Format**.

3. Select **Conditional Formatting**.

4. Click 

5. Select the condition that you would like to delete.

6. Click 





Formulas to calculate the score

Function **IF** is used for calculating the value with testing condition, and has 2 choices which are **True condition** and **false condition**. Example

=IF(G4=8,1,0)

Means that if the value of Cell **G4** equals to **8**, you will get **1** point but if it does not equal to **8**, you will get **0**.

=IF(G4="R",5,0)

Means that if Cell **G4** has **R**, you will get **5** points, if not, you will get **0**.

=IF(G4="Chiangmai",1,0)

Means that if Cell **G4** has the word **Chiangmai**, you will get **1** point, if not, you will get **0**.

=IF(G4="Orange",1,IF(G4=" Oranges",1,0))

Means that if **G4** has the word **Orange** or **Oranges**, you will get **1** point, if not, you will get **0**.

=IF(G4="Orange",1,IF(G4=" Oranges",5,0))

Means that if Cell **G4** has word **Orange**, you will get **1** point, if Cell **G4** has the word **Oranges** you will get **5** scores. If it is neither words, you will get **0**.

Note : You can use **IF** several times in case you have many conditions, but you need to have the symbol of **)**, close bracket. The number of symbol should be the same number of the symbol **(**, open bracket.

Formulas to Calculate the Total Score

Function **SUM** is used for calculating the total score of the set up data.

Example

=**SUM(D5:H5)** means the total score from cell **D5** cell **H5**

=**SUM(D5,D10,D15,D20)** means the total score of cells **D5,D10,D15,D20**

=**D5+D10+D15+D20** means the total score only for cells **D5,D10,D15,D20**

=**Sheet2!E4+Sheet3!E4+Sheet4!E4** means the total score of **Sheet2** cell **E4** ,**Sheet3** cell **E4** and **Sheet4** cell **E4**

Formulas to Enhance Drive and Encouragement

Function **IF** is used for calculating the value with condition in testing.

Example

=**IF(D5=6,"Best of the world",IF(D5=5,"Excellent",IF(D5=4,"Great",IF(D5=3,"Well Done",IF(D5=2,"Keep trying",IF(D5=1,"Life has just begun",IF(D5=0,"Try harder",""))))))))**

The meaning is if Cell **D5** gets 6 points, the following words will show up **Best of the world**

if Cell **D5** gets 5 points, the following words will show up **Excellent**.

if Cell **D5** gets 4 points , the following words will show up **Great**.

if Cell **D5** gets 3 points, the following words will show up **Well Done**.

if Cell **D5** gets 2 points, the following words will show up **Keep trying**.

if Cell **D5** gets 1 point, the following words will show up **Life has just begun**.

if Cell **D5** gets 0 point the following words will show up **Try harder**

if Cell **D5** has no, the Cell will be left **blank**.

Formulas to find Percentage

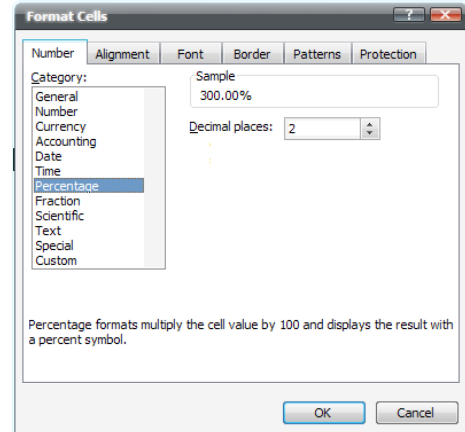
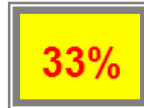
To count the number of play time or to reply to the question of how much is your percentage, means that to bring the total score and divide it by all the answers, for example

=H14/6 is the total score which is in Cell H14 will be divided by all the answers.

Then, format the number

1. Click right in the required Cell.
2. Select **Format Cell**.
3. Click **Number**.
4. Select **Percentage** as shown in the picture.
5. Click **OK**.

**Currently you get



To Hide the Data in the Cell

After finishing the game building, try enter and delete the data into Cell, test the formula to ensure that calculation formula and references are correct. Then, hide the data or the formula in the Cell by selecting one of the following methods that you think it fits well;

1. Change the color of the score Font to be in the same color as the Cell background.
2. Change the Font size in the Cell that has points to size 1.
3. Use menu for hiding row or column which has points.



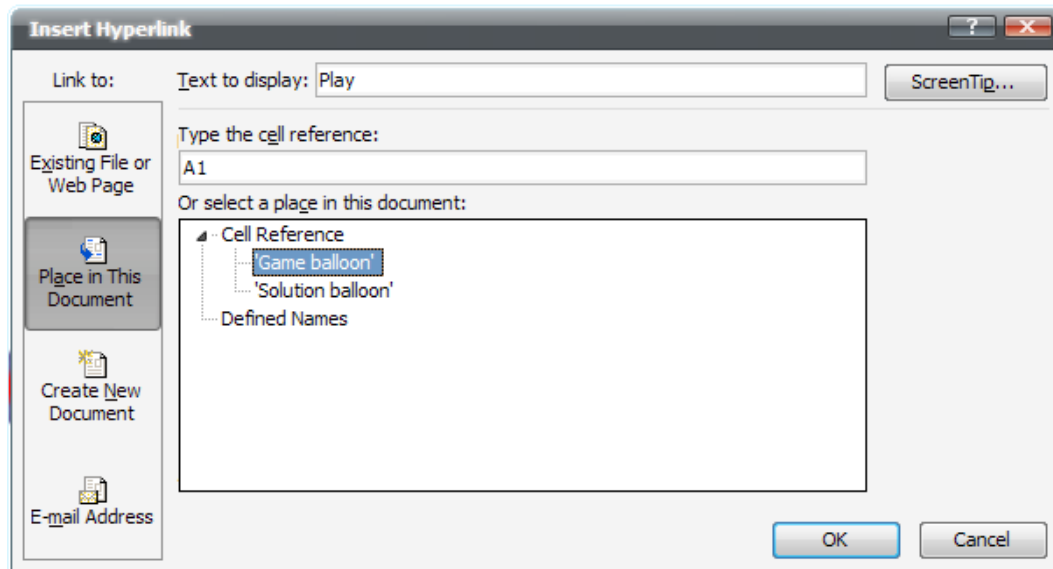
Building Hyperlink

Building hyperlink in the sheet

1. Select **Cell picture** or **wording** which will be used as linking point.



2. Click to **insert Hyperlink**
3. A window, which is shown hereunder will show up



4. Click to select **Place in this document**, and select the required **Cell reference**.
5. Click **OK**.


Building Link outside the sheet

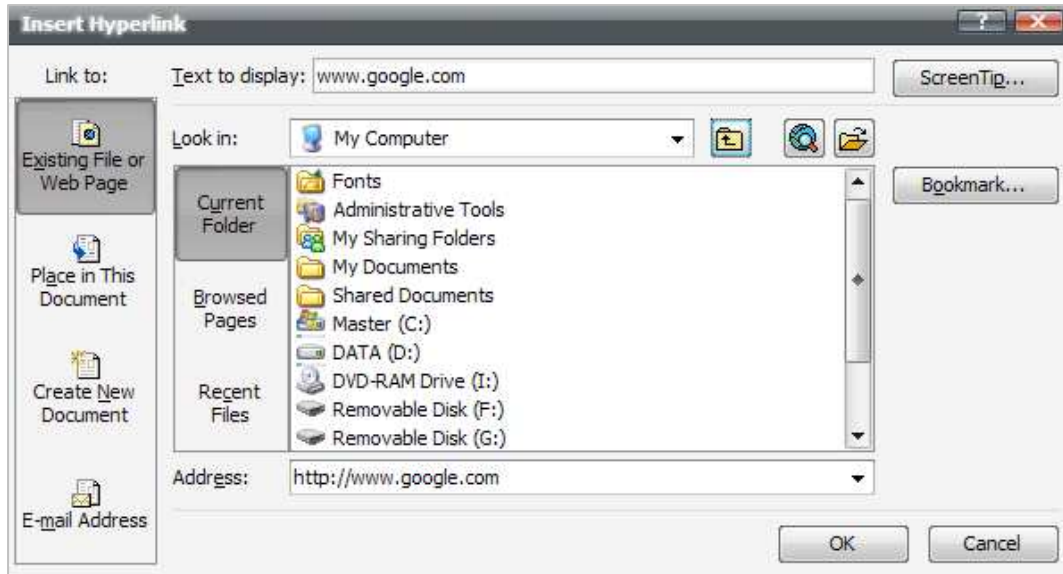
1. Select Cell picture or wording to be used as linking point.



www.krujanjira.com

www.google.com

2. Click  to insert Hyperlink.
3. The following window, as shown hereunder, will show up.



4. Select **Existing file or Webpage**.
5. Identify the required address **http://www.google.com**
6. Click **OK**.

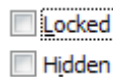


To Unlock Cell Which is Used as Answering Cell

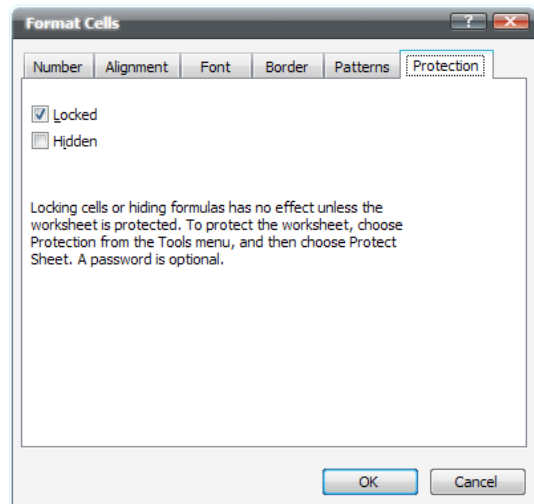
When the game is completely built, it is necessary to lock Cell to prevent data correction. Blank Cells will be provided so that the player can correct and adjust their answers all the time. Those Cells will be unlocked before protection measures are applied.

To unlock Cell to be used as answering Cell

1. Click to select Cell that are enable to be corrected.
2. Click menu **Format**
3. Select **Cells**
4. Click to select **Protection Tab**
5. Click in the **locked Cell** to become blank, as shown in the picture



6. Click **OK**.
7. Protect the sheet by click at **Menu Tools**.
8. Select **Protection**.
9. Click **Protect Sheet..**
10. Click **OK**.



Note : The data in the selected Cells can be corrected.



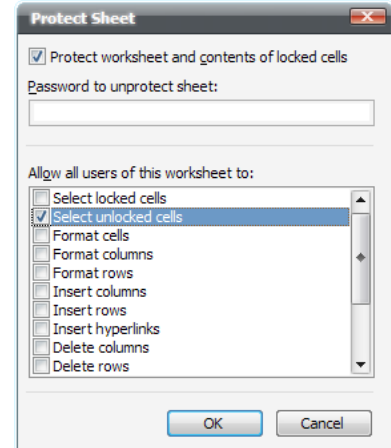
Sheet Protection by Using Password

Sheet protection can be done by either using password or not. If it is protected by not unlocking any Cells, it will protect the whole sheet, data correction and edition can not be made at all.

To Protect Sheet

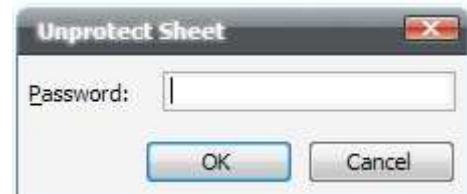
1. Click menu **Tools**.
2. Select **Protection**.
3. Click **Protect Sheet**.
4. A window to set up Password will show up.
5. Set up Password, then click **OK**.
6. Confirm Password again, click **OK**.

Note : To set up Password, assignment owner needs to remember it, otherwise, you cannot edit your worksheet again.



To Cancel Sheet Protection

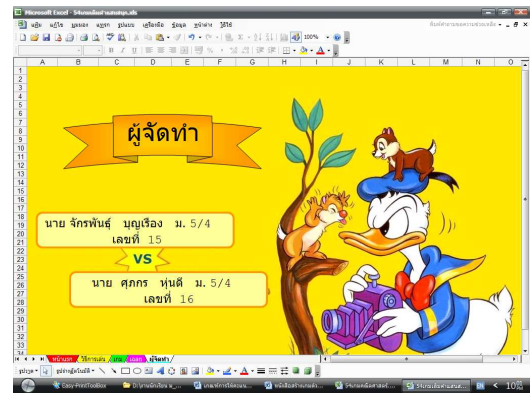
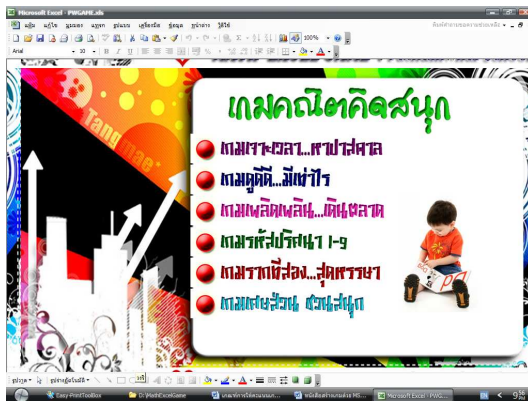
1. Click menu **Tools**.
2. Select **Protection**.
3. Click **Unprotect Sheet**.
4. A window to put in Password will show up, click **OK**.



 **Additional Game Pages**



To build up additional game pages is aimed to make the game more complete, mostly, the additional game pages comprises index page, game page, solution page, organizer page, and reference page.

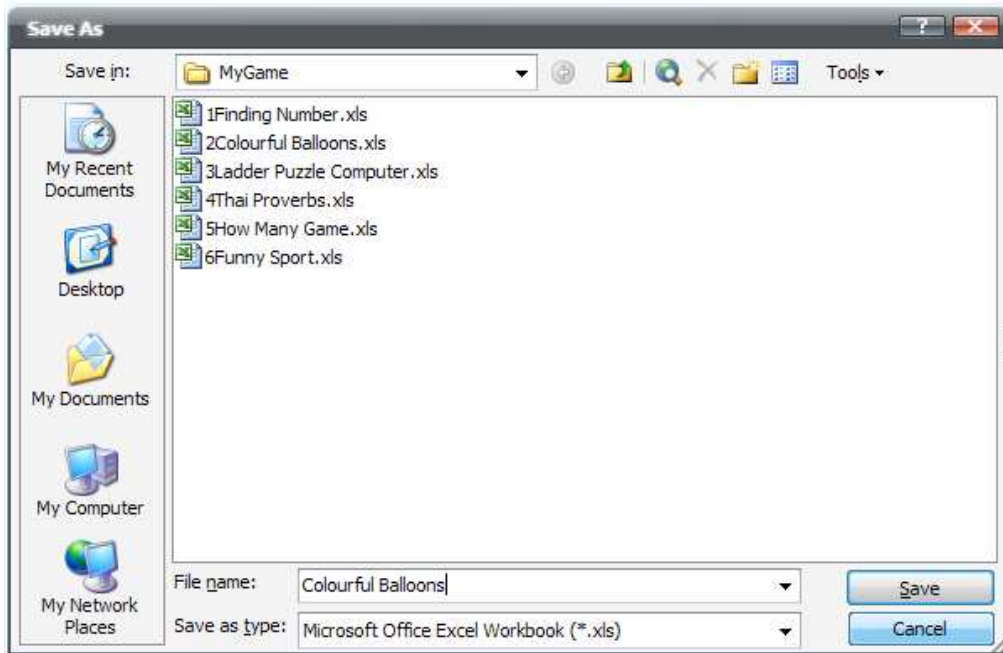
- ❑ **The first page / index / menu** is for greeting or welcoming the player which may comprise the game name, or playing rules.
- ❑ **Game page**, is for the player to find the solution by click to select the solution or others.
- ❑ **Solution page** is for the player to check the right solution.
- ❑ **Organizer page** is for introducing the organizer such as picture, name and family name registration number, E-Mail address or game building advisors.
- ❑ **Reference page** is for providing the background of the game, its content, pictures and related websites.



Example of Menu Page and Organizer Page

To Save the Data



1. Click menu **File** , click **Save As...** (or click )
2. Click to select the drive that you would like to save the data such as C: D: or E:
3. Double click the required folder such as  **MyGame**
4. Name the file such as **Colorful Balloons**, then click **OK**.

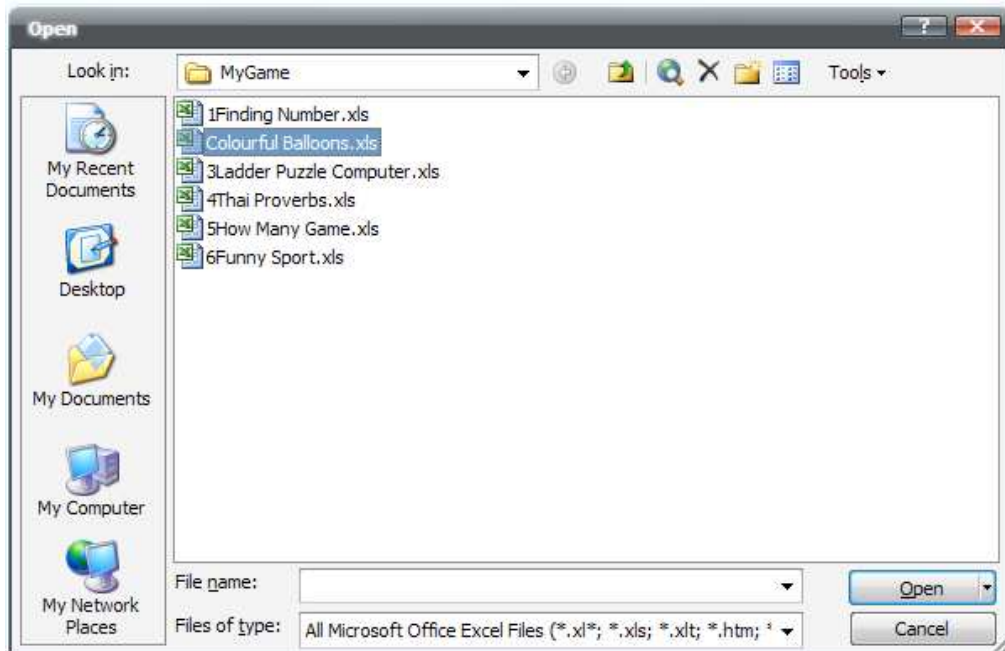


Note : If you save again under the same name, click 

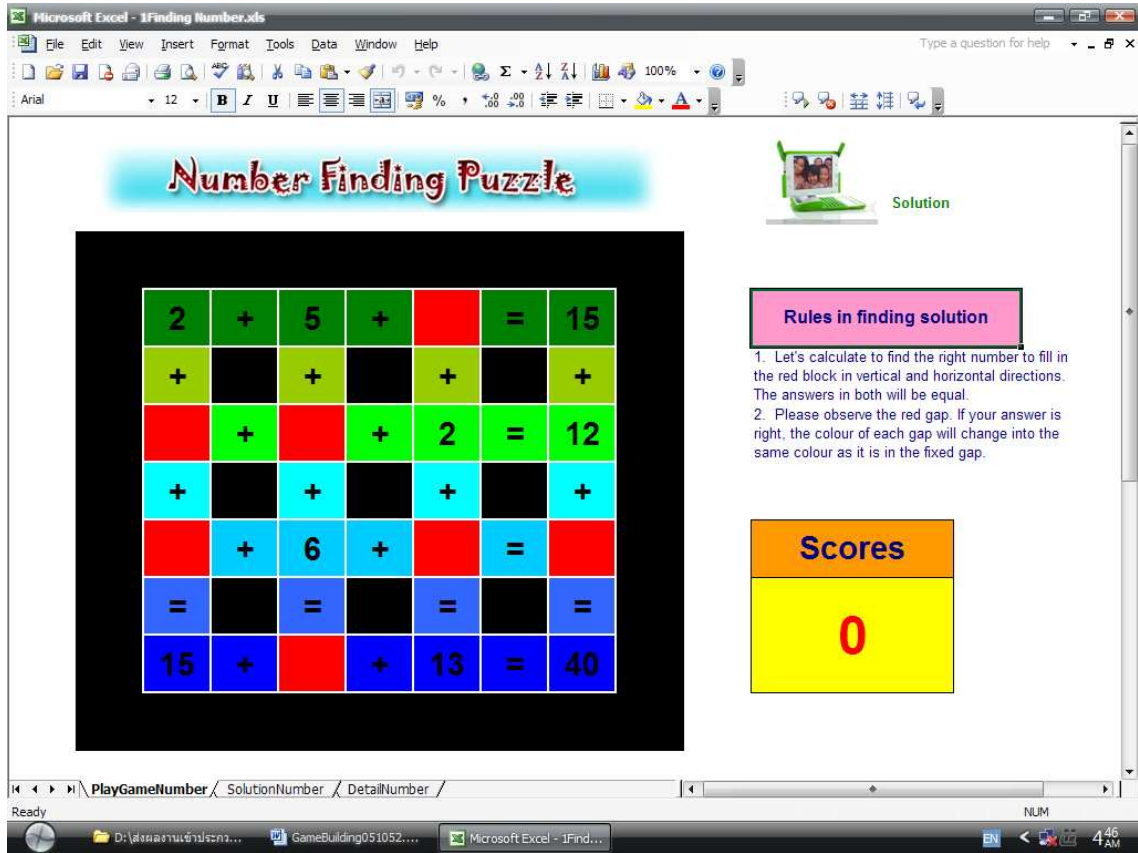


To Open the File

1. Click menu **File**, select **Open...** (or click )
2. Click to select drive to save the data such as C: D: E: or A:
3. Double click to select the required folder such as  **MyGame**
4. Click to select the File name such as **Colorful Balloons**, click **Open**.



Number Finding Puzzle Game



Game Page for the player.

Solution to the Number Finding Puzzle Game

The screenshot shows a Microsoft Excel spreadsheet with the following content:

Number Finding Puzzle

2	+	5	+	8	=	15
+		+		+		+
9	+	1	+	2	=	12
+		+		+		+
4	+	6	+	3	=	13
=		=		=		=
15	+	12	+	13	=	40

Rules in finding solution

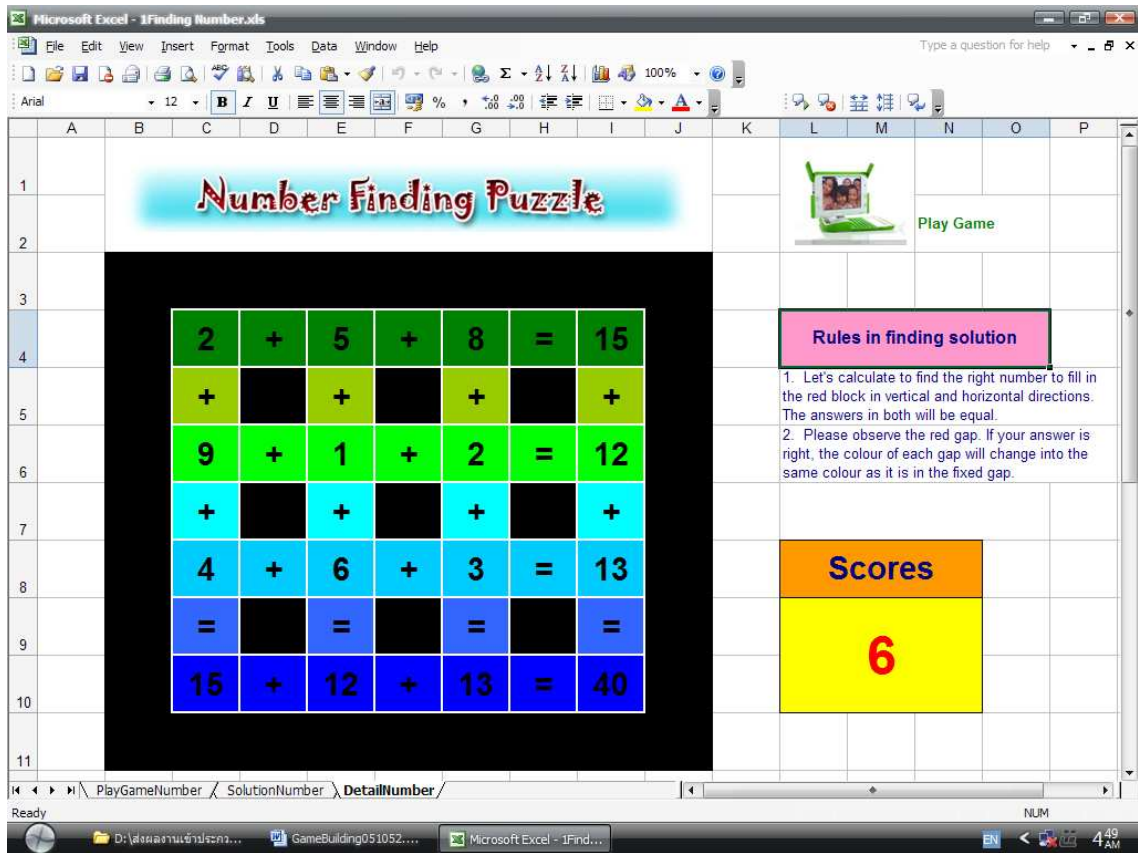
- Let's calculate to find the right number to fill in the red block in vertical and horizontal directions. The answers in both will be equal.
- Please observe the red gap. If your answer is right, the colour of each gap will change into the same colour as it is in the fixed gap.

Scores

6

The outlook of the Solution Page when the answer is correct.

Number Finding Puzzle Game



The outlook of the Game which the details have not been deleted yet.

Number Finding Puzzle Game

Game Building Procedures and Methods

1. Build up the work in **Book1** by starting from **Sheet1**
2. **Adjust the width of Column A to Column P to 8.00 (61pixels)**
Adjust the height of Row 1 to Row 11 to 39.00 (52 pixels)
3. **Merge Cells B1:J2** , this space will be used for placing the name of game "**Number Finding Puzzle Game**". Adjust the position of the name of game properly.
4. Type the **number and mathematical symbols** into the Cells, as shown in the picture by starting typing number **2** in Cell **C4**.

	A	B	C	D	E	F	G	H	I	J	K
1		Number Finding Puzzle									
2											
3											
4			2	+	5	+		=	15		
5			+		+		+		+		
6				+		+	2	=	12		
7			+		+		+		+		
8				+	6	+		=			
9			=		=		=		=		
10			15	+		+	13	=	40		

Note : To type **mathematical symbols** in the cell, after typing, press **Enter** only.

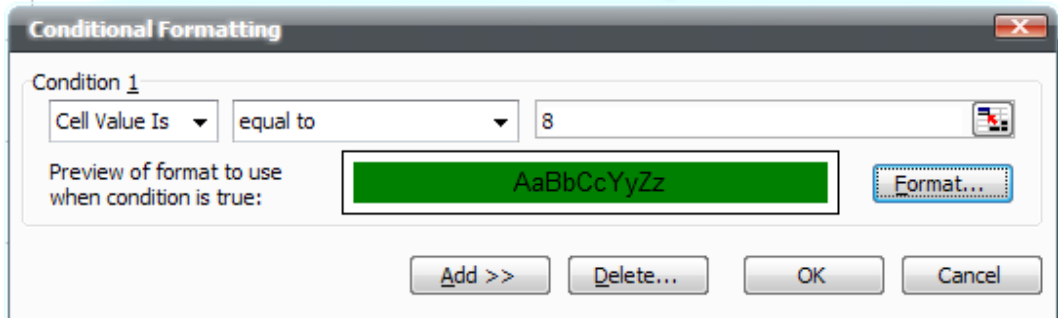
5. Format the font in cell **C4:I10** to **Size 22** , and **Bold**.
Click menu **Format >> Cells>> Alignment** , the font should be in the Center both in vertical and horizontal directions, click **OK**.
6. Change the cell color as defined as following;
Cell **C4:I4** to **Green**. Cell **C5:I5** to **Lime**.
Cell **C6:I6** to **Light green**. Cell **C7:I7** to **Light turquoise**.
Cell **C8:I8** to **Sky blue**. Cell **C9:I9** to **Light blue**.
Cell **C10:I10** to **Blue**.
Cells **D5** , **F5** , **H5** , **D7** , **F7** , **H7** , **D9** , **F9** and **H9** to black.
7. Select the space of **C4:I10**, click menu **Format>>Cells>>Border**, select type of line, **White**, click **Outline** and **Inside**, click **OK**.
8. Select the space of cell **B3:J3** , **B4:B10**, **B11:J11** and **J4:J10**, change the Cell color to **Black**.
9. Change the color of the following Cells **G4** , **C6** , **E6** , **C8** , **G8** , **I8** and **E10** to **Red**.
10. Click cell **G4**, select menu **Format>> Conditional Formatting...**, when the Conditional Formatting window appears, set up as according to the picture as shown.



It means that if the **Cell value** is equal to **8**, the condition is **true**, click

In the window **Format Cells**, click **Patterns** and select **Green** color, then click **OK**.


The outcome will be displayed as in the picture, click **OK**.



Try typing the number in cell **G4**, you will see that if the cell value is **not equal to 8**, the **Cell color** is still **Red**. If the cell value **equal to 8**, the **Cell color** will change to **Green**.

11. **Format the cells according to the condition to the red cells: C6,E6,C8,G8,I8 and E10** by using the same procedures as item 10. The cell value in **C6** is equal to **9**, the required color when the value is correct is **Light green**.
The Cell value in **E6** is equal to **1**, the required color when the value is correct is **Light green**.
The Cell value in **C8** is equal to **4**, the required color when the value is correct is **Blue sky**.
The Cell value in **G8** is equal to **3**, the required color when the value is correct is **Blue sky**.
The Cell value in **I8** is equal to **13**, the required color when the value is correct is **Blue sky**.
The Cell value in **E10** is equal to **12**, the required color when the value is correct is **Blue**.


12. **Merge cells L4:O4, type " Rules in finding solution"**
 Format the cell to **Size 12** and **Bold**, the font color is **Dark blue**, the cell color is **Rose**.
 Click menu **Format>> Cells>>Alignment**, align the font to the **Center** both in horizontal vertical and directions, click **OK**.
13. **Merge cells L5:O5, type the following text " 1. Let's calculate to find the right number to fill in the red block in vertical and horizontal directions. The answers in both will be equal."**
14. **Merge Cells L6:O6, type the following text " 2. Please notice the red blank block, if the answer is correct the color of that block will change to be in the same color as indicated in the row."**
15. Select the space in cells **L5:L6**, click **Format>>Cells>>Alignment**, align the text in **Horizontal** direction to the **Left (indent)**, and the text in **Vertical** direction to the **Center**, then put the checkmark **Wrap text** , click **OK**. Format the font **Size 10**, and change the font color of Rule 1 and Rule 2. to **Dark blue**.
16. Type **Formulas** and **Functions** to calculate **Sub score** as followings;
 Cell **P4**, type **=IF(G4=8,1,0)**
 It means that if cell **G4** is equal to **8**, give **1 point**, if not, give **0**.
 Cell **P5**, type **=IF(C6=9,1,0)**
 Cell **P6**, type **=IF(E6=1,1,0)**
 Cell **P7**, type **=IF(C8=4,1,0)**
 Cell **P8**, type **=IF(G8=3,1,0)**
 Cell **P9**, type **=IF(I8=13,1,0)**
 Cell **P10**, type **=IF(E10=12,1,0)**

17. **Merge cells L8:N8**, type "**Scores**".
Format cell to **Size 22, Bold** with **Dark blue**, cell color is **Light orange**.
Click **Format>>Cells>>Alignment**, align the font to the **Center** both in **Vertical** and **Horizontal** directions. Click **OK**.
18. **Merge cells L9:N10** to be used as the space for showing **Score**.
Set the font **Size 36** and **Bold**, the color of the font should be **Red** and the cell color is **Yellow**.
Click menu **Format>> Cells>> Alignment**, the font should be in the **Center** both in **Vertical** and **Horizontal** directions, click **OK**.
19. Select cells **L8:L9**, click to select the border tool  **All Borders** then click to the point cell.
20. Type **Formulas** and **Functions** to calculate the **Total Score** as follows; In cell **L9** type **=SUM(P4:P10)**
21. **Hide the points** by changing the font color in the cells **P4:P10** to **White**.
22. **Merge Cells L1:M2** for placing the **Hyperlink Picture**
Click menu **Insert>>Picture>>From File...>>**, select the required pictures, click **OK**. Adjust the size and put the picture in the defined position.
23. Click cell **N2**, type "**Play Game**", adjust the font to **Size 10** and **Bold**, with **Green**.
24. Create the **Solution of Number Finding Puzzle Game** worksheet.
Change the name of **Sheet 1** to **SolutionNumber**.
Right click on the **SolutionNumber**, select **Move or Copy...**, select **Create a copy**, click **OK**.

When the **SolutionNumber (2)** appears,
change the name to **PlayGameNumber**.

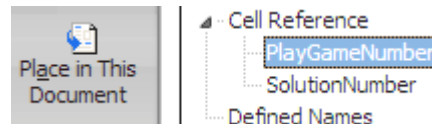
In the **PlayGameNumber** change " **Play Game**" to "**Solution**".

25. **Create the link between Playing page and Solution page.**

26. In the **SolutionNumber**, click in the **picture** in cell **L1**,
then click **Insert Hyperlink** 

When the **Insert Hyperlink** window appears,
select **Place in this document**.

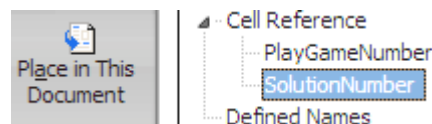
For Cell Reference, select **PlayGameNumber**, click **OK**.



27. In the **PlayGameNumber** , click the **picture** in cell **L1**, then click .

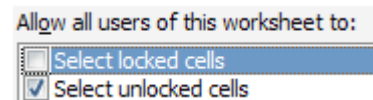
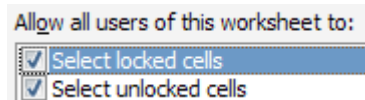
When the **Insert Hyperlink** window appears,
select **Place in this document**.

For Cell Reference, select **SolutionNumber**, Click **OK**.



28. **Check the link between the 2 sheets to ensure that it can moved forward and backward between **PlayGameNumber** and **SolutionNumber**.**

29. In the **PlayGameNumber**, delete the number in the following cells **G4, C6, E6, C8, G8, I8** and **E10**, the cells will turn **Red**.
30. Unlock cell to be used as **answering space**, only in the **PlayGameNumber** by click cell **G4**, then press **Ctrl** and click to select all the **red cells** which are **C6, E6, C8, G8, I8**, and **E10**.
Click menu **Format>>Cells>>Protection>>**, click **Locked** lock to **Locked** , then click **OK**.
31. **Create the Worksheet Protection.**
Click menu **Tools>>Protection>>Protect sheet**.
The window for defining Password shall appear to let you define your password (you can either define or reject to use Password).
Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.
Click **uncheck** **select locked cells** to become **select locked cells** as shown in the picture;



Click **OK**.

It can be seen that all the cells are locked except the following cells: **G4, C6, E6, C8, G8, I8** and **E10** which can fill in the number.

32. In the **SolutionNumber** worksheet,
Worksheet Protection by following the same procedures in **item 31**.
All the Cells will be locked in order that you can see only the solution.
33. **For Editing**, Click menu **Tools >> Protection >> Unprotect Sheet...**

34. **To Cancel the details** of Program window elements,
click **Tools >> Options... >>View**
click to cancel the details which you would like to delete in both 2
sheets such as

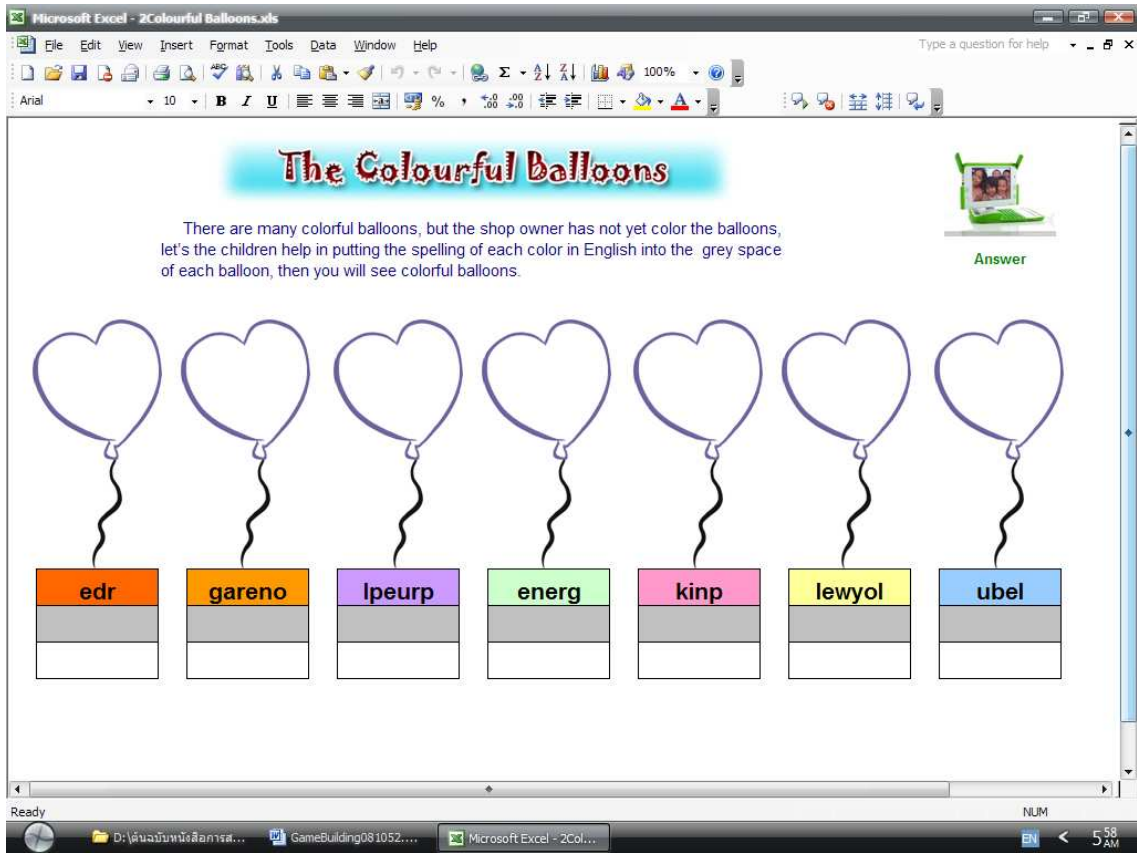
Formula bar Status bar Gridlines Row & column headers Sheet tabs

Click **OK**.

35. **To Save Number Finding Puzzle Game**
Click the **PlayGameNumber** sheet.
Click **File>>Save As...** >>type the name as **Number Finding**.
Click **Save**.

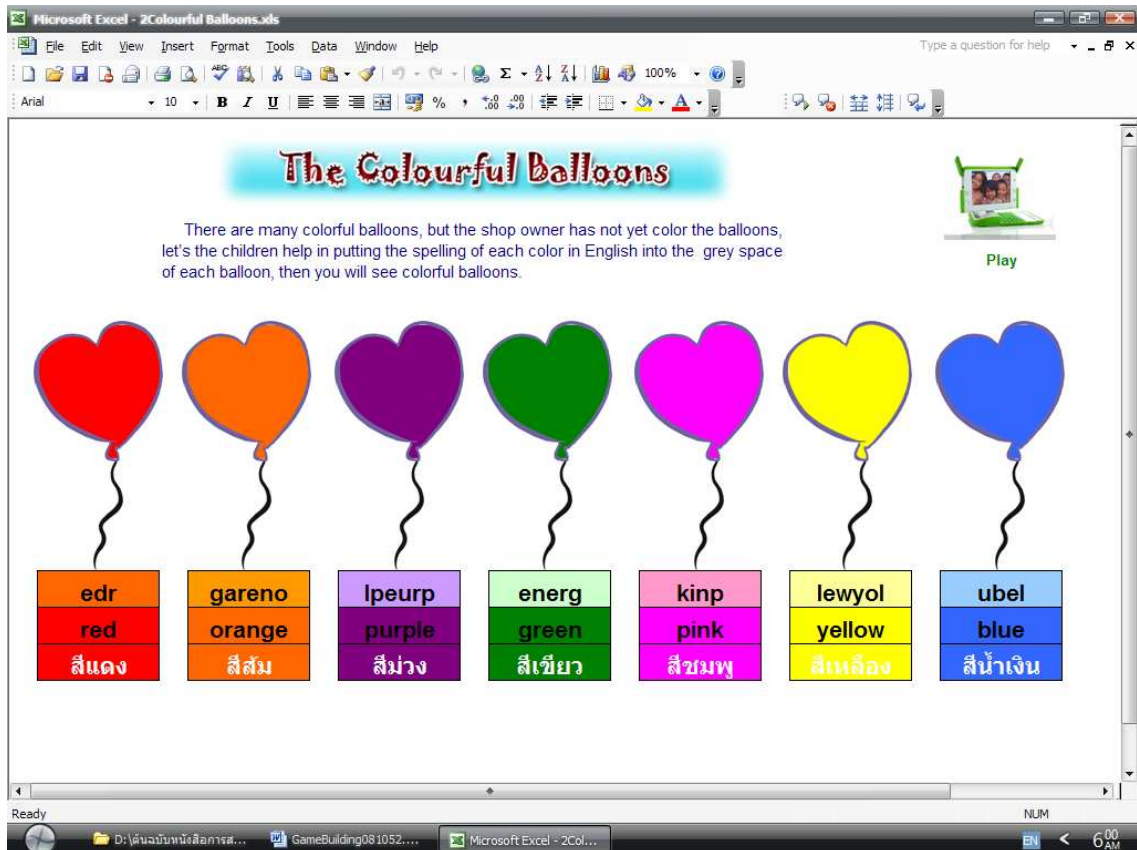


The Colourful Balloons Game



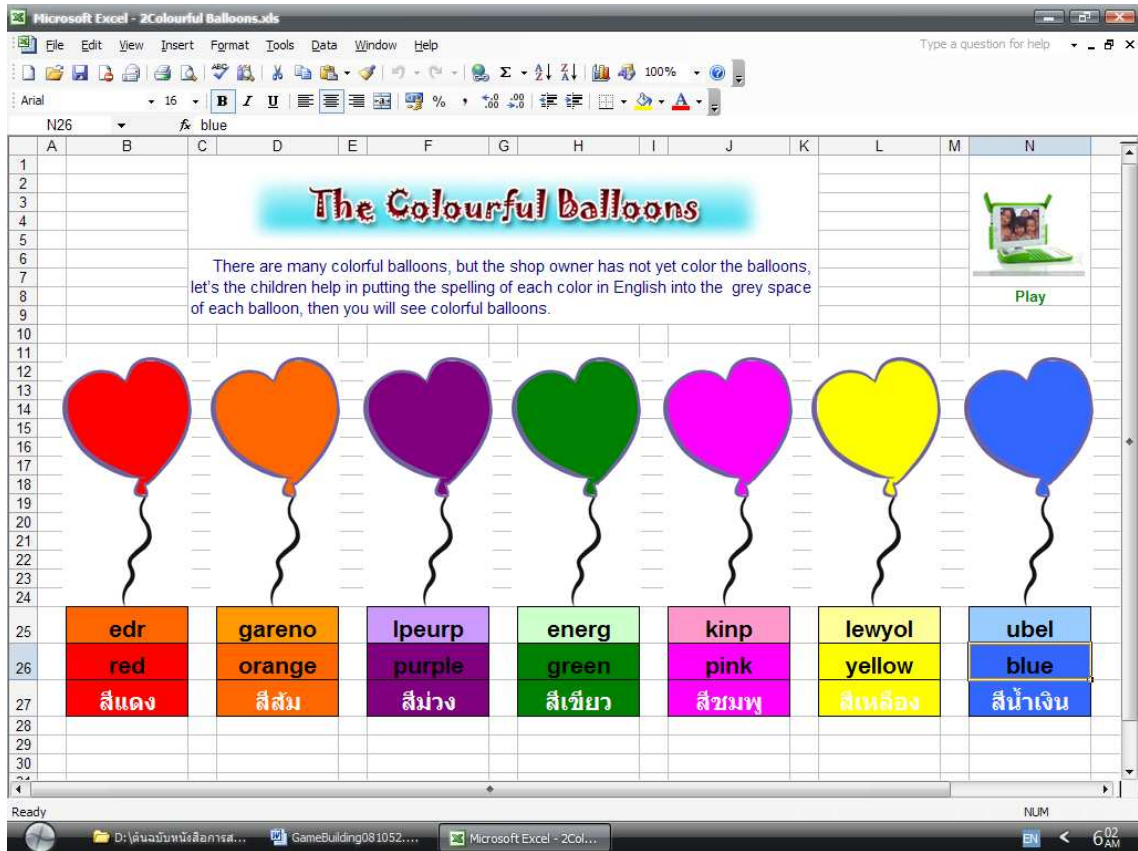
Game Page for the player

Solution to the Colourful Balloons Game



The outlook of the Solution Page when the answer is correct.

The Colorful Balloons Game



The outlook of the Game which the details have not been deleted yet.

The Colorful Balloons Game

Game Building Procedures and Methods

1. Build up the game in **Book1** by starting from **Sheet 1**.
2. **Adjust the height of the row 25-27 to 25.**
Adjust the width of columns A,C,E,G, I, K,M to 3 and columns B,D,F,H,J,L,N to15.
3. **Merge cells C1:K5** for placing the name of game "**Colorful Balloons Game**", Adjust the position of the name of game properly.
4. **Merge cells C6:K9**, type the game rules as follows "**In a balloons shop, there are many colorful balloons, but the shop owner has not yet color the balloons, let's the children help in putting the spelling of each color in English into the grey space of each balloon, then you will see colorful balloons.**"
Set the text of the rules to font **Size 11** and **Dark blue**.
Click menu **Format>>Cells>>Alignment**, align the text in **Horizontal** direction to the **Left (indent)**, and the text in **Vertical** direction to the **Center**, then put **Wrap text** , Click **OK**.
5. **Merge cells** to use the area for coloring the balloons as to the following requirements:
Cells **B12:B18** **Red** balloon Cells **D12:D18** **Orange** balloon
Cells **F12:F18** **Purple** balloon Cells **H12:H18** **Green** balloon
Cells **J12:J18** **Pink** balloon Cells **L12:L18** **Yellow** balloon
Cells **N12:N18** **Blue** balloon
6. Type the font in cells and change the cells color as to the following

requirements ():

Cell **B25** , type **edr** (orange)

Cell **D25** , type **gareno** (light orange)

Cell **F25** , type **lpeurp** (lavender purple)

Cell **H25** , type **energy** (light green)

Cell **J25** , type **kinp** (rose pink)

Cell **L25** , type **lewyol** (light yellow)

Cell **N25** , type **ubel** (light blue)

Select the area of cells **B25:N27**, Format the cell to **Center** and set the font to **Size 16** and **Bold**.

7. Click cells **B26,D26,F26,H26,J26,L26,N26** to change their cell color to **Grey-25%** as shown in the picture.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1			The Colourful Balloons											
2			There are many colorful balloons, but the shop owner has not yet color the balloons, let's the children help in putting the spelling of each color in English into the grey space of each balloon, then you will see colorful balloons.											
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25		edr	gareno	lpeurp	energ	kinp	lewyol	ubel						
26														
27														
28														

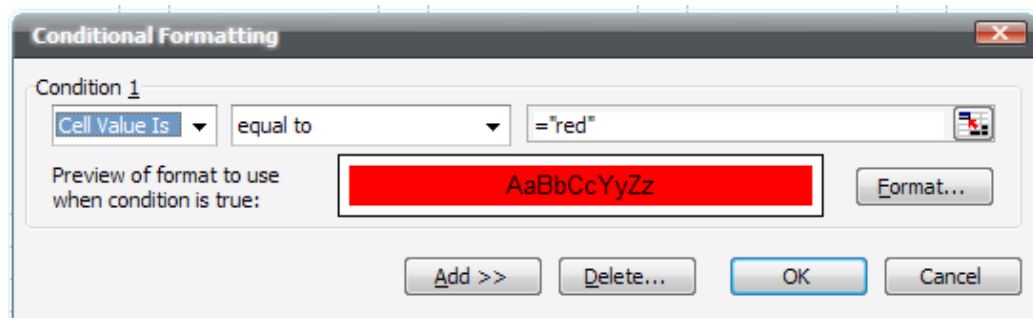
8. Type the solution of the correct color in row 26, the **Grey-25%** cell as follows:
B26 is Red D26 is Orange F26 is Purple H26 is Green
J26 is Pink L26 is Yellow N26 is Blue

9. Click cell **B26** to select menu **Format >> Conditional Formatting...**
 When Conditional Formatting window appeared, set up as according to the picture:



It means that if the cell value is **Red**, the condition is **true**, click **Format...**

In the window of **Format Cells**, click **Pattern**, select **Red** and click **OK**. The outcome will be displayed as in the picture, click **OK**.



Try typing the font in cell **B26**, if the cell value is **not red**, the cell color will remain **Grey-25%**. If the cell value is **Red**, the cell color will be **Red**.

10. Set **Conditional Cell Formatting** to the following **Grey-25%** cells i.e. **D26,F26,H26,J26,L26** and **N26**, using the same procedures as in item **9**, to define the correct solution and the cell color when the

value in the cell is corrected as follows:

Cell value	D26 is Orange	Orange pattern
	F26 is Purple	Plum purple pattern
	H26 is Green	Green pattern
	J26 is Pink	Pink pattern
	L26 is Yellow	Yellow pattern
	N26 is Blue	Light blue pattern


11. Set **Conditional Formatting** in the following cells **B27, D27, F27, H27, J27, L27** and **N27** by using the same procedure as in item 9, set up the correct answering value and the cell color when the value is true as followings:

Cell value in	B27 is "สีแดง"	White Font	Red Pattern
	D27 is "สีส้ม"	White Font	Orange Pattern
	F27 is "สีม่วง"	White Font	Plum Purple Pattern
	H27 is "สีเขียว"	White Font	Green Pattern
	J27 is "สีชมพู"	White Font	Pink Pattern
	L27 is "สีเหลือง"	White Font	Yellow Pattern
	N27 is "สีน้ำเงิน"	White Font	Light Blue Pattern

12. Type **Formulas** and **Functions** to automatically show the color name in row 27, when filling in the correct color name, in cell **B27** type **=IF(B26="red", "สีแดง", " ")**, it means that if cell **B26** has the wording **Red**, the word สีแดง will show up, if it is not that word, let it be blank.
Cell **D27**, type **=IF(D26="orange", "สีส้ม", " ")**
Cell **F27**, type **=IF(F26="purple", "สีม่วง", " ")**
Cell **H27**, type **=IF(H26="green", "สีเขียว", " ")**
Cell **J27**, type **=IF(J26="pink", "สีชมพู", " ")**

Cell L27, type =IF(L26="yellow", "สีเหลือง", " ")

Cell N27, type =IF(N26="blue", "สีน้ำเงิน", " ")

13. Click to select the area of cells B25:B27, D25:D27, F25:F27, H25:H27, J25:J27, L25:L27, N25:N27. click Toolbars, select **Border** , **All Borders** the color name cell.

14. Type **Formulas** and **Functions** so that **cell can automatically change the color**, when the correct color name is filled up.

Cell B12, type =B26

It means that if cell B26 has any data, cell B12 will show the same data.

Cell D12, type D26

Cell F12, type =F26

Cell H12, type H26

Cell J12, type =J26

Cell L12, type L26

Cell N12, type =N26

15. Set **Conditional Formatting** to the cells of **balloons color** which are B12, D12, F12, H12, J12, L12 and N12, by using the same procedure as in item 9. Then set up the correct answer and the cell color when the value is true as followings:

The value in cell

B12 is red

With red pattern

D12 is orange

With orange pattern

F12 is purple

With plum purple pattern

H12 is green

With green pattern

J12 is pink

With pink pattern

L12 is yellow

With yellow pattern


N12 is blue

With light blue pattern

16. **Hide the text in the balloons**, change the color of the text in the following cells **B12,D12,F12,H12,J12,L12** and **N12** into the same color as the cells, for example if the Cell is red, the letter should be changed to red.

Click menu **Insert>>Picture>>From File...>>** select the picture from CD-Rom named **balloon.gif**, click **Insert**. Format the picture to be in the position which cover the set up color in **Row 12**.



Click the balloon picture, use the **set transparent color**  from the **Toolbar Picture**.

Click in the balloon to fade out the former color of the balloon, **the space** will come out to show the set up color. **Copy the balloon picture**, to cover all the set up color cells.

17. **Merge cells N2:N7** for placing the picture

Click menu **Insert>>Picture>>From File...>>** select the required pictures. Click **OK**, adjust the size and place the picture into the defined position.

18. Click cell **N8**, type "**Play Game**", format the font to **Size 10, Bold and Green**.


19. Create the **Solution of The Colorful Balloons Game** worksheet.

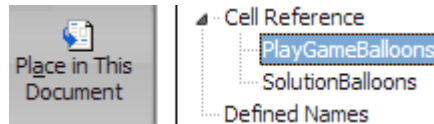
Change the name of **Sheet1** to **SolutionBalloons**.

Right click on the **SolutionBalloons**, select **Move or Copy...** select **Create a copy** **OK**.

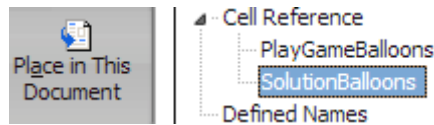
When the **SolutionBalloons (2)** appears, change the name to **PlayGameBalloons**.

In the **PlayGameBalloons**, change "**Play Game**" to "**Solution**".

20. **Create the link between Playing page and Solution page.**
 In the **SolutionBalloons**, click in the picture
 in cell N2, then click **Insert Hyperlink** 
 When the **Insert Hyperlink** window appears, select **Place in this document**
 For Cell Reference, select **PlayGameBalloons** Click **OK**.



21. In the **PlayGameBalloons**, click the picture in cell N2, then click 
 When the **Insert Hyperlink** window appears, select **Place in this document**.
 For Cell Reference, select **SolutionBalloons**. Click **OK**.



22. Check the link between the 2 sheets to ensure that it can be moved **forward** and **backward** between **PlayGameBalloons** and **SolutionBalloons**.
23. In the **PlayGameBalloons**, delete the data in the following cells **B26**, **D26**, **F26**, **H26**, **J26**, **L26** and **N26**, the cells will be displayed as **Grey-25%**, the set up color of the cells will not show up.
24. Unlock cell to be used as **answering space**, only in the **PlayGameBalloons**.
 Click cell **B26**, press **Ctrl** then click **Grey-25%** in all the following
 Cells **B26**, **D26**, **F26**, **H26**, **J26**, **L26** and **N26**.
 Click menu **Format >> Cells >> Protection..**
 click **Locked** to **Locked**, then click **OK**.

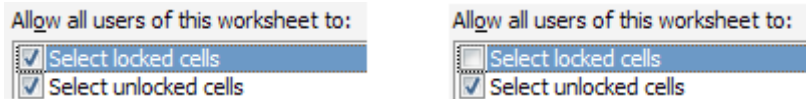
25. **Create the Worksheet Protection**

Click menu **Tools > Protection > Protect sheet.**

The window for defining password shall appear to let you define your password (you can either define or reject to use Password)

Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.

Click **uncheck** select locked cells to become select locked cells as shown in the picture.



Click **OK.**

All the cells are locked, only the grey cells which can fill in the data

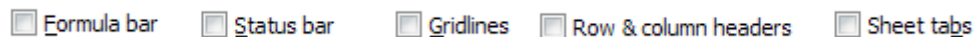
26. In the **SolutionBalloons** worksheet, you have to **lock all worksheets** by following the procedure in **item 25**. It can be seen that **all the cells are locked** for seeing solution only.

27. **For Editing,** Click menu **Tools >> Protection >> Unprotect Sheet...**

28. **To Cancel the details** of the window components,

Click **Tools >> Options... >> View**

Click to cancel the details which you would like to delete in both 2 sheets such as



Click **OK.**

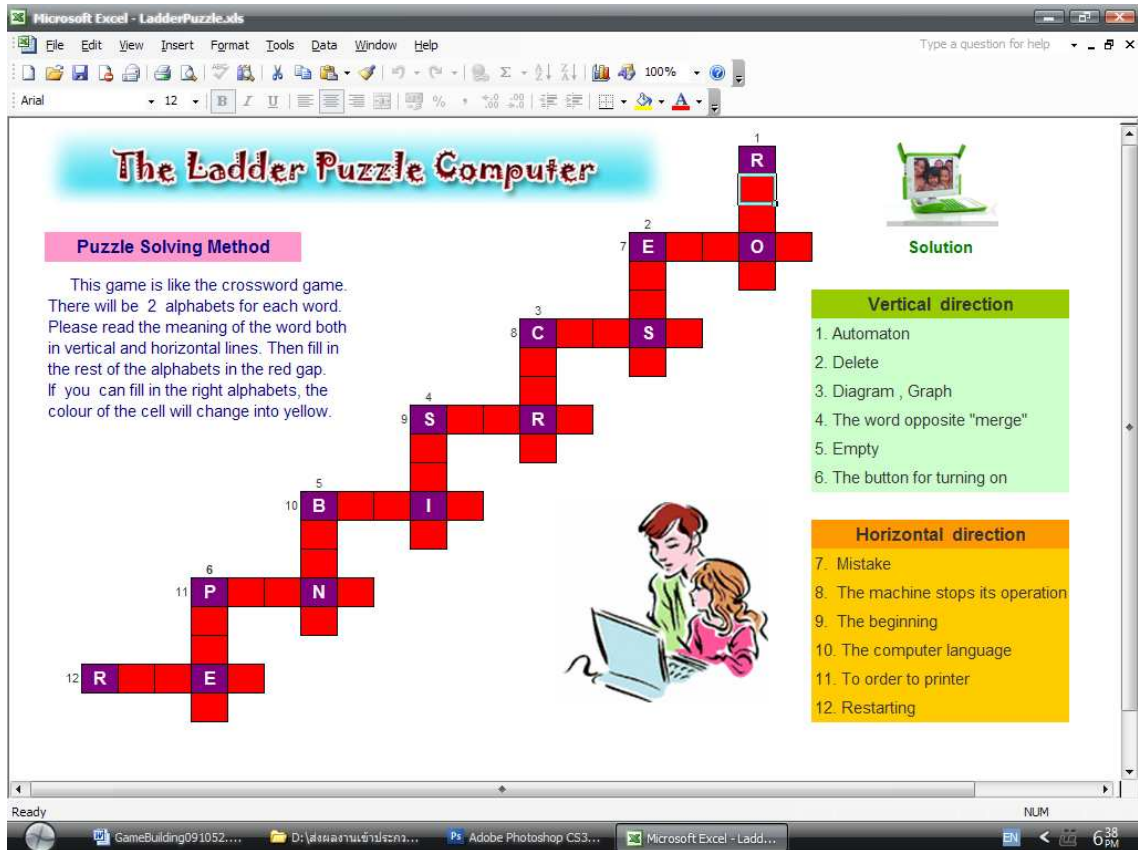
29. **To Save The Colorful Balloons Game.** Click **PlayGameBalloons** sheet.

Click menu **File >> Save As... >>** type the name as **Colorful Balloons,**

Click **Save.**



The Ladder Puzzle Computer Game



Game Page for the Player

Solution to The Ladder Puzzle Computer Game

The Ladder Puzzle Computer

Puzzle Solving Method

This game is like the crossword game. There will be 2 alphabets for each word. Please read the meaning of the word both in vertical and horizontal lines. Then fill in the rest of the alphabets in the red gap. If you can fill in the right alphabets, the colour of the cell will change into yellow.

Vertical direction

1. Automaton
2. Delete
3. Diagram , Graph
4. The word opposite "merge"
5. Empty
6. The button for turning on

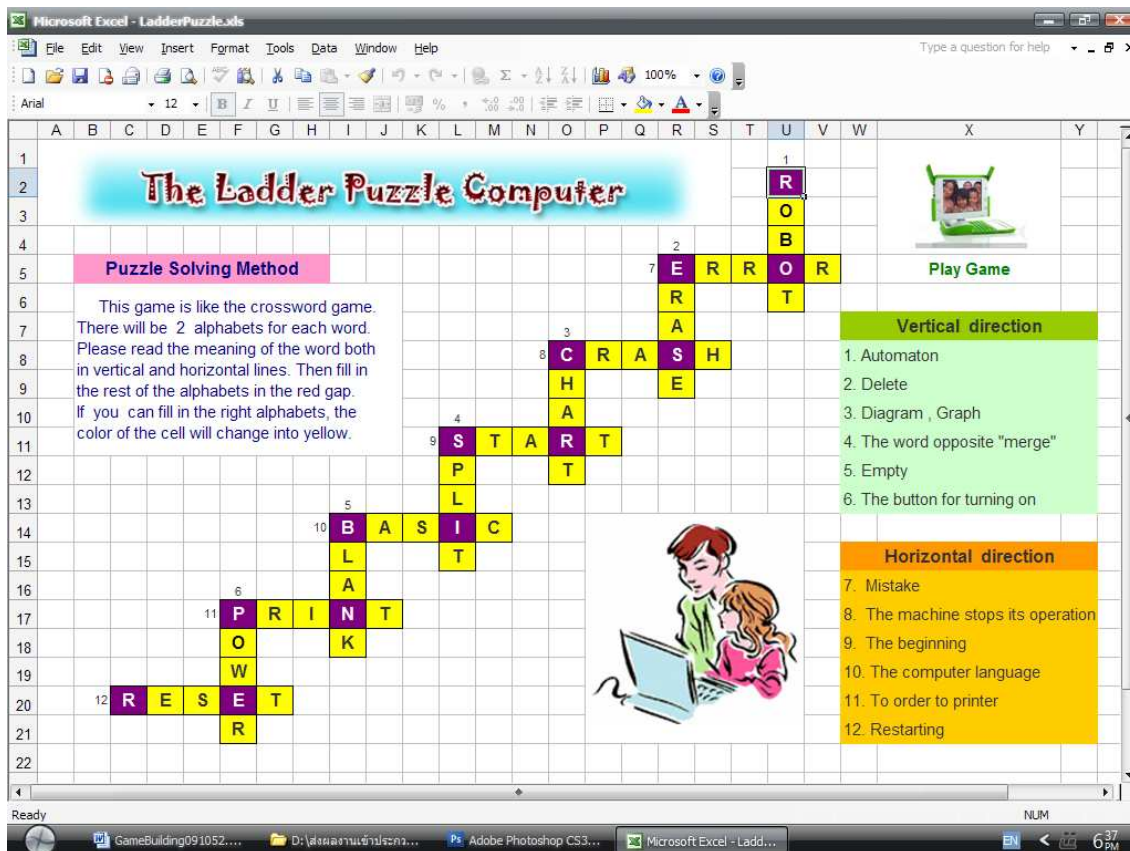
Horizontal direction

7. Mistake
8. The machine stops its operation
9. The beginning
10. The computer language
11. To order to printer
12. Restarting

The solution words are: 1. ROBOT, 2. ERROR, 3. CRASH, 4. START, 5. BASIC, 6. PRINT, 7. MISTAKE, 8. THE MACHINE STOPS ITS OPERATION, 9. THE BEGINNING, 10. THE COMPUTER LANGUAGE, 11. TO ORDER TO PRINTER, 12. RESTARTING.

The outlook of the Solution Page when the answer is correct.

The Ladder Puzzle Computer Game




The outlook of the Game which the details have not been deleted yet.

4. **Type the number and the English letters in the cells**
Starting from

U1, type 1	U2 , type R	U5, type O	R4, type 2
R5, type E	R8, type S	Q5, type 7	O7, type 3
O11, type R	N8, type 8	O8, type C	L10, type 4
L11, type S	L14, type I	K11, type 9	I13, type 5
I14, type B	I17, type N	H14, type 10	F16, type 6
F17, type P	F20, type E	E17, type 11	C20, type R
B20, type 12			

5. Click in cell **U2**, then press and hold **Ctrl** for a while, then click to select the following cells **U2:U6, R5:V5, R5:R9, O8:S8, O8:O12, L11:P11, L11:L15, I14:M14, I14:I18, F17:J17, F17:F21** and **C20:G20**.

Format the cells to **Size 12**, color to **Red, Bold**, click to select **Tools border**,  **All Borders** the selected cells.

Click **Format >> Cells >> Alignment**, adjust the font to the **Center** both in **Vertical** and **Horizontal** direction, click **OK**.

6. Format the Font as defined, click in cell **U2**, press **Ctrl** and hold for a while click the following cells **U5, R5, R8, O8, O11, L11, L14, I14, I14, I17, F17, F20, and C20**.

7. **Format the numbers** in the **Vertical** direction, click cell **U1**, press **Ctrl** and hold for a while, then click the following cells **R4, O7, L10, I13, and F16**. Set the font to **Size 8**.

Click menu **Format >> Cells >> Alignment**, set the font in **Horizontal** position to be in the **Center**, and the font in **Vertical** position to be **Bottom**, click **OK**.

8. **Format the numbers** in the **Horizontal** direction, click cell **Q5**, press **Ctrl** and hold for a while, then click the following cells **N8**, **K11**, **H14**, **E17**, and **B20**, adjust the font to **Size 8**.
Click menu **Format**>> **Cells**>>**Alignment**, align the **Horizontal** font to the **Right(indent)**, and the **Vertical** font to the **Center**, click **OK**.
9. Adjust the width of column X to 23.00 (166 pixels)
10. **Merge Cells X1:X4** for placing **Hyperlink Picture**
Click menu **Insert**>> **Picture**>> **From File...>>**, select the required pictures, click **OK**.
Adjust the size and place the picture in the indicated position.
11. Click cell **X5** and type " **Play Game**", set the font to **Size 10**, **Bold** and **Green**.
12. In cell **W7**, type "**Vertical direction**", format the font to **Size 10** and **Bold**.
Click cell **W7**, align the font to the **Center**, **Bold** and set the Cell color to **Lemon green**.
Change the color of the cells **W8:W13** into **Light green**.
Type the meaning of computer vocabularies respectively by using **Size 11** font as followings;
 - W8**, type 1. **Automaton**
 - W9**, type 2. **Delete**
 - W10**, type 3. **Diagram , Graph**
 - W11**, type 4. **The word opposite "merge"**
 - W12**, type 5. **Empty**
 - W13**, type 6. **The button for turning on**
13. In cell **W15**, type the text " **Horizontal direction**", adjust the font to **Size 12** and **Bold**.

Click cell **W15** and adjust it to be in the **Center, Bold** and change the cell color to **Light orange**. Change the cell color **W16:W21** to **Golden**. Type the meaning of computer vocabularies by using font **Size 11** as followings:

W16, type 7. Mistake

W17, type 8. The machine stops its operation

W18, type 9. The beginning

W19, type 10. The computer language

W20, type 11. To order to printer

W21, type 12. Restarting

14. **Merge cells B5:E5, type "Puzzle Solving Method".**

Format the cells to **Size 12** and **Bold**, the font color is **Dark blue**, the cell color is **Rose**.

15. **Merge cells B6:J11, type "This game is like the crossword game. There will be 2 alphabets for each word. Please read the meaning of the word both in vertical and horizontal lines. Then fill in the rest of the alphabets in the red gap. If you can fill in the right alphabets, the color of the cell will change into yellow."**

Format the font in cell **B6** to **Size 11**, the Font color is **Dark blue**.

Click menu **Format > > Cells > > Alignment**, align the **Horizontal** text to be **Left(indent)**, as for the **Vertical** text, align to the **Center** and put

Wrap text click **OK**.

16. Click cell **U3**, select **Format > > Conditional Formatting...**

When the conditional formatting window appears, set up the conditions as the shown picture

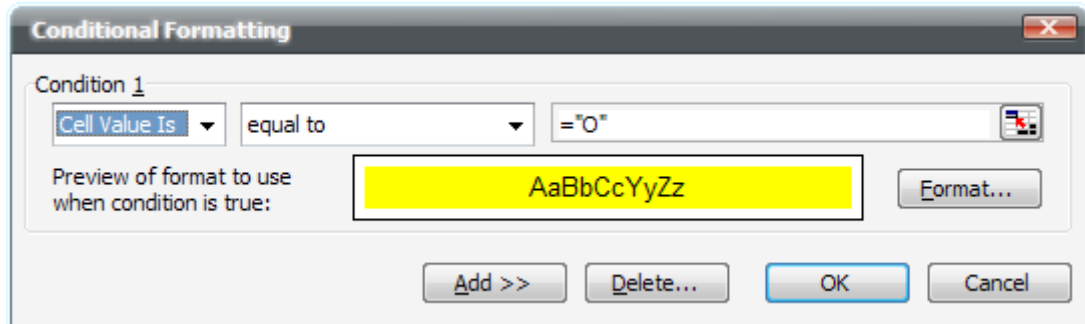


It means that if the cell value is **equal to 0**, the condition is **true**

Click

In **the** conditional formatting window, click **Pattern**, select **Yellow**, click **OK**.

The outcome will be displayed as in the picture, click **OK**.



Try typing the letters in cell **U3**, you will see that if the cell value is **not equal to 0**, the cell color will remain **Red**. But if the cell value is **0**, the color will change to **Yellow**.

17. As for the following **Red** cells **U4, U6, S5, T5, V5, R6, R7, R9, P8, Q8, S8, O9, O10, O12, M11, N11, P11, L12, L13, L15, J14, K14, M14, I15, I16, I18, G17, H17, J17, F18, F19, F21, D20, E20, and G20**, follow the same procedures as in item 16.

18. **Type the answer letter** in the following cells:

U4=B	U6=T	S5=R	T5=R	V5=R
R6=R	R7=A	R9=E	P8=R	Q8=A
S8=H	O9=H	O10=A	O12=T	M11=T
N11=A	P11=T	L12=P	L13=L	L15=T
J14=A	K14=S	M14=P	I15=L	I16=A


I18=K G17=R H17=I J17=T F18=O
 F19=W F21=R D20=E E20=S G20=T

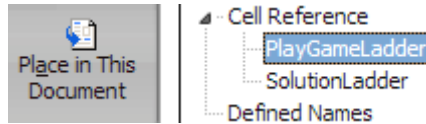
Recheck again from the following **Solution**:


Vertical	Solution
1. Automaton	ROBOT
2. Delete	ERASE
3. Diagram , Graph	CHART
4. The word opposite "merge"	SPLIT
5. Empty	BLANK
6. The button for turning on	POWER

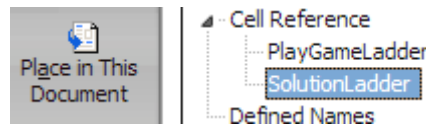
Horizontal	Solution
7. Mistake	ERROR
8. The machine stops its operation	CRASH
9. The beginning	START
10. The computer language	BASIC
11. To order to printer	PRINT
12. Restarting	RESET

19. **Merge cells P15:U21**, for placing the pictures about computer. Click menu **Insert>>Picture>>From File...**, select the pictures from CD- Rom. Click **OK**. Adjust the pictures in the indicated position.
20. Create **The Ladder Puzzle Computer Game** worksheet. Change the name of **Sheet1** to **SolutionLadder**. Right click on the **SolutionLadder**, select **Move or Copy...**, select **Create a copy**, click **OK**. When the **SolutionLadder (2)** appears, change the name to the **PlayGameLadder**. In the **PlayGameLadder**, change the word **"Play Game"** to **"Solution"**.

21. Create the link between **Playing page** and **Solution page**.
In the **SolutionLadder**, click the picture in cell X1,
then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears,
select **Place in this document**.
For Cell Reference, select **PlayGameLadder**, click **OK**.



22. In the **PlayGameLadder**, click the picture in cell X1,
then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears,
select **Place in this document**.
For Cell Reference, select **SolutionLadder**, Click **OK**.



23. **Check the link** between the 2 worksheets to ensure that it can be moved **forward** and **backward** between **PlayGameLadder** and **SolutionLadder**.
24. In the **PlayGameLadder**, delete the letters in the following cells:
U3, U4, U6 , S5 , T5 , V5 , R6, R7, R9 , P8 , Q8 , S8 , O9 ,
O10 , O12 , M11 , N11 , P11, L12, L13 , L15 , J14 , K14 ,
M14 , I15 , I16 , I18 , G17, H17 , J17, F18 , F19 , F21 ,
D20 , E20 and G20. The cells will be turned to Red.

25. Unlock the cells to be used as **answering space**, only in the **PlayGameLadder** by click cell **U3**, then press **Ctrl**, and click to select **all red cells** I.E. **U4 , U6 , S5 , T5 , V5 , R6 , R7 , O12 , M11 , N11 , P11 , L12 , L13 , L15 , J14 , K14 , M14 , I15 , I16 , I18 , G17 , H17 , J17 , F18 , F19 , F21 , D20 , E20** and **G20**. Click menu **Format>>Cells>>Protection**, click **Locked** to be **Locked**. Click **OK**.

26. **Create Worksheet Protection**

Click menu **Tools >> Protection >> Protect sheet**

The window for defining Password shall appear to let you define your password (you can either define or reject to use Password)

Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.

Click **uncheck** select locked cells to become select locked cells as shown in the picture:



Click **OK**.

It can be seen that all the cells are locked except the following cells; **U3 , U4 , U6 , S5 , T5 , V5 , R6 , R7 , R9 , P8 , Q8 , S8 , O9 , O10 , O12 , M11 , N11 , P11 , L12 , L13 , L15 , J14 , , K14 , M14 , I15 , I16 , I18 , G17 , H17 , , J17 , F18 , F19 , F21 , D20 , E20** and **G20** which can fill in the letters.

27. In the **SolutionLadder** worksheet, you have to **lock all worksheets** by following the same procedure in **item 26**. It can be seen that **all the cells are locked** for seeing solution only.
28. **For Editing**, Click menu **Tools >> Protection >> Unprotect Sheet...**
29. To **Cancel the details** of the window components,
Click menu **Tools >> Options... >>View**
Click to cancel the details which you would like to delete in both 2 sheets such as

Formula bar Status bar Gridlines Row & column headers Sheet tabs

Click **OK**.

30. **To Save The Ladder Puzzle Computer Game**
Click the **PlayGameLadder** sheet.
Click menu **File>>Save As...>>**type the name as **Ladder Puzzle**.
Click **Save**.



English Proverbs Games

English Proverbs

Proverbs	The meanings	Scores	Solution
1 than-better-never-late	"มาสายดีกว่าไม่มา"	0	Total Scores <div style="border: 1px solid black; padding: 5px; display: inline-block;">0</div> Cheer up!! <div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block; width: fit-content;"> Please fill in the English proverbs in the blank which has the same meaning. </div> 
2 food-is-music-love-of-the	"ดนตรีเป็นอาหารแห่งความรัก"	0	
3 power-knowledge-is	"ความรู้คือ อำนาจ"	0	
4 live-to-and-eat-not-eat-live-to	"จงกินเพื่ออยู่ มิใช่อยู่เพื่อกิน"	0	
5 me-love-dog-love-my	"รักฉันก็ต้องรักหมาฉันด้วย"	0	
6 comes-never-tomorrow	"พรุ่งนี้ไม่เคยมาถึงเลย"	0	
7 people-negative-avoid	"หลีกเลี่ยงคนที่มองโลกในแง่ร้าย"	0	
8 like-no-present-time-the	"ไม่มีเวลาใดเหมือนปัจจุบัน"	0	
9 late-to-never-learn-too	"ไม่สายเกินไปที่จะเรียนรู้"	0	
10 man-maketh-manners	"กิริยามารยาท ทำให้คนเป็นคน"	0	

Ready | PlayGameProverbs / SolutionProverbs / DetailProverbs / NUM | 6:56 PM

Game Page for the player

Solution to the English Proverbs Game

English Proverbs

	Proverbs	The meanings	Scores
1	Better than never late. than-better-never-late	"มาสายดีกว่าไม่มา"	5
2	Music is the food of love. food-is-music-love-of-the	"ดนตรีเป็นอาหารแห่งความรัก"	5
3	Knowledge is power. power-knowledge-is	"ความรู้คือ อำนาจ"	5
4	Eat to live and not live to eat. live-to-and-eat-not-eat-live-to	"จงกินเพื่ออยู่ มิใช่อยู่เพื่อกิน"	5
5	Love me love my dog. me-love-dog-love-my	"รักฉันก็ต้องรักหมาฉันด้วย"	5
6	Tomorrow never comes. comes-never-tomorrow	"พรุ่งนี้ไม่เคยมาถึงเลย"	5
7	Avoid negative people. people-negative-avoid	"หลีกเลี่ยงคนที่มองโลกในแง่ร้าย"	5
8	No time like the present. like-no-present-time-the	"ไม่มีเวลาใดเหมือนปัจจุบัน"	5
9	Never too late to learn. late-to-never-learn-too	"ไม่สายเกินไปที่จะเรียนรู้"	5
10	Manners maketh man. man-maketh-manners	"กิริยามารยาท ทำให้คนเป็นคน"	5

Total Scores
50

Perfect!!

Please fill in the English proverbs in the blank which has the same meaning.

The outlook of the Solution Page when the answer is correct.

English Proverbs Games

The screenshot shows a Microsoft Excel spreadsheet with the following data:

Proverbs	The meanings	Scores
1 Better than never late. than-better-never-late	"มาสายดีกว่าไม่มา"	5
2 Music is the food of love. food-is-music-love-of-the	"ดนตรีเป็นอาหารแห่งความรัก"	5
3 knowledge is power. power-knowledge-is	"ความรู้คือ อำนาจ"	5
4 Eat to live and not live to eat. live-to-and eat-not-eat-live-to	"จงกินเพื่ออยู่ มิใช่อยู่เพื่อกิน"	5
5 Love me love my dog. me-love-dog-love-my	"รักฉันก็ต้องรักหมาฉันด้วย"	5
6 Tomorrow never comes. comes-never-tomorrow	"พรุ่งนี้ไม่เคยมาถึงเลย"	5
7 Avoid negative people. people-negative-avoid	"หลีกเลี่ยงคนที่มองโลกในแง่ร้าย"	5
8 No time like the present. like-no-present-time-the	"ไม่มีเวลาใดเหมือนปัจจุบัน"	5
9 Never too late to learn. late-to-never-learn-too	"ไม่สายเกินไปที่จะเรียนรู้"	5
10 Manners maketh man. man-maketh-manners	"กิริยามารยาท ทำให้คนเป็นคน"	5

Additional elements in the spreadsheet include a 'Play Game' button, a 'Total Scores' box showing 50, a 'Perfect!!' message, and a cartoon character with a speech bubble that says: "Please fill in the English proverbs in the blank which has the same meaning."

The outlook of the Game which the details have not been deleted yet.

The English Proverbs Game

Game Building Procedures and Methods

1. Build up the game in **Book1** by starting at **Sheet1**.
2. **Adjust row 1 to row 26 to be 16.50 (22pixels)**
3. **Adjust the width in the required columns as followings:**

Column A=5.00 (40 pixels)	Column B=4.00 (33 pixels)
Column C=40.00 (215 pixels)	Column D=5.00 (19 pixels)
Column E=35.00 (355 pixels)	Column F=2.00 (19 pixels)
Column G=10.00 (75 pixels)	Column H=7.00 (54 pixels)
Column I=15.00 (110 pixels)	Column J=7.00 (54 pixels)
4. **Merge cells C1:G4** for placing the name of game "**English Proverbs**"
Adjust the position of the name of game properly.
5. **Type the required text** as followings:

C5, type Proverb	E5, type Meaning
G5, type Score	

Format the cells into **Size 12** and **Bold**, the font color is **Dark blue**.

B7 type 1	B9 type 2
B11 type 3	B13 type 4
B15 type 5	B17 type 6
B19 type 7	B21 type 3
B23 type 9	B25 type 10

6. Look at the example picture, type the required text as followings:

	A	B	C	D	E	F	G	H	
1			English Proverbs						
2									
3									
4									
5			Proverbs		The meanings		Scores		
6									
7		1			"มาสายดีกว่าไม่มา"				
8			than-better-never-late						
9		2			"ดนตรีเป็นอาหารแห่งความรัก"				
10			food-is-music-love-of-the						
11		3			"ความรู้คือ อำนาจ"				
12			power-knowledge-is						
13		4			"จงกินเพื่ออยู่ มิใช่อยู่เพื่อกิน"				
14			live-to-and-eat-not-eat-live-to						
15		5			"รักฉันก็ต้องรักหมาฉันด้วย"				
16			me-love-dog-love-my						
17		6			"พรุ่งนี้ไม่เคยมาถึงเลย"				
18			comes-never-tomorrow						
19		7			"หลีกเลี่ยงคนที่มองโลกในแง่ร้าย"				
20			people-negative-avoid						
21		8			"ไม่มีเวลาใดเหมือนปัจจุบัน"				
22			like-no-present-time-the						
23		9			"ไม่สายเกินไปที่จะเรียนรู้"				
24			late-to-never-learn-too						
25		10			"กริยามารยาท ทำให้คนเป็นคน"				
26			man-maketh-manners						

C8 type than-better-never-late C10 type food-is-music-love-of-the
 C12 type power-knowledge-is C14 type live-to-and-eat-not-eat-live-to
 C16 type me-love-dog-love-my C18 type comes-never-tomorrow
 C20 type people-negative-avoid C22 type like-no-present-time-the
 C24 type late-to-never-learn-too C26 type man-make-the-manners

E7, type "Late better than never."

E9, type " Music is the food of love"


E11, type "Knowledge is power."


E13, type " Eat to live, not live to eat."

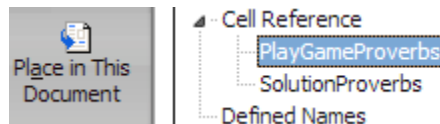
E15, type " Love me , love my dog."
E17 type " Tomorrow never comes."
E19 type " Avoid negative people."
E21 type " No time like the present."
E23 type " Never too late to learn."
E25 type " Manners make man."


7. Format the font in cells **C5, E5, G5** to **Size 12** with **Dark blue**, align the font to the **Center**. Format cell **B7:C26** to **Size 11** and align the font to the **Center**.
8. Click to select cells and change the color in the following cells:
Press **Ctrl**, click to select cells **C7, E7, G7, C17, E17, G17** and change the cells color to **Light orange**.
Press **Ctrl**, click to select cells **C9, E9, G9, C19, E19, G19** and change the cells color to **Lavender**.
Press **Ctrl**, click to select cells **C11, E11, G11, C21, E21, G21** and change the cells color to **Pale blue**.
Press **Ctrl**, click to select cells **C13, E13, G13, C23, E23, G23** and change the cells color to **Rose**.
Press **Ctrl**, click to select cells **C15, E15, G15, C25, E25, G25** and change the cells color to **Lime**.
Press **Ctrl**, click to select cells **C8, C18** and change the cells color to **Red**.
Press **Ctrl**, click to select cells **C10, C20** and change the cells color to **Violet**.
Press **Ctrl**, click to select cells **C12, C22** and change the cells color to **Light blue**.
Press **Ctrl**, click to select cells **C14, C24** and change the cells color to **Pink**.
Press **Ctrl**, click to select cells **C16, C26** and change the cells color to **Green**.

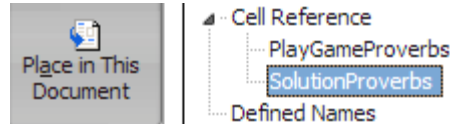
9. Press **Ctrl**, click to select cells **C8, C10, C12,C14, C16, C18, C20, C22,C24** and **C26**, click menu **Format>>Cells>>Border**, select **Thick line, White** color. Click to select **Underline**, click **OK**.
10. Then Type the correct answer of the proverb as following:
 - Cell **C7**, type **Late better than never**.
 - Cell **C9**, type **Music is the food of love**.
 - Cell **C11**, type **Knowledge is power**.
 - Cell **C13**, type **Eat to live not live to eat**.
 - Cell **C15**, type **Love me love my dog**.
 - Cell **C17**, type **Tomorrow never comes**.
 - Cell **C19**, type **Avoid negative people**.
 - Cell **C21**, type **No time like the present**.
 - Cell **G23**, type **Never too late to learn**.
 - Cell **G25**, type **Manners make man**.
11. Type **Formula** and **Function** to calculate the point as followings:
 - Cell **G7**, type **=IF (C7="Late better than never", 5,0)**
 - It means that if cell **C7** has the data **Late better than never**, the point will be **5**, if not, the point should be **0**
 - Cell **G9**, type **=IF (C9="Music is the food of love.", 5,0)**
 - Cell **G11**, type **=IF (C11="Knowledge is power.", 5,0)**
 - Cell **G13**, type **=IF (C13="Eat to live, not live to eat.", 5,0)**
 - Cell **G15**, type **=IF (C15="Love me, love my dog.", 5,0)**
 - Cell **G17**, type **=IF (C17="Tomorrow never comes.", 5,0)**

- Cell **G19**, type =IF (C19="Avoid negative people..", 5,0)
 Cell **G21**, type =IF (C21="No time like the present.", 5,0)
 Cell **G23**, type =IF (G23="Never too late to learn.", 5,0)
 Cell **G25**, type =IF (G25="Manners make man.", 5,0)
12. **Format the data** in the cell **G7:G25** to in **Size 12** and **Bold** and align the **Center**.
 13. **Merge cells I7:I8**, type "**Total Scores**", format the Cells to **Size 12**, **Bold** and the font color is **Dark blue** while the cell color is **Light green**.
 14. **Merge cells I9:I11** to be used for showing score.
Format the cells to be in **Size 30**, **Bold** with **Pale blue**.
 15. Select the cells **I7:I11**, click the **Tool Border** , **All borders** to the scoring cell.
 16. Type **Formula** and **Function** to calculate the total score as following;
Cell **19**, type=**SUM(G7,G9,G11,G13,G15,G17,G19,G21,G23,G5)**
It means that the total score should be collected from the following Cells **G7,G9,G11,G13,G15,G17,G19,G21,G23,G5**.
 17. **Merge cells H13:J13** for using as the area for putting encouraging terms to game player.
 18. Click cell **H13**, type =IF(19>=30,"Perfect!!",IF(19>=20"Very Good!!",IF(19>=10,"Good!",IF (19<10,Cheer up!!))))
 19. **Merge cells I21:I26** for placing a cartoon picture of a Thai child.
Click menu **Insert>>Picture>>From File...>>**, select the pictures from CD-Rom, click **OK**. Adjust the size and place the pictures to be in the proper position.

20. From the Toolbar **Drawing**, click **AutoShapes**, select **Callouts**, draw the callouts over the cartoon, type the text as followings **"Please fill in the English proverbs in the blank which has the same meaning. Please fill in the English proverbs in the space that suits to their meanings"**.
Format the data to **Size 10**, font in **Dark blue**.
21. **Merge cells I1:I4** for placing the pictures.
Click menu **Insert>>Pictures>>From File...>>**, select the pictures as required. Click **OK**. Adjust the size and put the pictures in the proper position.
22. Click cell **I5**, type **"Play Game"**, format to **Size 10, Bold and Green**.
23. Create the **Solution of English Proverbs Game** worksheet
Change the name of **Sheet 1** to **SolutionProverbs**.
Right click on the **SolutionProverbs**, select **Move or Copy...**, select **Create a copy**, click **OK**.
When the **SolutionProverbs (2)** appears, change the name to the **PlayGameProverbs**.
In the **PlayGameProverbs**, change the word **"Play Game"** to **"Solution"**.
24. **Create the link** between **Playing page** and **Solution page**.
In the **SolutionProverbs**, click the picture in cell **I1**, then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears, select **Place in this Document**.
For Cell Reference, select **PlayGameProverbs**, Click **OK**.

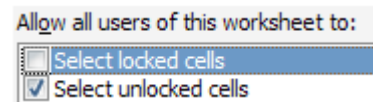
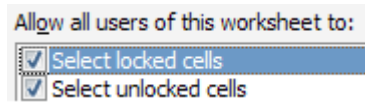


25. In the **PlayGameProverbs**, click the pictures in cell **I1**, then click **Insert Hyperlink** . When the **Insert Hyperlink** window appears, select **Place in this Document**. For Cell Reference, select **SolutionProverbs**, Click **OK**.



26. **Check the link** between the 2 worksheets to ensure that it can be moved **forward** and **backward** between **PlayGameProverbs** and **SolutionProverbs**.
27. In the **PlayGameProverbs**, delete the text in the following cells: **C9, C11, C13, C15, C17, C19, C21, C21, C23, and C25**. The scoring space is all 0.
28. Unlock the cells to be used as **answering space** only in the **PlayGameProverbs** by click cell **C7** then press **Ctrl**, and click to select the following cells **C9,C11,C13,C15,C17,C19,C21,C23, and C25**. Click menu **Format >>Cells >>Protection**, click **L**ocked to be **L**ocked .Click **OK**.
29. **Create Worksheet Protection**
Click menu **Tools >> Protection >> Protect sheet**
The window for defining Password shall appear to let you define your password (you can either define or reject to use Password)
Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.

Click **uncheck** select locked cells to become select locked cells as shown in the picture;

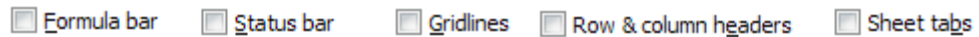


Click **OK**.

All the Cells are locked except for the following cells C7, C9, C11, C13, C17, C19, C21, C23, and C25 which can type the text.

30. In the **SolutionProverbs** worksheet, you have to **lock all worksheets** by following the procedure in **item 29**. It can be seen that **all the Cells are locked** for seeing solution only.
31. **For Editing**, Click menu **Tools >> Protect >> Unprotect sheet...**
32. **To Cancel the details** of the window components, Click menu **Tools>>Options...>>View**.

Click to cancel the details which you like to delete in both 2 sheets such as



Click **OK**.

33. **To Save The English Proverbs Game**
Click the **PlayGameProverbs** sheet.
Click menu **File>>Save As...>>**, type the name as **English Proverbs**.
Click **Save**.



How Many Game

The screenshot shows a Microsoft Excel spreadsheet titled "How Many Game.xls". The interface is designed for a counting game. At the top, the title "How Many Game" is displayed in a stylized font. Below the title, there are two main sections: "How many triangles are there?" and "How many squares are there?".

Triangles Section:

- The first question shows a six-pointed star (hexagram) formed by two overlapping triangles. Below it is a small triangle icon and a red rectangular box for the answer.
- The second question shows a large triangle divided into four smaller triangles by lines from each vertex to the center. Below it is a small triangle icon and a red rectangular box for the answer.
- The third question shows a regular hexagon divided into six triangles by lines from each vertex to the center. Below it is a small triangle icon and a red rectangular box for the answer.

Squares Section:

- The first question shows a complex arrangement of overlapping squares. Below it is a small square icon and a red rectangular box for the answer.
- The second question shows a cross-like shape formed by five overlapping squares. Below it is a small square icon and a red rectangular box for the answer.
- The third question shows a set of four concentric squares. Below it is a small square icon and a red rectangular box for the answer.

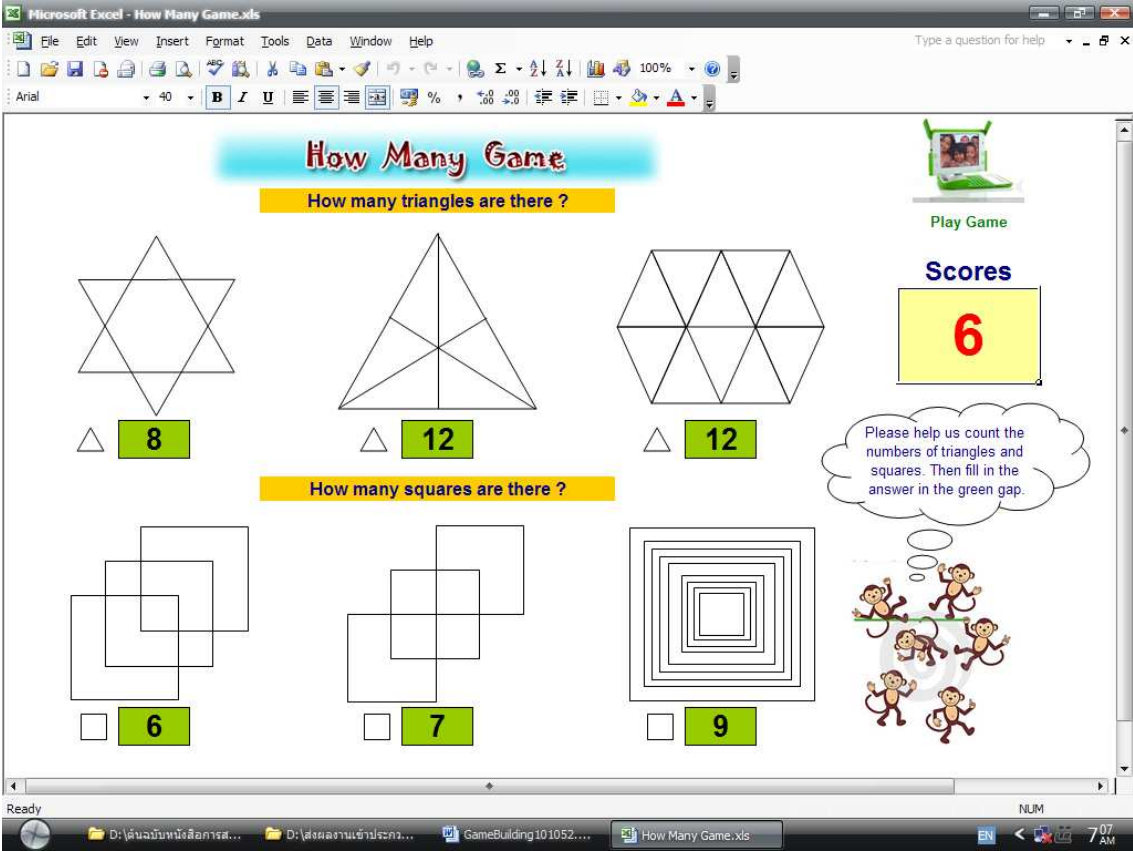
Score and Instructions:

- A "Solution" button is located at the top right.
- A "Scores" section shows a yellow box with the number "0".
- A thought bubble contains the text: "Please help us count the numbers of triangles and squares. Then fill in the answer in the green gap."
- An illustration of several monkeys is shown at the bottom right.

The spreadsheet's status bar at the bottom shows "Ready", the current cell "NUM", and the time "7:06 AM".

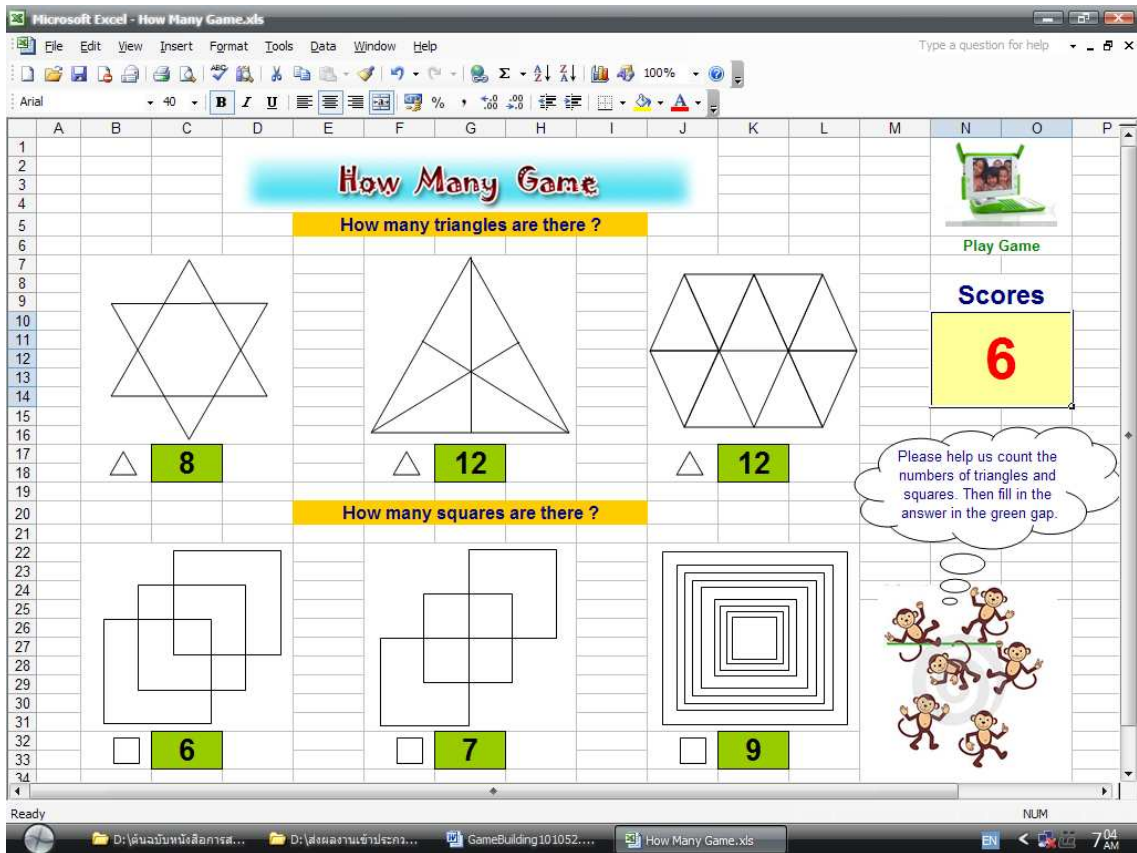
Game Page for the player

Solution for How Many Game



The outlook of the Solution Page when the answer is correct.



How Many Game




The outlook of the Game which the details have not been deleted yet.


How Many Game



Game Building Procedures and Methods

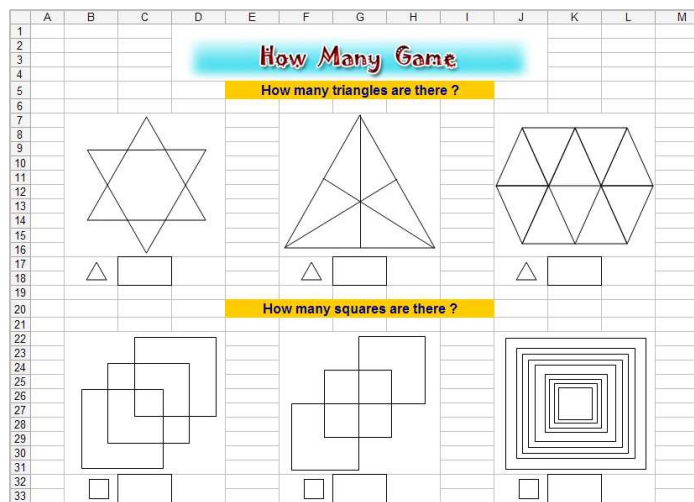
1. Build up the game in **Book 1** by starting from **Sheet1**.
2. **Merge cells D1:J14** for placing the name of game "How Many Game".
Adjust the position of the name of game properly.
3. **Merge cells E5:I5**, type the question "How many triangles are there ?",
format the cell to **Size 12, Bold**, the color of the font is **Dark blue**
and the cell color is **Gold**.
4. **Merge cells E20:I20**, type the question "How many squares
are there ?", format the cell to **Size 12, Bold**, the color of the font
is **Dark blue** and the cell color is **Gold**.
5. Merge the following cells for placing all 6 drawings;
Merge cells B7:D16 for placing **triangle 1**
Merge cells F7:H16 for placing **triangle 2**
Merge cells J7:L16 for placing **triangle 3**
Merge cells B22:D31 for placing **squares 1**
Merge cells F22:H31 for placing **squares 2**
Merge cells J22:L31 for placing **squares 3**
6. **Merge cells B17:B18**, on the **Toolbar Drawing** click **AutoShapes**,
select  **Basic Shapes** , select  draw the picture as required.
(press **Shift** and hold it for a while, during drawing in order to get
the equal sides of the shape.)
Click in the cell **B17**, click **Copy** to place in cells **F17** and **J17** respectively.

7. **Merge cells B32:B33**, in the **Toolbar Drawing** click **AutoShapes**, select  **Basic Shapes**, select draw the picture as required. (press **Shift** and hold it for a while, during drawing in order to get the equal sides of the shape.)

Click in the cell **B32**, click **Copy** to place in cells **F32** and **J32** respectively.

8. Build up the answering cell by **Merging cells C17:C18**, click  **Outside Border**, change the cell color to **Red** with **Size 18**, **Bold**. Click in the cell **C17** **Copy** to place in cells **G17**, **K17**, **C32**, **G32** and **K32** respectively.

9. In the **Toolbar Drawing**, click **AutoShapes**, select  **Basic Shapes** select  and draw all the 6 pictures as required (press **Shift** and hold it for a while, during drawing in order to get the equal sides of the shape.)



10. When finished to draw adjust the pictures **grouping** into the set up position properly.

11. Click **C17** to select menu **Format>>Conditional Formatting...**, when the Conditional Formatting window appears, set up as shown in the picture

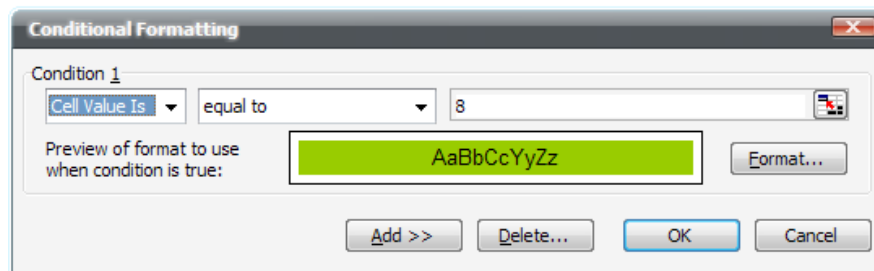


It means that if the **Cell value** is equal to **8**, the condition is **true**.

Click

In the window **Format Cells**, click **Patterns** and select **Lime**, then click **OK**.

The outcome will be displayed in the picture, click **OK**.



Try typing a number in cell **C17**, you will see that if the cell value is **not equal to 8**, the **Cell color** is still **Red**. If the cell value **equal to 8**, the **Cell color** will change to **Lime**.

12. **Set Conditional Formatting** for the following cells **G17, K17, C32, G32** and **K32** by using the same procedures as in item 11. Set up the value of the correct answer and the cell color when the value is true as follow;

Cell **G17** is **12**, the cell color that should be changed when the value is correct is **Lime**.

Cell **K17** is **12**, the cell color that should be changed when the value is correct is **Lime**.

Cell **C32** is **6**, the cell color that should be changed when the value is correct is **Lime**.

Cell **G32** is **7**, the cell color that should be changed when the value is correct is **Lime**.

Cell **K32** is **9**, the cell color that should be changed when the value is correct is **Lime**.

13. Type the answer of the correct number as follows:

Cell **C19** is **8**. Cell **G19** is **12**. Cell **K19** is **12**.

Cell **C34** is **6**. Cell **G34** is **7**. Cell **K34** is **9**.

14. Type **Formulas** and **Functions** to calculate sub score as follows:

Cell **C19**, type =**IF(C17=8,1,0)**

It means that if cell **C17** is equal to **8**, give **1 point**, if not , give **0**.

Cell **G19**, type=**IF(G17=12,1,0)**

Cell **K19**, type=**IF(K17=12,1,0)**

Cell **C34**, type=**IF(C32=6,1,0)**

Cell **G34**, type=**IF(G32=7,1,0)**

Cell **K34**, type=**IF(K32=9,1,0)**

15. **Merge cells N8:O9**, type "**Scores**".

Format cell to **Size 40** ,**Bold**. Set the font color to **Dark blue**


16. **Merge cells N10:O14** to be used as the space for showing **score**.

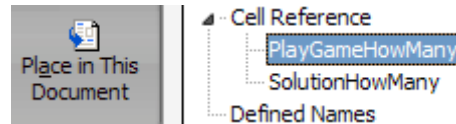
Format the cell to **Size 40** and **Bold** the font color is **Red** and the cell color is **yellow**.


Click menu **Format>>Cells>>Alignment**, adjust the font to the **Center**.

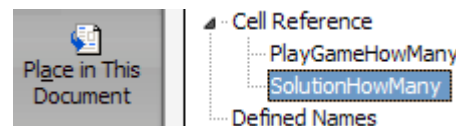
Select cell **N10**, click to select the **Outside Border** 

17. Type **Formulas and Functions** to calculate **Total score** as follows:
In cell **N10**, type **=SUM(C19,G19,K19,C34,G34,K34)**
It means that to **sum up the points** from the following cells:
C19,G19,K19,C34,G34, and **K34**.
18. **Hide the points** by clicking to select cell **C19, G19, K19, C34,G34** and **K34** and change the font color to **White**.
19. **Merge cells M24:O33** for placing the picture.
Click menu **Insert>>Picture>> From File...>>**select picture from the CD- Rom, click **OK**. Adjust the size of the picture and place it in the properly position.
20. In the **Toolbar Drawing**, click **AutoShapes>>Callouts**, select **Cloud callout** draw the picture, **type** the following text in the callouts
"Please help us count the numbers of triangles and squares. Then fill in the answer in the green gap."
Format the cell to **Size 10** with the font color **Dark blue**.
21. **Merge cells N1:O5** for placing the picture.
Click menu **Insert>>Picture>>From File...>>** and select pictures as required. Click **OK**, adjust the size and place the pictures as indicated.
22. **Merge cells N6:O6**, type **"Play Game"**, format the font to **Size 10, Bold** and the font color is **Green**.
23. Create the **Solution of How Many Game** worksheet.
Change the name of **Sheet1** to the **SolutionHowMany**.
Right click on the **SolutionHowMany**, select **Move or Copy...** ,
select **Create a copy** , click **OK**.
When the **SolutionHowMany (2)** appears,
change the name to the **PlayGameHowMany**.

- In the **PlayGameHowMany**, change the word "**Play Game**" to "**Solution**".
24. Create the link between **Playing page** and **Solution page**.
In the **SolutionHowMany**, click the picture in cell N1,
then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears,
select **Place in This Document**.
For Cell Reference, select **PlayGameHowMany**, click **OK**.



25. In the **PlayGameHowMany**, click the picture in cell N1,
Then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears,
select **Place in This Document**.
For Cell Reference, select **SolutionHowMany**, click **OK**.



26. **Check the link** of the 2 worksheets to ensure that it can be moved **forward** and **backward** between **PlayGameHowMany** and **SolutionHowMany**.
27. In the **PlayGameHowMany**, delete the number in the following cells: **C17, G17, K17, C32, G32** and **K32**. The cells will be turned to **Red**.

28. Unlock the cells to be used as **answering space**, only in **PlayGameHowMany** by click cell **C17**, then press **Ctrl**, and click to select all **red cells** i.e. **G17, K17, C32, G32** and **K32**.

Click menu **Format>>Cells>>Protection>>**,
click **Locked** lock to **Locked** , then click **OK**.

29. **Create Worksheet Protection**

Click menu **Tools>>Protection>>Protect sheet**,

The window for defining Password shall appear to let you define your password (you can either define or reject to use Password)

Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.

Click **uncheck** select locked cells to become select locked cells as shown in the picture:



Click **OK**.

It can be seen that all the cells are locked except the following cells: **C17, G17, K17, C32, G32** and **K32** which can **fill up the number**.

30. In the **SolutionHowMany** worksheet, you have to **lock all worksheet** by following the same procedure in **item 29**. It can be seen that **all the cells are locked** for seeing solution only.
31. **For Editing**, click menu **Tools>>Protection>>Unprotect sheet...**
32. **To Cancel the details** of Program window elements.
Click menu **Tools>>Options...>>View**.

Click to cancel the details which you like to delete in both 2 sheets such as

Formula bar Status bar Gridlines Row & column headers Sheet tabs

Click **OK**.

33. **To Save The How Many Game**

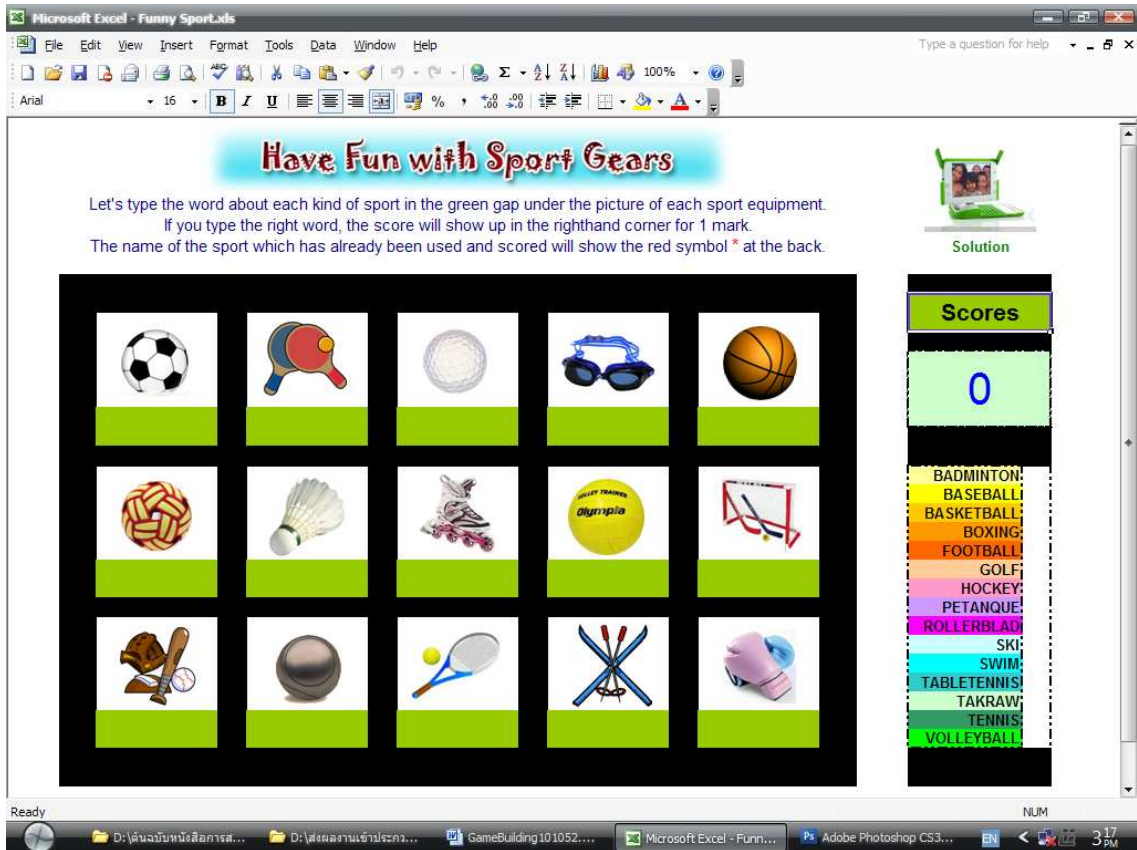
Click the **PlayGameHowMany** sheet.

Click menu **File** >> **Save as...** >> type the name as **How Many**.

Click **Save**.

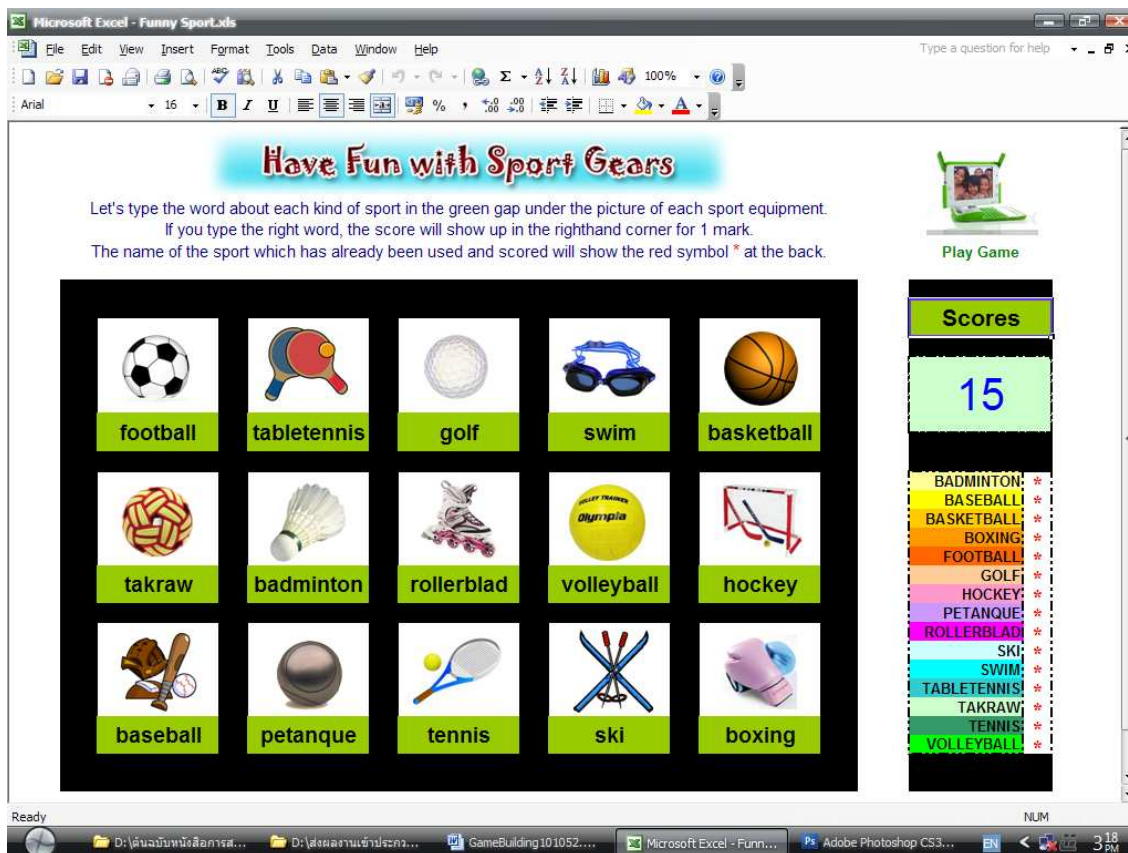


Have Fun with Sport Gears Game



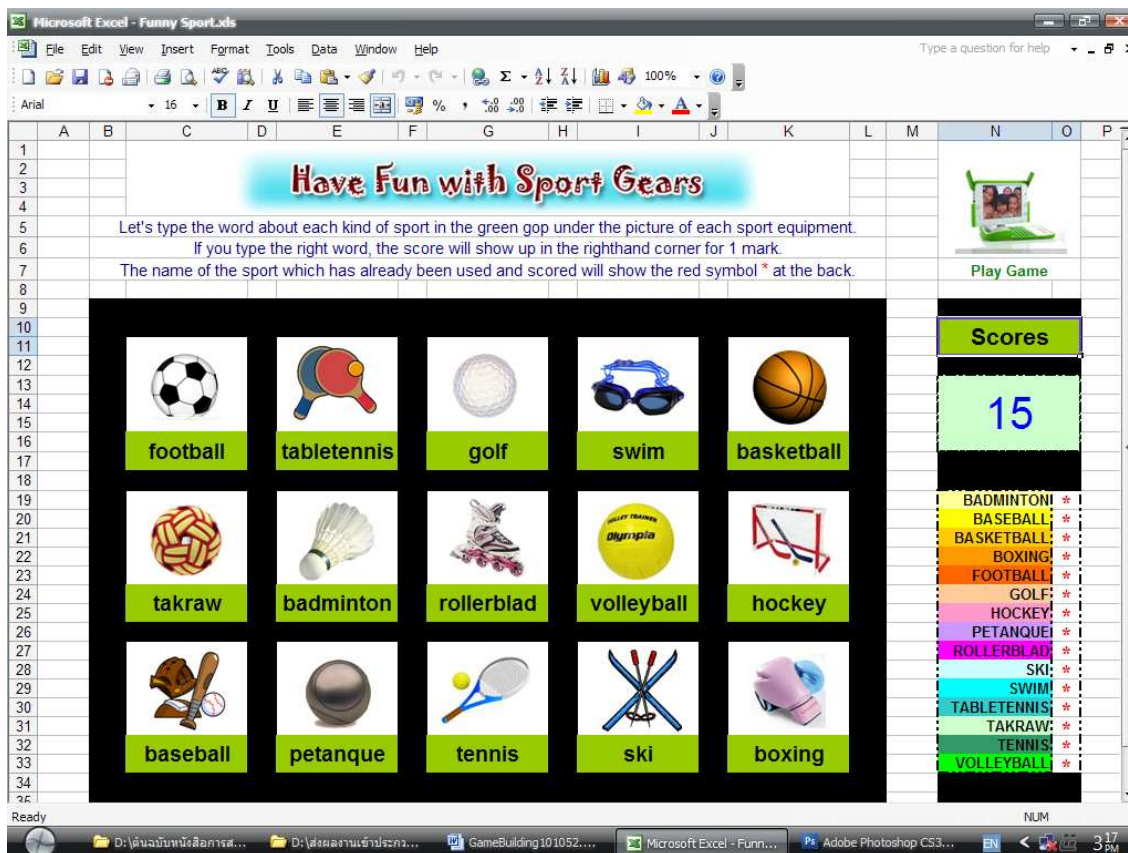
Game Page for the player

Solution to Have Fun with Sport Gears Game



The outlook of the Solution Page when the answer is correct.

Have Fun with Sport Gears Game



The outlook of the Game which the details have not been deleted yet.

Have Fun with Sport Gears Game

Game Building Procedures and Methods


1. Build up the game in **Book1** by starting from **Sheet1**.
2. Adjust the width of column **A=6 B=4 C=15 D=3 E=15 F=3 G=15 H=3 I=15 J=3 K=15 L=4 M=6 N=14 O=3 P=6**.
3. Merge cells **B1:L3** for placing the name of game "**Have Fun with Sport Gears Game**". Adjust the position of the name of game properly.
4. Type the Rules of the game over 3 lines and set the font to **Size 11** and the font color to **Dark blue**.
Merge cells **C4:K4**, type "**Please type the name of each sport in the green box under the picture of indicated sport equipment**".
Merge cells **C5:K5**, type "**If you type the correct name, you will get 1 point. The score will be displayed on the right box**".
Merge cells **C6:K6**, type "**The name of the sports that already filled in and got the point shall have the red mark * on the back**".
5. Prepare the space for placing the picture of each sport totaling 15 pictures as follows :
Merge cells C10:C14 for placing **Football** Picture
Merge cells E10:E14 for placing **Table tennis** Picture
Merge cells G10:G14 for placing **Golf** Picture
Merge cells I10:I14 for placing **Swimming** Picture
Merge cells K10:K14 for placing **Basketball** Picture
Merge cells C18:C22 for placing **Takraw** Picture

- Merge cells E18:E22** for placing **Badminton** Picture
- Merge cells G18:G22** for placing **Roller Blade** Picture
- Merge cells I18:I22** for placing **Volleyball** Picture
- Merge cells K18:K22** for placing **Hockey** Picture
- Merge cells C26:C30** for placing **Baseball** Picture
- Merge cells E26:E30** for placing **Petanque** Picture
- Merge cells G26:G30** for placing **Tennis** Picture
- Merge cells I26:I30** for placing **Skiing** Picture
- Merge cells K26:K30** for placing **Boxing** Picture

6. Click menu **Insert > Picture > From File...** select the picture from CD-Rom and place it as defined in item 5.


	A	B	C	D	E	F	G	H	I	J	K	L	M	
1														
2			Have Fun with Sport Gears											
3			Please type the name of each sport in the green box under the picture of indicated sport equipment.											
4			If you type the correct name, you will get 1 point. The score will be displayed on the right box.											
5			The name of the sports that already filled in and got the point shall have the red mark * on the back.											
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7. **Merge cells C15:C16**, set the font to **Size 14** and **Bold** and set the font color to **Lime**.
8. Click cell **C15**, click **copy** and **paste** in cells **E15** , **G15** , **I15** , **K15** , **C23** , **E23** , **G23** , **I23** , **K23** , **C31** , **E31** , **G31** , **I31** and **K31**.
9. **Type the sports name** in the following cells and set the cell color as follow:
N18= BADMINTON (Light Yellow) **N19= BASEBALL** (Yellow)
N20= BASKETBALL (Gold) **N21= BOXING** (Light Orange)
N22= FOOTBALL (Orange) **N23= GOLF** (Tan)
N24= HOCKEY (Rose Pink) **N25= PETANQUE** (Lavender Purple)
N26= ROLLERBLAD (Pink) **N27= SKI**(Light Blue Turquoise)
N28= SWIM (Blue Turquoise) **N29= TABLETENNIS** (Blue Green)
N30= TAKRAW (Light Green) **N31= TENNIS**(Sea Green)
N32= VOLLEYBALL (Light Green)
10. Select the space of cells **N18:N32** and align the font to **Right** and set the font **Size 10** and **Bold**.
Click menu **Format >> Cells >> Border** select **Dot Line**, then **Outline** and click **OK**.
11. Type the **correct answer** in the following cells :
Cell **C15**, type **FOOTBALL** Cell **E15**, type **TABLETENNIS**
Cell **G15**, type **GOLF** Cell **I15**, type **SWIM**
Cell **K15**, type **BASKETBALL** Cell **C23**, type **TAKRAW**
Cell **E23**, type **BADMINTON** Cell **G23**, type **ROLLERBLADE**
Cell **I23**, type **VOLLEYBALL** Cell **K23**, type **HOCKEY**
Cell **C31**, type **BASEBALL** Cell **E31**, type **PETANQUE**
Cell **G31**, type **TENNIS** Cell **I31**, type **SKI**
Cell **K31**, type **BOXING**

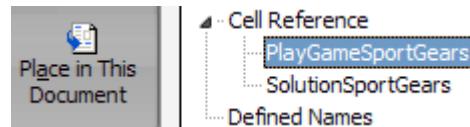
12. Type **Formulas** and **Functions** to calculate **sub score** as following :
- Cell **C17**, type **=IF(C15="FOOTBALL",1,0)**
 It means that if there is the word "FOOTBALL" in cell **C15**, give **1 point**, if not, **give 0**.
- Cell **E17**, type **=IF(E15="TABLETENNIS",1,0)**
 Cell **G17**, type **=IF(G15="GOLF",1,0)**
 Cell **I17**, type **=IF(I15="SWIM",1,0)**
 Cell **K17**, type **=IF(K15="BASKETBALL",1,0)**
 Cell **C25**, type **=IF(C23="TAKRAW",1,0)**
 Cell **E25**, type **=IF(E23="BADMINTON",1,0)**
 Cell **G25**, type **=IF(G23="ROLLERBLAD",1,0)**
 Cell **I25**, type **=IF(I23="VOLLEYBALL",1,0)**
 Cell **K25**, type **=IF(K23="HOCKEY",1,0)**
 Cell **C33**, type **=IF(C31="BASEBALL",1,0)**
 Cell **E33**, type **=IF(E31="PETANQUE",1,0)**
 Cell **G33**, type **=IF(G31="TENNIS",1,0)**
 Cell **I33**, type **=IF(I31="SKI",1,0)**
 Cell **K33**, type **=IF(K31="BOXING",1,0)**
13. **Merge cells N9:O10**, type "Scores". Format the cell to **Center** and set the font to **Size 16** and **Bold**. Set the cell color to **Lime**.
14. **Merge Cells N12:O15** for showing the score.
 Format the cell to **Size 30** and **Bold** and set the font color to **Blue**.
 Then, set the cell color to **Light green**.
 Click menu **Format >> Cells>> Alignment**, align the font to **Center** both **Horizontal** and **Vertical** directions. Click **OK**
 Click cell **N12**, click **Outside border** 


15. Type **Formulas** and **Functions** to calculate score as follows:
 Cell **N12** = **SUM(C17,E17,G17,I17,K17,C25,E25,G25,I25,K25,C33,E33,G33,I33,K33)**
 It means that to sum up the score from the following cells:
C17,E17,G17,I17,K17,C25,E25,G25,I25,K25 ,C33,E33,G33,I33
 and **K33**
16. Type **Formulas** and **Functions** for to show * behind the sports name already filled in.
 Cell **O18**, type =**IF(E25=1,"*"," ")**
 It means that if cell **E25** has **1 point**, the * mark will be displayed.
 If not, it remains **blank**.
 Cell **O19**, type =**IF(C33=1,"*"," ")**
 Cell **O20**, type =**IF(K17=1,"*"," ")**
 Cell **O21**, type =**IF(K33=1,"*"," ")**
 Cell **O22**, type =**IF(C17=1,"*"," ")**
 Cell **O23**, type =**IF(G17=1,"*"," ")**
 Cell **O24**, type =**IF(K25=1,"*"," ")**
 Cell **O25**, type =**IF(E33=1,"*"," ")**
 Cell **O26**, type =**IF(G25=1,"*"," ")**
 Cell **O27**, type =**IF(I33=1,"*"," ")**
 Cell **O28**, type =**IF(I17=1,"*"," ")**
 Cell **O29**, type =**IF(E17=1,"*"," ")**
 Cell **O30**, type =**IF(C25=1,"*"," ")**
 Cell **O31**, type =**IF(G33=1,"*"," ")**
 Cell **O32**, type =**IF(I25=1,"*"," ")**

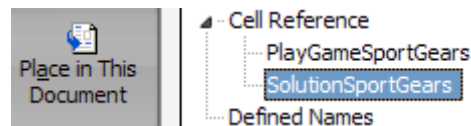
Note : You can use **Copy** for typing formulas in cells having similar data and then change the **cell name**.

17. Select the space of cells **O18:O32** and set the font type to **Angsana New** and the font **Size 20** and **Bold** and the font color to **Red**.
Note : If the height of the rows having * is changed, you have to adjust the row height to **12.75**.
18. **Hide sub score** by setting the color of following cells to **Black**.
B8:L9 B10:B34 C33:L34 D10:D32 F10:F32
H10:H32 J10:J32 L10:L32 C17:K17 C25:K25
N33:O34 N8:O8 N11:O11 N16:O17
19. **Merge cells N1:O5** for placing the picture.
Click menu **Insert >> Picture>> From Files...** >> select the picture, Click **OK**, then adjust the size of the picture and place it in the indicated position .
20. **Merge cells N6:O6** for placing the word "Play Game".
Format the cell to **Size 10, Bold** and **Green**
21. Create the **Solution of Have Fun with Sport Gears Game** worksheet.
Change the name of **Sheet1** to **SolutionSportGears**.
Right click on the **SolutionSportGears**, select **Move or Copy...** , select **Create a copy** , click **OK**.
When the **SolutionSportGears (2)** appears, change the name to **PlayGameSportGears**.
In the **PlayGameSportGears** change the word "Play Game" to "Solution".
22. **Create the link** between **Playing page** and **Solution page**.
In the **SolutionSportGears** , click the picture in cell **N1**, then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears, select **Place in this document**.

For Cell Reference, select **PlayGameSportGears** Click **OK**.



23. In the **PlayGameSportGears**, click the **Picture** in cell **N1** then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears, select **Place in this document**.
For Cell Reference, select **SolutionSportGears** Click **OK**.



24. **Check the link** between the 2 worksheets to ensure that it can be moved **forward** and **backward** between **PlayGameSportGears** and **SolutionSportGears**.
25. In the **PlayGameSportGears**, delete the sports name in cells **C15, E15, G15, I15, K15, C23, E23, G23, I23, K23, C31, E31, G31, I31** and **K31** and remains blank.
26. Unlock Cell to be used as **answering space**, only in the **PlayGameSportGears** by click cell **C15**, then press **Ctrl**, and click to select answering cells which are **E15, G15, I15, K15, C23, E23, G23, I23, K23, C31, E31, G31, I31** and **K31**.
Click menu **Format>>Cells>>Protection>>**,
click **Locked** lock to **Locked** , then click **OK**.

27. **Create Worksheet Protection**

Click menu **Tools > Protection > Protect sheet**,

The window for defining Password shall appear to let you define your password (you can either define or reject to use Password)

Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.

Click **uncheck** select locked cells to become select locked cells as shown in the picture:



Click **OK**.

It can be seen that all cells are locked except the following cells **C15, E15, G15, I15, K15, C23, E23, G23, I23, K23, C31, E31, G31, I31** and **K31** which can **fill in the answer**.

28. In the **SolutionSportGears** worksheet, you have to **lock all worksheets** by following the procedure in **item 27**. It can be seen that **all the cells are locked** for seeing solution only.

29. **For Editing**, Click menu **Tools >> Protection >> Unprotect sheet...**

30. **To Cancel the details** of Program window elements.

Click menu **Tools >> Options... >> View**.

Click to cancel the details which you like to delete in both 2 sheets such as

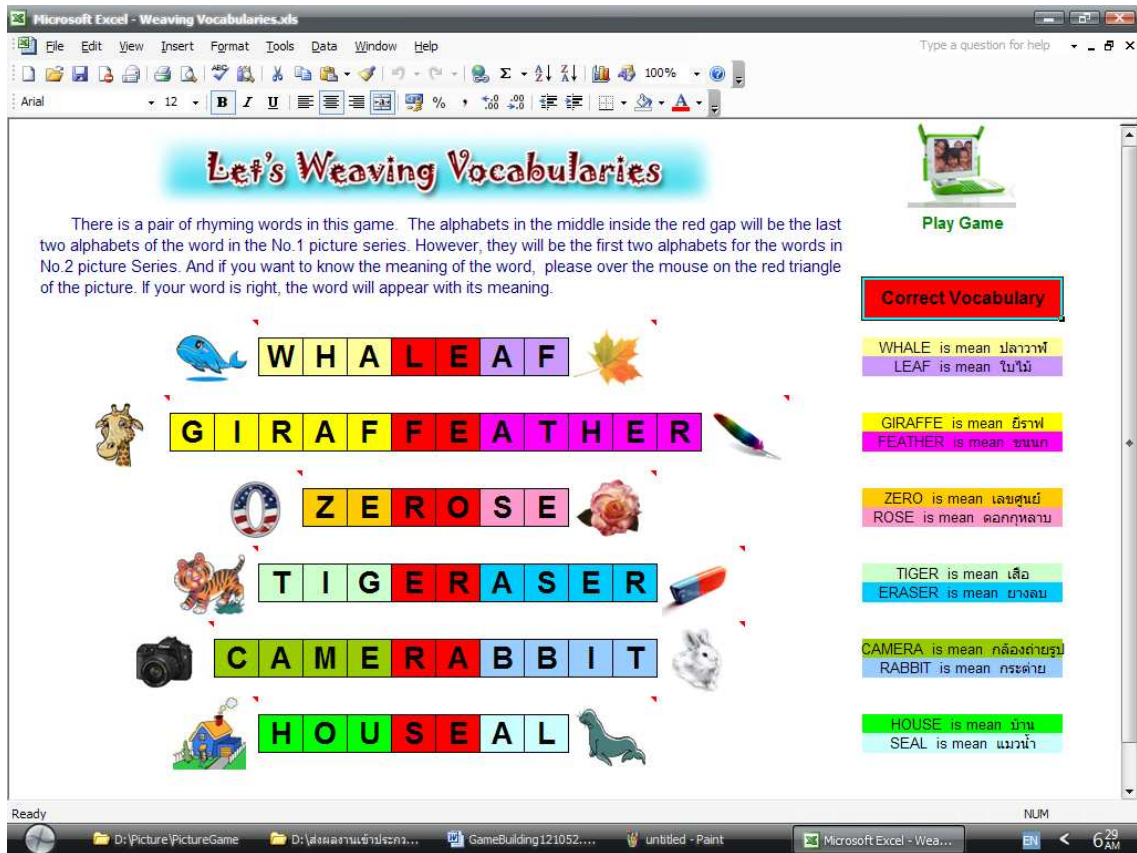
Formula bar Status bar Gridlines Row & column headers Sheet tabs

Click **OK**.

31. **To save The Have Fun with Sport Gears Game**
Click the **PlayGameSportGears** sheet.
Click menu **File >> Save as...>** type the name as **Sport Gears**.
Click **Save**.



Solution to Let's Weaving Vocabularies Game



The outlook of the Solution Page when the answer is correct.

Let's Weaving Vocabularies Game

Let's Weaving Vocabularies

There is a pair of rhyming words in this game. The alphabets in the middle inside the red gap will be the last two alphabets of the word in the No.1 picture series. However, they will be the first two alphabets for the words in No.2 picture Series. And if you want to know the meaning of the word, please over the mouse on the red triangle of the picture. If your word is right, the word will appear with its meaning.

	W	H	A	L	E	A	F						
	G	I	R	A	F	F	E	A	T	H	E	R	
	Z	E	R	O	S	E							
	T	I	G	E	R	A	S	E	R				
	C	A	M	E	R	A	B	B	I	T			
	H	O	U	S	E	A	L						

Correct Vocabulary

- WHALE is mean ปลาวาฬ
- LEAF is mean ใบไม้
- GIRAFFE is mean ยีราฟ
- FEATHER is mean ขนนก
- ZERO is mean เลขศูนย์
- ROSE is mean ดอกกุหลาบ
- TIGER is mean เสือ
- ERASER is mean ยางลบ
- CAMERA is mean กล้องถ่ายรูป
- RABBIT is mean กระต่าย
- HOUSE is mean บ้าน
- SEAL is mean แมวน้ำ

The outlook of the Game which the details have not been deleted yet.

Let's Weaving Vocabularies Game

Game Building Procedures and Methods

1. Build up the game in **Book1** by starting from **Sheet1**.
2. **Adjust the width of column** following : **A=3 , B-S=5 , T=3 , U=25**
3. **Merge cells D1:Q4** for placing the name of game "**Let's Weaving Vocabulary Game**". Adjust the position of the name of game properly.
4. **Adjust the Height of Row 5-8** to be equal to **15**
5. **Merge cells B6:T8** type "**There is a pair of rhyming words in this game. The alphabets in the middle inside the red gap will be the last two alphabets of the word in the No.1 picture series. However, they will be the first two alphabets for the words in No.2 picture Series. And if you want to know the meaning of the word, please over the mouse on the red triangle of the picture. If your word is right, the word will appear with its meaning. "**
Click menu **Format >> Cells>> Alignment**, align the **Horizontal** text to be **Left(indent)**, as for the **Vertical** text, align to the **Center** and put **Wrap text** Click **OK**.
Format the font to **Size 11** and the font color to **Dark Blue**.
6. **Merge cells U8:U9**, type "**Correct Vocabulary**". Format the font to **Size 12 ,Bold** and cell color to **Red**.
Click menu **Format >> Cells>> Alignment**, align the text to **Center** both in **Horizontal** and **Vertical** directions, click **OK**.
7. **Merge cells**, click menu **Insert >> Comment** and **Insert>> Picture**. select the pictures from CD-Rom, click **OK**.

Cells E10:F13 Comment: **Fishes which feed their calves with milk.**
Picture: **Whale**

Cells N10:O13 Comment: **The parts of a tree.**
Picture: **Leaf**

Cells C14:D17 Comment: **An animal which has the longest neck.**
Picture: **Giraffe**

Cells Q14:R17 Comment: **The outer covering of a bird.**
Picture: **Feather**

Cells F18:G21 Comment: **A number which has a circle shape.**
Picture: **Zero**

Cells N18:O21 Comment: **The flower which symbolizes love.**
Picture: **Rose**

Cells E22:F25 Comment: **A wild animal which looks like a cat.**
Picture: **Tiger**


Cells P22:Q25 Comment: **The stationery for correcting wrong words.**
Picture: **Rubber**


Cells D26:E29 Comment: **An equipment for recording pictures.**
Picture: **Camera**

Cells P26:Q29 Comment: **A Lovely pet with long ears.**
Picture: **Rabbit**

Cells E30:F33 Comment: **A place where a human living.**
Picture: **House**

Cells N30:O33 Comment: **It is name a cat but it is not a land animal.**
Picture: **Seal**


8. **Merge cells G11:G12 and format the cell to Size 20 , Bold , then click Outside border **

9. **Format the font** in the following cells by clicking cell **G11** and click **Format Painter**  and **Paste** in cell **H11, I11, J11, K11, L11, M11, E15, F15, G15, H15, I15, J15, K15, L15, M15, N15, O15, P15, H19, I19, J19, K19, L19, M19, G23, H23, I23, J23, K23, L23, M23, N23, O23, F27, G27, H27, I27, J27, K27, L27, M27, N27, O27, G31, H31, I31, J31, K31, L31** and **M31**.
10. **Type the vocabulary** in the following cells as shown in the picture:


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
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28																				
29																				
30																				
31																				
32																				
33																				


Let's Weaving Vocabularies

There is a pair of rhyming words in this game. The alphabets in the middle inside the red gap will be the last two alphabets of the word in the No.1 picture series. However, they will be the first two alphabets for the words in No.2 picture Series. And if you want to know the meaning of the word, please over the mouse on the red triangle of the picture. If your word is right, the word will appear with its meaning.





W H A L E A F







G I R A F F E A T H E R







Z E R O S E







T I G E R A S E R






C A M E R A B B I T





H O U S E A L



Change the color of cell **J11, K11, J15, K15, J19, K19, K23, J23, J27, K27, J31** and **K31** to Red.

11. Type **Formulas** and **Functions** in the cell to calculate **Sub Score** as follows: **G10** type =**IF(G11="W",1,0)**

It means that if the alphabet in **G11** is equal to **"W"**, give **1 point**. if not, give **0**.

Cell H10 , type = IF(H11="H",1,0)	Cell I10 , type = IF(I11="A",1,0)
Cell L10 , type = IF(L11="A",1,0)	Cell M10 , type = IF(M11="F",1,0)
Cell E14 , type = IF(E15="G",1,0)	Cell F14 , type = IF(F15="I",1,0)
Cell G14 , type = IF(G15="R",1,0)	Cell H14 , type = IF(H15="A",1,0)
Cell I14 , type = IF(I15="F",1,0)	Cell L14 , type = IF(L15="A",1,0)
Cell M14 , type = IF(M15="T",1,0)	Cell N14 , type = IF(N15="H",1,0)
Cell O14 , type = IF(O15="E",1,0)	Cell P14 , type = IF(P15="R",1,0)
Cell H18 , type = IF(H19="Z",1,0)	Cell I18 , type = IF(I19="E",1,0)
Cell L18 , type = IF(L19="S",1,0)	Cell M18 , type = IF(M19="E",1,0)
Cell G22 , type = IF(G23="T",1,0)	Cell H22 , type = IF(H23="I",1,0)
Cell I22 , type = IF(I23="G",1,0)	Cell L22 , type = IF(L23="A",1,0)
Cell M22 , type = IF(M23="S",1,0)	Cell N22 , type = IF(N23="E",1,0)
Cell O22 , type = IF(O23="R",1,0)	Cell G26 , type = IF(G27="A",1,0)
Cell F26 , type = IF(F27="C",1,0)	Cell I26 , type = IF(I27="E",1,0)
Cell H26 , type = IF(H27="M",1,0)	Cell M26 , type = IF(M27="B",1,0)
Cell L26 , type = IF(L27="B",1,0)	Cell O26 , type = IF(O27="T",1,0)
Cell N26 , type = IF(N27="I",1,0)	Cell H30 , type = IF(H31="O",1,0)
Cell G30 , type = IF(G31="H",1,0)	Cell L30 , type = IF(L31="A",1,0)
Cell I30 , type = IF(I31="U",1,0)	
Cell M30 , type = IF(M31="L",1,0)	


Note : Please note that every alphabet box which is **not red** cell will have **1 point** displayed above. You can use **Copy** for typing formulas in the cell having similar data and change the cell name.

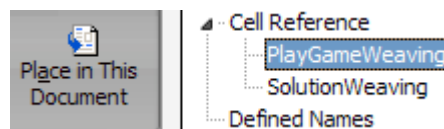
12. Type **Formulas and Functions** to sum up **Total Score** and display the **Correct Vocabulary**.
- Cell **J13**, type =**SUM(G10:I10)** means to **sum up the score of G10,H10 and I10** (3 cells)
Cell **U11**, type =**IF(J13=3,"WHALE is mean ปลาวาฬ"," ")**
It means that if the cell value of **J13** is equal to **3**, the meaning of **WHALE** will be displayed.
Change the cell color of **G11,H11 ,I11** and **U11** to **Light yellow**.
 - Cell **K13**, type =**SUM(L10:M10)**
Cell **U12**, type =**IF(K13=2,"LEAF is mean ใบไม้"," ")**
Change the cell color of **L11,M11** and **U12** to **Lavender**.
 - Cell **J17**, type =**SUM(E14:I14)**
Cell **U15**, type =**IF(J17=5,"GIRAFFE is mean ยีราฟ"," ")**
Change the cell color of **E15,F15,G15,H15,I15** and **U15** to **Yellow**.
 - Cell **K17**, type =**SUM(L14:P14)**
Cell **U16**, type =**IF(K17=5,"FEATHER is mean ขนนก"," ")**
Change the cell color of **L15,M15,N15,O15,P15** and **U16** to **Pink**.
 - Cell **J21**, type =**SUM(H18:I18)**
Cell **U19**, type =**IF(J21=2,"ZERO is mean เลขศูนย์"," ")**
Change the cell color of **H19,I19** and **U19** to **Gold**.
 - Cell **K21**, type =**SUM(L18:M18)**
Cell **U20**, type =**IF(K21=2,"ROSE is mean ดอกกุหลาบ"," ")**
Change the cell color of **L19,M19** and **U20** to **Rose**.
 - Cell **J25**, type =**SUM(G22:I22)**
Cell **U23**, type =**IF(J25=3,"TIGER is mean เสือ"," ")**
Change the cell color of **G23,H23,I23** and **U23** to **Light green**.


- Cell **K25**, type =**SUM(L22:O22)**
Cell **U24**, type =**IF(K25=4,"ERASER is mean ยางลบ"," ")**
Change the cell color of **L23,M23,N23,O23** and **U24** to **blue sky**.
- Cell **J29**, type =**SUM(F26:I26)**
Cell **U27**, type =**IF(J29=4,"CAMERA is mean กล้องถ่ายรูป"," ")**
Change the cell color of **F27,G27,H27,I27** and **U27** to **Lime**.
- Cell **K29**, type =**SUM(L26:O26)**
Cell **U28**, type =**IF(K29=4,"RABBIT is mean กระต่าย"," ")**
Change the cell color of **L27,M27,N27,O27** and **U28** to **Pale blue**.
- Cell **J33**, type =**SUM(G30:I30)**
Cell **U31**, type =**IF(J33=3,"HOUSE is mean บ้าน"," ")**
Change the cell color of **G31,H31,I31** and **U31** to **Light green**.
- Cell **K33**, type =**SUM(L30:M30)**
Cell **U32**, type =**IF(K33=2,"SEAL is mean แมวน้ำ"," ")**
Change the cell color of **L31,M31** and **U32** to **Light turquoise**.

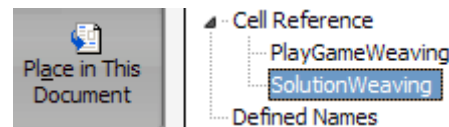
Note : Check the correct vocabulary in **Column U** in **Solution to Let's Weaving Vocabularies Game Page**.

13. **Hide the sub score** by selecting all cells displaying **Scores** and change the font color to **White**.
14. **Merge cells U1:U5** for placing the **Picture**.
Click **Insert >> Picture >> From File...** >> select the picture and click **OK**. Then adjust the size and place the picture in the indicated position.
15. Click cell **U6**, type "**Play Game**". Format the cell to **Center**, **Size 11** , **Bold** and **Green**.

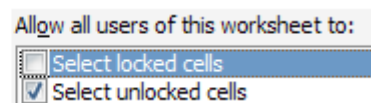
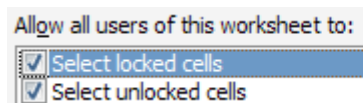
16. Create the **Solution to Let's Weaving Vocabularies Game** worksheet. Change the name of **Sheet1** to **SolutionWeaving**. Right click on the **SolutionWeaving** , select **Move or Copy...** , select **Create a copy** , click **OK**. When the **SolutionWeaving (2)** appears, change the name to **PlayGameWeaving**. In the **PlayGameWeaving** change "Play Game" to "Solution".
17. **Create the link** between **Playing page** and **Solution page**. In the **SolutionWeaving**, click the picture in cell **U1**, then click **Insert Hyperlink** . When the **Insert Hyperlink** window appears, select **Place in this Document**. For Cell Reference, select **PlayGameWeaving**, click **OK**.



18. In the **PlayGameWeaving** , click the picture in cell **U1**, then click **Insert Hyperlink** . When the **Insert Hyperlink** window appears, select **Place in this Document**. For Cell Reference, select **SolutionWeaving**, click **OK**.



19. **Check the link** between the 2 sheets to ensure that it can be moved **forward** and **backward** between **PlayGameWeaving** and **SolutionWeaving**.
20. Unlock cell to be used as **answering space**, only in **PlayGameWeaving**, click to select cell **G11 , H11 , I11 , L11 , M11 , E15 , F15 , G15 , H15 , I15 , L15 , M15 , N15 , O15 , P15 , H19 , I19 , L19 , M19 , G23 , H23 , I23 , L23 , M23 , N23, O23 , F27 , G27 , H27 , I27 , L27 , M27 , N27 , O27, G3, H31 , I31 , L31** and **M31**
Click menu **Format>>Cells>>Protection>>**,
click **Locked** lock to **Locked** , then click **OK**.
Click **Delete** to delete all alphabets in **answering cells**.
21. **Create Worksheet Protection**
Click menu **Tools>>Protection>>Protect sheet**,
The window for defining Password shall appear to let you define your password (you can either define or reject to use Password)
Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.
Click **uncheck** select locked cells to become select locked cells as shown in the picture:



Click **OK**.

It can be seen that all the cells are locked except the cells in **item 20** which can **fill in the alphabets**.

22. In the **SolutionWeaving** worksheet, you have to **lock all worksheets** by following the procedure in **item 21**. It can be seen that **all the cells are locked** for seeing solution only.
23. **For Editing**, click **Tools >> Protection >> Unprotect sheet...**
24. **To Cancel the details** of Program window elements.
Click menu **Tools >> Options... >> View**,
Click to cancel the details which you would like to delete in both 2 sheets such as

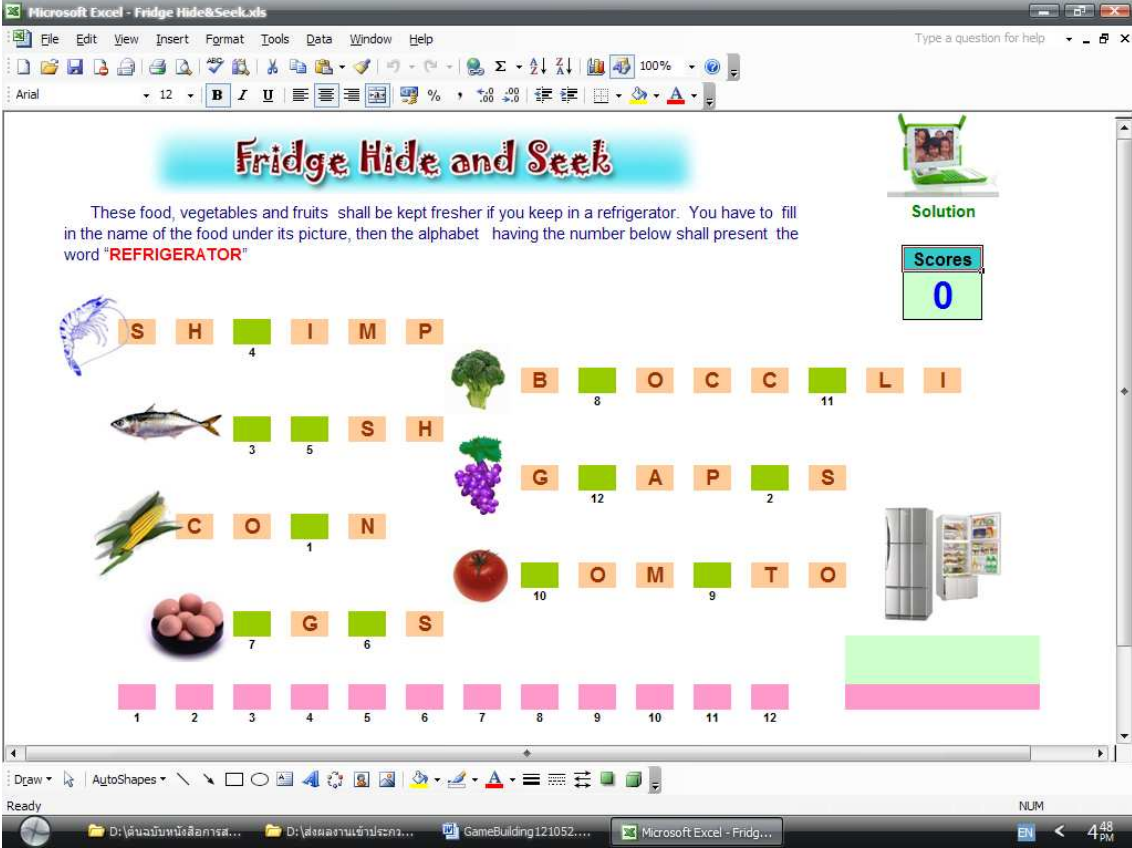
Formula bar Status bar Gridlines Row & column headers Sheet tabs

Click **OK**.

25. **To Save Weaving Vocabularies Game**
Click the **PlayGameWeaving** sheet.
Click menu **File >> Save as...>>** type the name as **Weaving Vocabularies**.
Click **Save**.

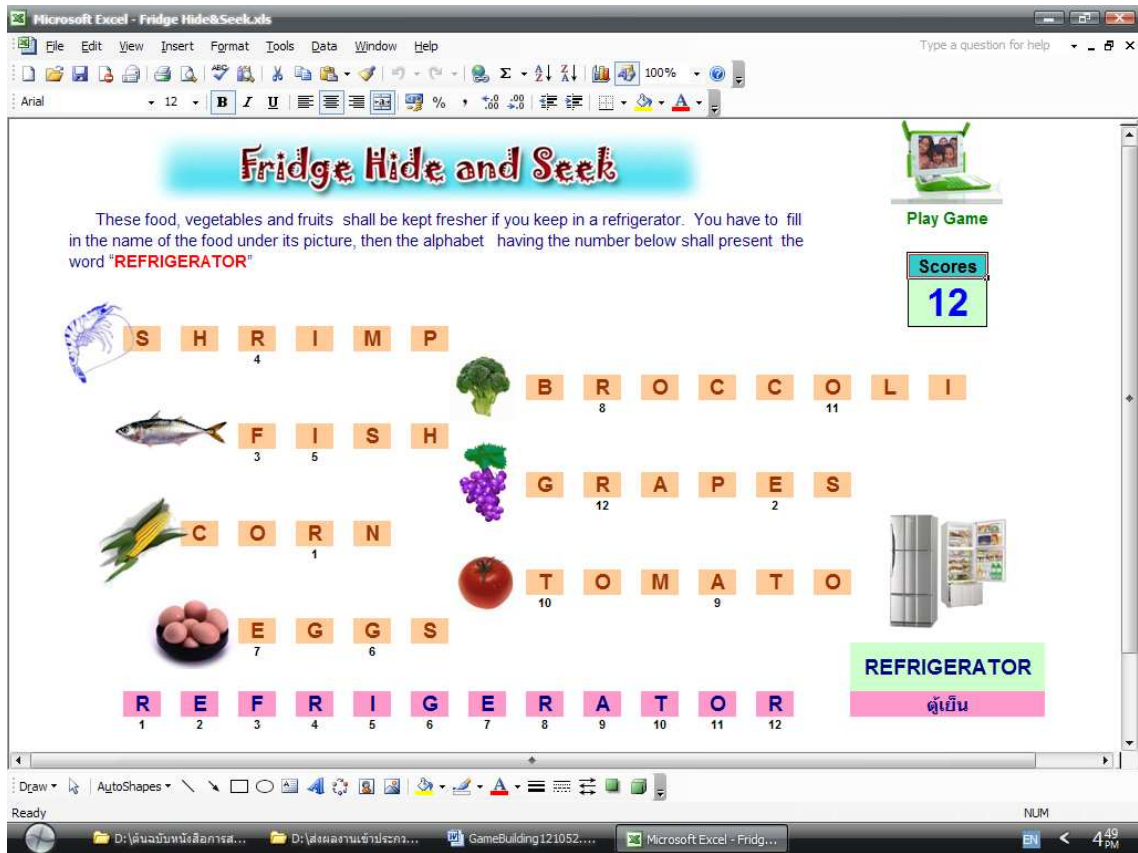


Fridge Hide and Seek Game



Game Page for the player

Solution to Fridge Hide and Seek Game



The outlook of the Solution Page when the answer is correct.


Fridge Hide and Seek Game

Game Building Procedures and Methods

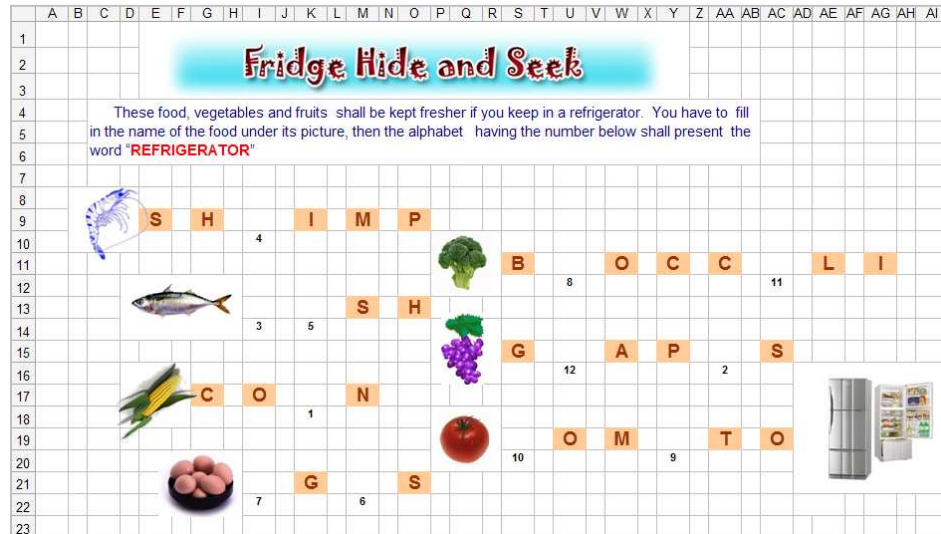
1. Build up the game in **Book1** by starting from **Sheet1**
2. **Adjust the width of column**
A,C,E,G,I,K,M,O,Q,S,U,W,Y,AA,AC,AE,AG,AI,AK to 4
Adjust the width of column
B,D,F,H,J,L,N,P,R,T,V,X,Z,AB,AD,AF,AH,AJ to 2
Adjust the height of row 1-30 to 17
3. **Merge cells E1:Y3** for placing the name of game "**Fridge Hide and Seek Game**". Adjust the position of the name of game properly.
4. **Merge cells C4:AB6**, type "**These food, vegetables and fruits shall be kept fresher if you keep in a refrigerator. You have to fill in the name of the food under its picture, then the alphabet having the number below shall present the word "REFRIGERATOR"**"
Click menu **Format >> Cells >> Alignment**, align the **Horizontal** text to **Left(indent)**, as for the **Vertical** text, align to the **Center** and put **Wrap text** Click **OK**.
Format the font to **Size 11** and the font color to **Dark Blue**.
5. **Merge cells** for placing the picture.
Click menu **Insert >> Picture**, select the pictures from CD-Rom as follows:
Cells **B8:D10**, **Insert >> Picture "Shrimp"**
Cells **P10:R12**, **Insert >> Picture "Broccoli"**
Cells **F12:H14**, **Insert >> Picture "Fish"**
Cells **P14:R16** , **Insert >> Picture "Grapes"**

Cells D16:F18, Insert >> Picture "Corn"
 Cells P18:R20, Insert >> Picture "Tomato"
 Cells F20:H22, Insert >> Picture "Eggs"
 Cells AD16:AJ21, Insert >> Picture "Refrigerator"

6. Format the cell color of E9 to **tan** and set the font to **Center, Bold, Brown** and **Size 14**


Click cell E9, click **Format Painter** , then click in the following cells: G9, K9, M9, O9, S11, W11, Y11, AA11, AE11, AG11, M13, O13, S15, W15, Y15, AC15, G17, I17, M17, U19, W19, AA19, AC19, K21 and O21

7. **Type the alphabet** in the following cells as shown in the picture:



8. Format the cell color of I9 to **Lime** and set the font to **Center, Bold, Brown** and **Size 14**

Click cell I9, click **Format Painter** , then click in the following cells: U11, AC11, I13, K13, U15, AA15, K17, S19, Y19, I21 and M21

9. Format the cell color **E24** to **Rose** and set the font to **Center, Bold, Dark Blue** and **Size 14**
Click cell **E24**, click **Format Painter** , then click in the following cells: **G24, I24, K24, M24, O24, Q24, S24, U24, W24, Y24** and **AA24**

10. **Type the number** to control cell as indicated as follows:

I10 , type 4	U12 , type 8	AC12 , type 11	I14 , type 3
K14 , type 5	U16 , type 12	AA16 , type 2	K18 , type 1
S20 , type 10	Y20 , type 9	I22 , type 7	M22 , type 6
E25 , type 1	G25 , type 2	I25 , type 3	K25 , type 4
M25 , type 5	O25 , type 6	Q25 , type 7	S25 , type 8
U25 , type 9	W25 , type 10	Y25 , type 11	AA25 , type 12

Format the cell having number to **Size 8** and **Bold**.

Click menu **Format >> Cells >> Alignment** then align the **Horizontal** text to **Center** and **Vertical** text to **Top**. Click **OK**.

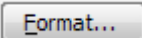
11. **Set Conditional Formatting** as follows:

Click Cell **I9**, select **Format >> Conditional Formatting..**

When the Conditional Formatting window appears, set up as according to the picture as shown.

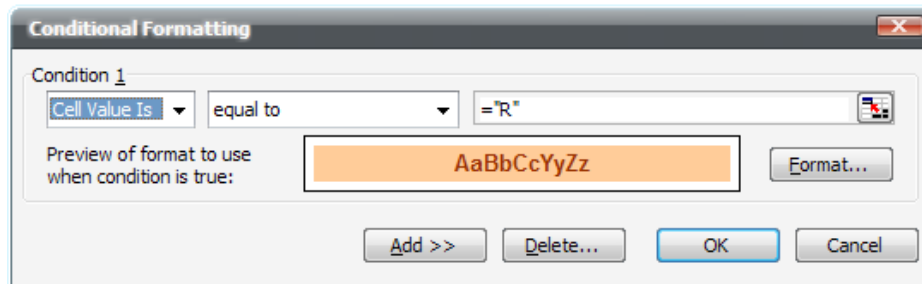


It means that if the **cell value** is equal to **R**, the condition is **true**

Click 

In the window **Format cells**, click **Font** select **Brown** and **Bold**,
Click **Pattern**, select **Tan** color, click **OK**.

The output will be displayed as in the picture, click **OK**.



Try typing the numbers in cell **I9**, you will see that if the cell value is **not equal to R**, the **Cell color** is still **Lime**. If the cell value is **equal to R**, the **Cell color** will change to **Tan** and the **Font color** will change to **Brown**.

12. As for the **Lime cells** which are **U11,AC11,I13,K13,U15,AA15, K17,S19,Y19,I21** and **M21**, execute **Conditional Formatting** in every cells by following the same procedure in **item 11**


The alphabet in cell :


U11 is R	AC11 is O	I13 is F	K13 is I
U15 is R	AA15 is E	K17 is R	S19 is T
Y19 is A	I21 is E	M21 is G	

13. **Type Formulas** to link the alphabet for orderly arrangement. Click cell **E24**, type **=IF(K17="R","R","** ")

It means that if there is the alphabet **"R"** in cell **K17**, you will get **R** in cell **E24**.

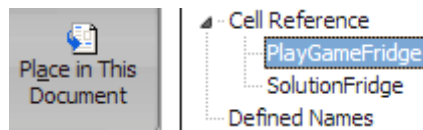
G24 , type =IF(AA15="E","E"," ")	I24 , type =IF(I13="F","F"," ")
K24 , type =IF(I9="R","R"," ")	M24 , type =IF(K13="I","I"," ")
O24 , type =IF(M21="G","G"," ")	Q24 , type =IF(I21="E","E"," ")
S24 , type =IF(U11="R","R"," ")	U24 , type =IF(Y19="A","A"," ")
W24 , type =IF(S19="T","T"," ")	Y24 , type =IF(AC11="O","O"," ")
AA24 , type =IF(U15="R","R"," ")	


14. **Merge cells AF6:AH6**, type "Scores". Format the cell to **Size 12, Bold and Blue green** .
 15. **Merge cells AF7:AH8** for showing score. Format the cell to **Size 26, Bold and Light Green**. Set the font color to **Blue**.
 16. Select the space of cells **AF6:AF7**, click **All Border** 
 17. Type **Formulas and Functions** to calculate **Sub score** as follows:
 Cell **E23**, type **=IF(E24="R",1,0)**
 It means that if there is the alphabet "R" in cell **E23**, give **1 point**, if not, **give 0**.
 Cell **G23**, type **=IF(G24="E",1,0)** Cell **I23**, type **=IF(I24="F",1,0)**
 Cell **K23**, type **=IF(K24="R",1,0)** Cell **M23**, type **=IF(M24="I",1,0)**
 Cell **O23**, type **=IF(O24="G",1,0)** Cell **Q23**, type **=IF(Q24="E",1,0)**
 Cell **S23**, type **=IF(S24="R",1,0)** Cell **U23**, type **=IF(U24="A",1,0)**
 Cell **W23**, type **=IF(W24="T",1,0)** Cell **Y23**, type **=IF(Y24="O",1,0)**
 Cell **AA23**, type **=IF(AA24="R",1,0)**
- Note :** If you fill in the **correct answer**, all cells in **row 23** which have formulas shall have **"1 point"** in the cell.
18. Type **Formulas and Functions** to calculate **Total scores** as follows
 cell **AF8**, type **=SUM(E23:AA23)**
 It means that to sum up the points of cells **E23:AA23**
 19. **Hide the Sub score** by changing the font color of cells **E23:AA23** to **White**.
 20. **Merge cells AD22:AJ23** for placing the word "REFRIGERATOR".
 21. Type **Formulas** for automatically showing the word "REFRIGERATOR" as follow:
=E24&G24&I24&K24&M24&O24&Q24&S24&U24&W24&Y24&AA24

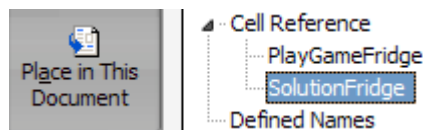
22. **Format** the cell color **AD22** to **Light green** and set the font to **Size 14, Bold** and **Dark blue**.
Click menu **Format >> Cells >> Alignment**, the font should be in the **Center** both in **Horizontal** and **Vertical** directions. Click **OK**.
23. **Merge cells AD24:AJ24** for placing the word **"REFRIGERATOR"**
24. Type **Formulas** for automatically showing the word **"REFRIGERATOR"** as follow:
=IF(AD22="refrigerator", "ตู้เย็น")
Format the cell **AD22** to **Rose** and set the font to **Size 12, Bold** and **Dark blue**.
25. **Merge cells AE1:AI3** for placing the picture.
Click menu **Insert >> Picture >> From File... >>**, select the required pictures, click **OK**.
Adjust the size and put the picture in the indicated position.
26. Click cell **N2**, type **"Play Game"**. Set the font to **Size 10, Bold** and **Green**.
27. Create the **Solution to Fridge Hide and Seek Game** worksheet.
Change the name of **Sheet1** to **SolutionFridge**.
Right click on the **SolutionFridge**, select **Move or Copy...**, select **Create a copy**, click **OK**.
When the **SolutionFridge (2)** appears, change the name to the **PlayGameFridge**.
In the **PlayGameFridge** change **"Play Game"** to **"Solution"**.
28. In the **SolutionFridge**, click the picture in cell **AE1**, then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears,

select **Place in this Document**.

For Cell Reference, select **PlayGameFridge**, click **OK**.

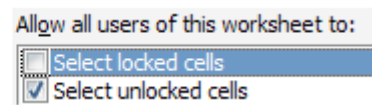
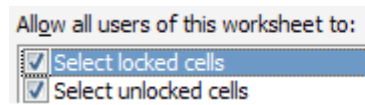


29. In the **PlayGameFridge**, click the picture in cell **AE1**, then click **Insert Hyperlink** . When the **Insert Hyperlink** window appears, select **Place in this Document**. For Cell Reference, select **SolutionFridge**, click **OK**.



30. **Check the link** between the 2 sheets to ensure that it can be moved **forward** and **backward** between **PlayGameFridge** and **SolutionFridge**.
31. Unlock cell to be used as **answering space**, only in the **PlayGameFridge**. by click to select cells having the number under the food name which are **I9,U11,AC11,I13,K13,U15,AA15, K17,S19,Y19,I21** and **M21**. Click menu **Format>>Cells>>Protection>>**, click **Locked** lock to **Locked** , then click **OK**. Click **Delete** to delete all alphabet data in **answering cells**.
32. **Create Worksheet Protection**
Click menu **Tools>>Protection>>Protect sheet**,
The window for defining Password shall appear to let you define your password (you can either define or reject to use Password)

Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.
Click **uncheck** select locked cells to become select locked cells as shown in the picture:



Click **OK**.

It can be seen that all the cells are locked except the indicated cells in **item 31**; which can fill in the number.

33. In the **SolutionFridge** worksheet, you have to **lock all worksheets** by following the procedure in **item 32**. It can be seen that **all the cells are locked** for seeing solution only.
34. **For Editing**, Click menu **Tools >> Protect >> Unprotect Sheet...**
35. **To Cancel the details** of Program window elements, Click menu **Tools >> Options... >> View**, Click to cancel the details which you would like to delete in both 2 sheets such as

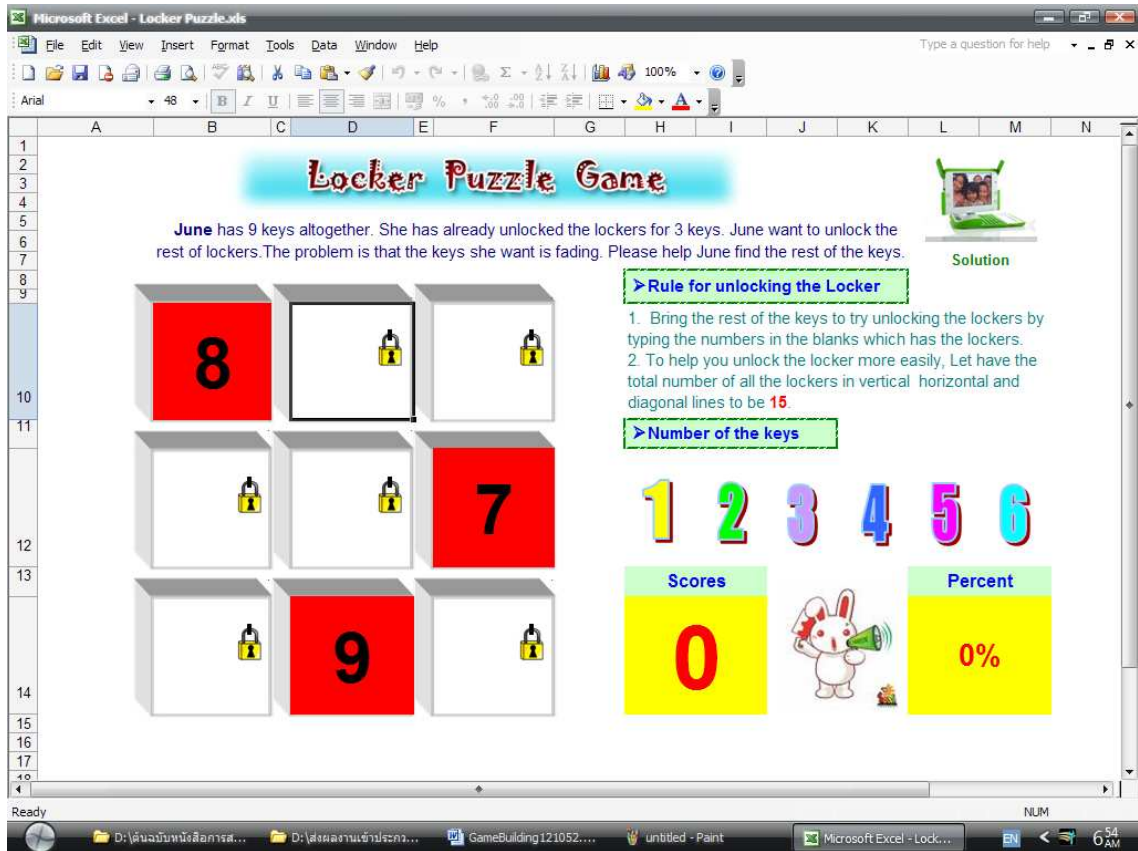
Formula bar Status bar Gridlines Row & column headers Sheet tabs

Click **OK**.

36. **To Save Fridge Hide and Seek Game**
Click the **PlayGameFridge** sheet.
Click menu **File >> Save as...>>** type the name **Fridge Hide&Seek**.
Click **Save**.



Locker Puzzle Game



Game Page for the player

Solution to Locker Puzzle Game

Locker Puzzle Game

June has 9 keys altogether. She has already unlocked the lockers for 3 keys. June want to unlock the rest of lockers. The problem is that the keys she want is fading. Please help June find the rest of the keys.

Rule for unlocking the Locker

1. Bring the rest of the keys to try unlocking the lockers by typing the numbers in the blanks which has the lockers.
2. To help you unlock the locker more easily, Let have the total number of all the lockers in vertical horizontal and diagonal lines to be **15**.

Number of the keys

1 2 3 4 5 6

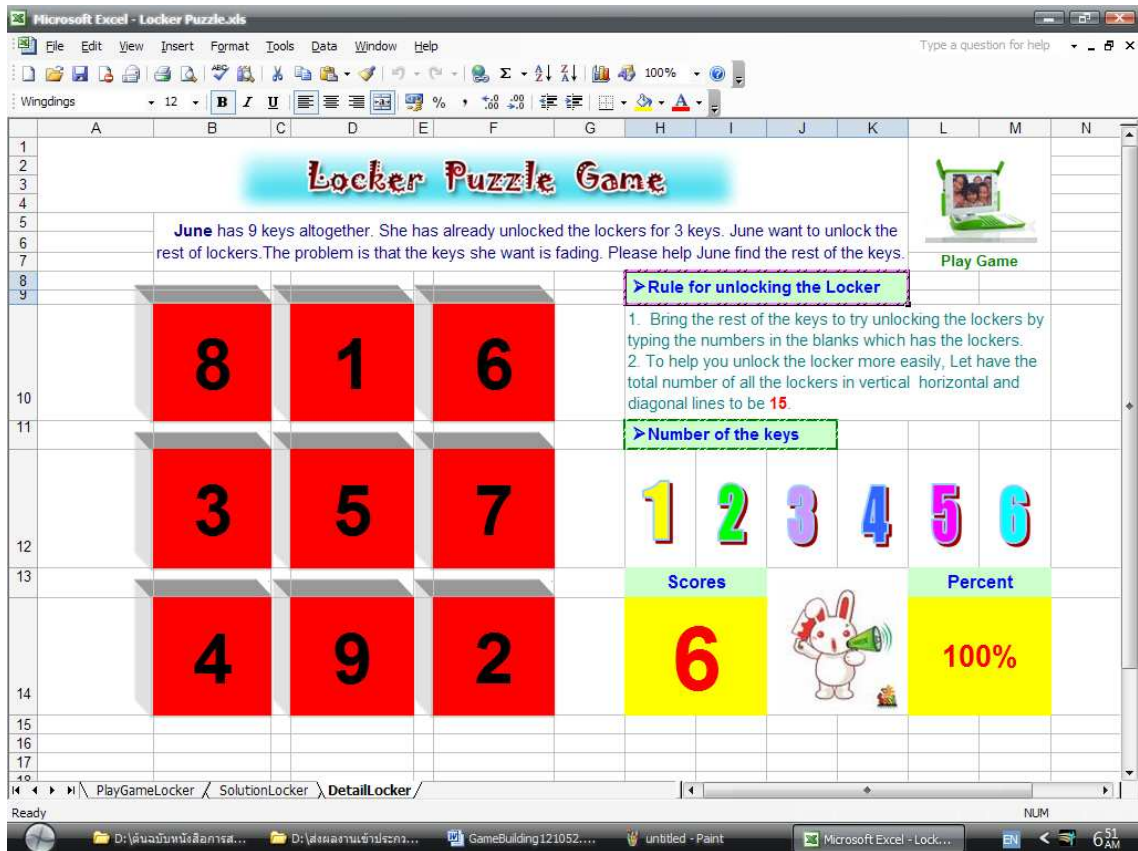
Scores
6

Percent
100%

8	1	6
3	5	7
4	9	2

The outlook of the Solution Page when the answer is correct.

Locker Puzzle Game

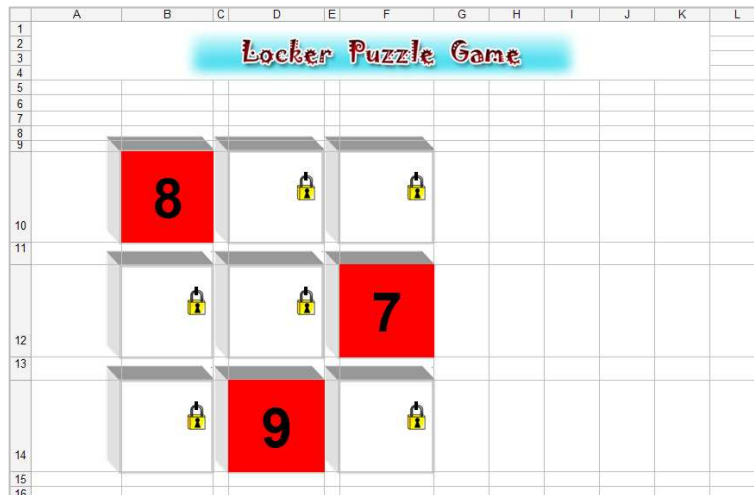


The outlook of the Game which the details have not been deleted yet.

Locker Puzzle Game

Game Building Procedures and Methods

1. Build up the game in **Book1** by starting from **Sheet1**.
2. **Insert the picture as the background of worksheet.**
Click menu **Format >> Sheet >> Background...**,
Select the picture from CD-Rom, click **locker.jpg**, click **Insert**.
3. **Merge cells A1:K4** for placing the name of game "**Locker Puzzle Game**". Adjust the position of the name of game properly.
4. **Adjust the width and the height of cells B10,D10,F10,B12,D12,F12,B14,D14 and F14** to be equal to the width and the height of the **Locker** as shown in the picture.
5. **Type the number in cells B10 , F12 and D14** as shown in the picture:



Format the cells **B10:F14** to **Size 48** and **Bold**.

Click menu **Format >> Cells>> Alignment**, align the text to the **Center** both in **Horizontal** and **Vertical** directions, click **OK**.

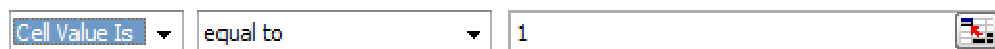
Set the cell color of cells **B10**, **F12** and **D14** to **Red**.

6. **Merge cells B5:K7**, type "June has 9 keys altogether. She has already unlocked the lockers for 3 keys. June want to unlock the rest of lockers. The problem is that the keys she want is fading. Please help June find the rest of the keys"

Set the font cell **B5** to **Size 11** and set the font color to **Dark blue**. Click menu **Format >> Cells>> Alignment**, align the **Horizontal** text to left and **Vertical** text to **Center** and put **Wrap text** Click **OK**.

7. Click cell **D10**, select **Format>> Conditional Formatting...**

When the Conditional Formatting window appears, set up as according to the picture as shown:

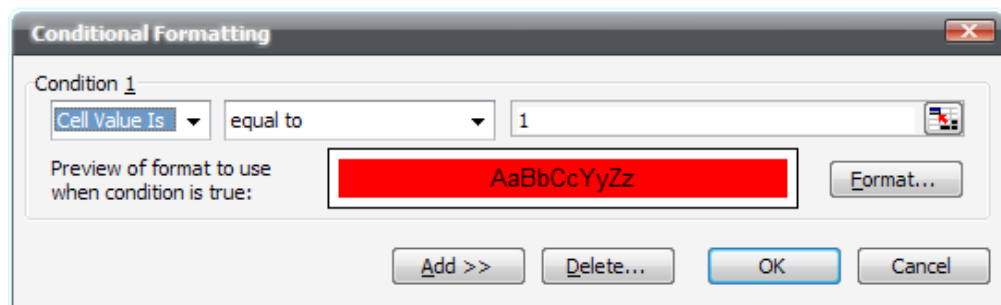


It means that if the **cell value is equal to 1**, the condition is **true**

Click

In the **Cell Formatting** window, click **Pattern**, select **Red**, click **OK**.

The output will be displayed as in the picture, click **OK**.



Try typing the numbers in cell **D10**. It can be seen that if the cell value is **not equal to 1**, the cell color is still white with the picture of key. But if the cell value is **equal to 1**, the cell color will change to **Red** without the picture of key.

8. **Set Conditional Formatting** for cells having keys comprising cell **F10,B12,D12,B14** and **F14** by following the same procedure in **item 7**

Cell value of **D10** is equal to **1**

Cell value of **F10** is equal to **6**

Cell value of **B12** is equal to **3**

Cell value of **D12** is equal to **5**

Cell value of **B14** is equal to **4**

Cell value of **F14** is equal to **2**

Note : Type the correct numbers in every lockers, the cell color will change to **Red**.

9. Type **Formulas** and **Functions** to calculate **Sub scores** as follows:

Cell **D9**, type **=IF(D10=1,1,0)**

It means that if the cell value of cell **D10** is **equal to 1**, give **1 point**, if not, **give 0**.

Cell **F9**, type **=IF(F10=6,1,0)**

Cell **B11**, type **=IF(B12=3,1,0)**


Cell **D11**, type **=IF(D12=5,1,0)**

Cell **B13**, type **=IF(B14=4,1,0)**

Cell **F13**, type **=IF(F14=2,1,0)**

10. **Merge cells H8:J9**, click menu **Insert >> Symbol**, select the required symbol. Click **Insert**, type **"Rule for unlocking the Locker"** Format the cell **H8** to **Size 11** and **Bold**. Set the font color to **Blue** and cell color to **Light Green**.


- Click menu **Format >> Cells>> Alignment** then align the text to the **Center** both **Horizontal** and **Vertical** directions. Click **OK**.
11. **Merge cells H10:M10**, type "1. Bring the rest of the keys to try unlocking the lockers by typing the numbers in the blanks which has the lockers. 2. To help you unlock the locker more easily, Let have the total number of all the lockers in vertical horizontal and diagonal lines to be 15."

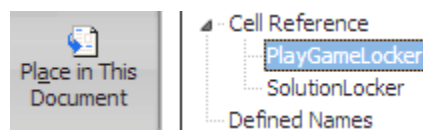
Format the cell **H10** to **Size 11** and the font color to **Teal green**. Click menu **Format >> Cells>> Alignment**, align the **Horizontal** text to **Left(indent)** and **Vertical** text to **Center** and put **Wrap text** Click **OK**.
 12. **Merge cells H11:J11**, click menu **Insert >> Symbol**, select the required symbol. Click **Insert**, type "Number of the keys" Set the cell format as shown in **item 10**.
 13. Click **Insert WordArt**  on toolbar Drawing, **Create the number 1-6** for placing in cells **H12 - M12**.
 14. **Merge cells H13:I13**, type "Scores" Set the cell format as shown in **item 10**.
 15. **Merge cells L13:M13**, type "Percentage" Set the cell format as shown in **item 10**.
 16. **Merge cells H14:I14** for showing score.


Format the cell to **size 60** and **Bold**. Set the font color to **Red** and cell color to **Yellow**.

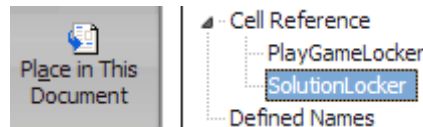
Click menu **Format >> Cells>> Alignment**, the font should be in the **Center** both in **Horizontal** and **Vertical** directions. Click **OK**.

17. Type **Formulas** and **Functions** to calculate **Total score** as follows:
Cell **H14**, type **=SUM(D9,F9,B11,D11,B13,F13)**
It means to sum up the points in cells **D9,F9,B11,D11,B13,F13**.
18. **Hide the sub score** by changing the font size in cells **D9,F9,B11,D11,B13** and **F13** to **1**.
19. **Merge cells J13:K14** for placing the picture.
Click menu **Insert >> Picture >> From File... >>**, select the pictures from CD-Rom, click **OK**. Adjust the size and put the picture in the indicated position.
20. **Merge cells L14:M14** for showing **Percentage**.
Format the Cell to size **24** and **Bold**. Set the Font color to **red** and Cell color to **yellow**.
Click menu **Format >> Cells >> Alignment** then align the text to **Center** both **Horizontal** and **Vertical** directions. Click **OK**.
21. Type **Formulas** and **Functions** to calculate **Percentage** as follows:
Cell **L14**, type **=H14/6**
It means that the point in cell **H14** must be **divided by the full score**.
Click menu **Format >> Cells >> Number** Select **Number to Percentage**
Click **OK**.
22. **Merge cells L1:M6** for placing the Hyperlink Picture.
Click menu **Insert >> Picture >> From File... >>**, select the pictures, click **OK**.
Adjust the size of the picture and place it in the indicated position.
23. **Merge cells L7:M7**, type **"Play Game"** format the font to **Size 10 Bold** and **Green**.

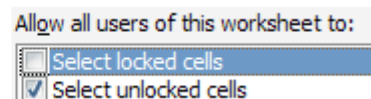
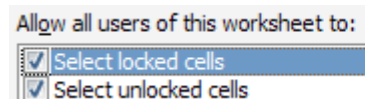
24. Create the **Solution to Locker Puzzle Game** worksheet.
Change the name of **Sheet1** to **SolutionLocker**.
Right click on the **SolutionLocker** , select **Move or Copy...** ,
select **Create a copy** , click **OK**.
When the **SolutionLocker (2)** appears,
change the name to the **PlayGameLocker**.
In the **PlayGameLocker**, change the word "Play Game" to "Solution".
25. Create the link between **Playing page** and **Solution page**.
26. In the **SolutionLocker**, click the picture in cell **L1**,
then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears,
select **Place in this Document**.
For Cell Reference, select **PlayGameLocker**, click **OK**.



27. In the **PlayGameLocker**, click the picture in cell **L1**,
then click **Insert Hyperlink** 
When the **Insert Hyperlink** window appears,
select **Place in this Document**.
For Cell Reference, select **SolutionLocker**, click **OK**.



28. **Check the link** between the 2 sheets to ensure that it can be moved **forward** and **backward** between **PlayGameLocker** and **SolutionLocker**.
29. In the **PlayGameLocker**, delete the number in cells **D10, F10,B12, D12,B14** and **F14**, then you will see the picture of locker with key over such cells.
30. Unlock cell to be used as **answering space**, only in the **PlayGameLocker** by click cells **D10**, press **Ctrl** and click to select answering cells which are **F10,B12,D12,B14** and **F14**.
Click menu **Format>>Cells>>Protection>>**, click **Locked** lock to **Locked** , then click **OK**.
31. **Create Worksheet Protection**
Click menu **Tools>>Protection>>Protect sheet**,
The window for defining Password shall appear to let you define your password (you can either define or reject to use Password)
Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.
Click **uncheck** select locked cells to become select locked cells as shown in the picture:



Click **OK**.

It can be seen that all the cells are locked except the following cells: **D10,F10,B12,D12,B14** and **F14** which can fill in the number.

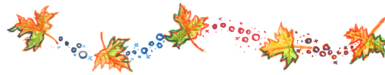
32. In the **SolutionLocker** worksheet, you have to **lock all worksheets** by following the same procedure in **item 31**. It can be seen that **all the cells are locked** for seeing solution only.
33. **For Editing**, Click menu **Tools >> Protection >> Unprotect Sheet...**
34. **To Cancel the details** of Program window elements.
Click menu **Tools >> Options... >> View**.
Click to cancel the details which you would like to delete in both 2 sheets such as

Formula bar Status bar Gridlines Row & column headers Sheet tabs

Click **OK**

Note : In this game, you could not delete the head row and head column otherwise the position of picture cell will not be in the former position.

35. **To Save Locker Puzzle Game**
Click the **PlayGameLocker** sheet.
Click menu **File >> Save as...>>** type the name as **Locker Puzzle**.
Click **Save**.



Cursed Angel Game

Cursed Angel Game

Long time ago, there was an angel breaking the heaven's rules. She, therefore, was cursed to stay in the magic picture frame until there was someone good at mathematics can decode and open the puzzle picture. The angel shall appear. We hope you can help the angel.

The Missions to help Angel.

- You have to fill the answers in 24 blank boxes.
- If your answer is correct, the box having the same number as the answer shall be opened i.e. if the correct answer is "2", the second box shall be opened, if your answer is not correct, the box could not be opened.

2x2	20-4	5+7	9-8	4x5	7+4	6x4	8-5	9+8	2x3	8+6	15-7
7x3	8+5	11-9	3x3	14+9	24-5	2x5	3+4	11x2	9-4	5x3	9+9

Game Page for the player

Solution to Cursed Angel Game

Cursed Angel Game

Long time ago, there was an angel breaking the heaven's rules. She, therefore, was cursed to stay in the magic picture frame until there was someone good at mathematics can decode and open the puzzle picture. The angel shall appear. We hope you can help the angel.

The Missions to help Angel.

- You have to fill the answers in 24 blank boxes.
- If your answer is correct, the box having the same number as the answer shall be opened i.e. if the correct answer is "2", the second box shall be opened, if your answer is not correct, the box could not be opened.

2x2	20-4	5+7	9-8	4x5	7+4	6x4	8-5	9+8	2x3	8+6	15-7
4	16	12	1	20	11	24	3	17	6	14	8
7x3	8+5	11-9	3x3	14+9	24-5	2x5	3+4	11x2	9-4	5x3	9+9
21	13	2	9	23	19	10	7	22	5	15	18

The outlook of the Solution Page when the answer is correct.

Cursed Angel Game

Cursed Angel Game

Long time ago, there was an angel breaking the heaven's rules. She, therefore, was cursed to stay in the magic picture frame until there was someone good at mathematics can decode and open the puzzle picture. The angel shall appear. We hope you can help the angel.

The Missions to help Angel.

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- If your answer is correct, the box having the same number as the answer shall be opened i.e. if the correct answer is "2", the second box shall be opened, if your answer is not correct, the box could not be opened.

2x2	20-4	5+7	9-8	4x5	7+4	6x4	8-5	9+8	2x3	8+6	15-7
4	16	12	1	20	11	24	3	17	6	14	8
7x3	8+5	11-9	3x3	14+9	24-5	2x5	3+4	11x2	9-4	5x3	9+9
21	13	2	9	23	19	10	7	22	5	15	18

The outlook of the Game which the details have not been deleted yet.

Cursed Angel Game

Game Building Procedures and Methods

1. Build up the game in **Book1** by starting from **Sheet1**.
2. **Insert the picture as the background of worksheet.**
Click menu **Format >> Worksheet >> Background..**
Select the picture from CD-Rom, click **Angel. jpg**,
click **Insert**.
3. **Merge cells A1:H6** for placing the name of game
"Cursed Angel Game".
Adjust the position of the name of game properly.
4. **Adjust the column width** as follow:

Column B and G =4.00

Column C to F =9.57

Column I to T =5.00

Adjust the Row Height as follow:


8 =21	9=50
10=50	11=50
12=50	13=50
14=50	15=21



Note : The height and the width are approximately set up for dividing
the picture to 4x6 boxes.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11									2x2	20-4	5+7	9-8	4x5	7+4	6x4	8-5	9+8	2x3	8+6	15-7
12																				
13									7x3	8+5	11-9	3x3	14+9	24-5	2x5	3+4	11x2	9-4	5x3	9+9
14																				
15																				

5. Type the question in the cells as follows:

I11 type **2X2** **J11** type **20-4** **K11** type **5+7** **L11** type **9-8**
M11 type **4X5** **N11** type **7+4** **O11** type **6X4** **P11** type **8-5**
Q11 type **9+8** **R11** type **2x3** **S11** type **8+6** **T11** type **15-7**
I13 type **7X3** **J13** type **8+5** **K13** type **9-7** **L13** type **3x3**
M13 type **14+9** **N13** type **24-5** **O13** type **2x5** **P13** type **3+4**
Q13 type **11x2** **R13** type **9-4** **S13** type **5x3** **T13** type **9+9**

6. Select the space of cells **I11:T14**, then format cell to **Size 12, Bold** and click **All Borders** 
Select the space of cells **I12:T12** and cells **I14:T14**, then change the font to **Size 18**.
Click menu **Format >> Cells >> Alignment**. Align the text in **Center** both in **Horizontal** and **Vertical** directions, then click **OK**.

7. **Change the cell color** as follows:
 Cells **I11:T11** change to **Light Yellow**
 Cells **I12:T12** change to **Yellow**
 Cells **I13:T13** change to **Light Green**
 Cells **I14:T14** change to **Lime**
8. Select the space of cells **C9:F14**, change the cell color to **Black** (the picture of angel is hidden under 24 black boxes).
 Click menu **Format >> Cells>> Border**,
 select  **White Dot** Click **Inside Border** 
9. **Merge cells I1:Q7** , type "Long time ago, there was an angel breaking the heaven's rules. She, therefore, was cursed to stay in the magic picture frame until there was someone good at mathematics can decode and open the puzzle picture. The angel shall appear. We hope you can help the angel".
 Set the font cell **I1** to **Size 11** and change the color to **Dark Blue**.
 Click menu **Format >> Cells>> Alignment**, align the **Horizontal** text to **left(Indent)** and **Vertical** text to **Center** and put **Wrap text** Click **OK**.
10. **Merge cells I8:P8**, type "The Mission to help Angel"
 Format the cell **I8** to **size 16** , **Bold** and change the cell color to **Rose**.
 Click menu **Format >> Cells >> Alignment**, then align the text to **Center** both **Horizontal** and **Vertical** directions. Click **OK**
11. **Merge cells I9:Q10**, type "1. You have to fill the answers in 24 blank boxes. 2. If your answer is correct, the box having the same number as the answer shall be opened i.e. if the correct answer is "2", the second box shall be opened, if your answer is not correct, the box could not be opened.

Set the font size in cell **I9** to **Size 11** and the font color to **Violet**. Click menu **Format >> Cells >> Alignment**, align the **Horizontal** text to **left(Indent)** and **Vertical** text to **Top** and put **Wrap text** Click **OK**.

12. **Merge cells R8:T10** for placing the **Picture**.

Click menu **Insert >> Picture >> From Files.. >>** select the picture from CD-Rom, click **OK**, then adjust the size of the picture and place it in the indicated position.

13. **Type the correct answer** in the following cells:

Cell I12 type 4	Cell J12 type 16	Cell K12 type 12
Cell L12 type 1	Cell M12 type 20	Cell N12 type 11
Cell O12 type 24	Cell P12 type 3	Cell Q12 type 17
Cell R12 type 6	Cell S12 type 14	Cell T12 type 8
Cell I14 type 21	Cell J14 type 13	Cell K14 type 2
Cell L14 type 9	Cell M14 type 23	Cell N14 type 19
Cell O14 type 10	Cell P14 type 7	Cell Q14 type 22
Cell R14 type 5	Cell S14 type 15	Cell T14 type 18

14. **Type Formulas to link the answer and position in the picture** as follows:

Cell **C9** type **=L12** (number 1 will appear in the cell)

It means that any data contained in cell **L12** will show up.

(i.e. The data in Cell **L12** is **number 1**. When we delete the data in **L12**, number 0 will show up in **C9** instead).

Note : Select the space of cells **C9:F14** and change the font color to **White** to see the number more clearly.

Cell **D9**, type =**K14** (No. "2" will show up)
 Cell **E9**, type =**P12** (No. "3" will show up)
 Cell **F9**, type =**I12** (No. "4" will show up)
 Cell **C10**, type =**R14** (No. "5" will show up)
 Cell **D10**, type =**R12** (No. "6" will show up)
 Cell **E10**, type =**P14** (No. "7" will show up)
 Cell **F10**, type =**T12** (No. "8" will show up)
 Cell **C11**, type =**L14** (No. "9" will show up)
 Cell **D11**, type =**O14** (No. "10" will show up)
 Cell **E11**, type =**N12** (No. "11" will show up)
 Cell **F11**, type =**K12** (No. "12" will show up)
 Cell **C12**, type =**J14** (No. "13" will show up)
 Cell **D12**, type =**S12** (No. "14" will show up)
 Cell **E12**, type =**S14** (No. "15" will show up)
 Cell **F12**, type =**J12** (No. "16" will show up)
 Cell **C13**, type =**Q12** (No. "17" will show up)
 Cell **D13**, type =**T14** (No. "18" will show up)
 Cell **E13**, type =**N14** (No. "19" will show up)
 Cell **F13**, type =**M12** (No. "20" will show up)
 Cell **C14**, type =**I14** (No. "21" will show up)
 Cell **D14**, type =**Q14** (No. "22" will show up)
 Cell **E14**, type =**M14** (No. "23" will show up)
 Cell **F14**, type =**O12** (No. "24" will show up)

15. Click cell **C9**, select menu **Format >> Conditional Formatting...**

when the Conditional Formatting window appears, set up as according to the picture as shown.



It means that if the **cell value is equal to 1**, the condition is **true**.

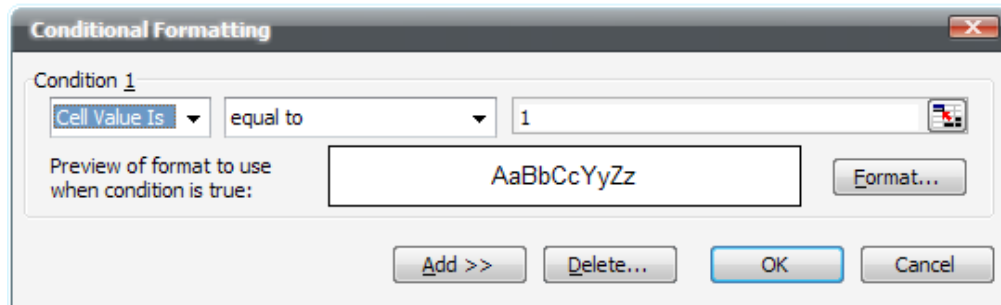
Click 

In the **Format Cells** window

Click **Border**, select **None**  click **OK**.


Click **Pattern**, select **None**  click **OK**.

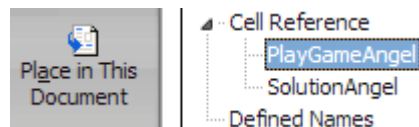
The outcome will be displayed as in the picture, click **OK**.




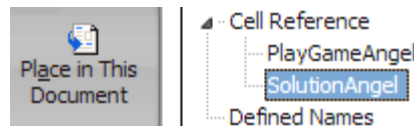
Try to type any numbers in cell **C9**. It can be seen that if the cell value is **not equal to 1**, the cell color is **still black covering the picture of the angel**. But if the cell value is **equal to 1**, the **picture of the angel will be displayed**.

16. **Set Conditional Formatting** for all **Black cells** comprising cells having the **Number 2-24** by following the same procedure in **item 15** (the cell value is equal to the number shown in each cells).
17. **Hide the cell number** by change the font in cell **C9:F14** to **Size 1** and change the font color to **Black**.
18. **Merge cells R1:T6** for placing the **Hyperlink Picture**.
Click menu **Insert**» **Picture**» **From File..** » select the pictures, click **OK**.
Adjust the size of the picture and place it in the indicated position.

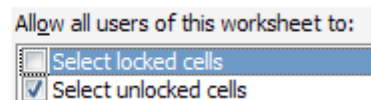
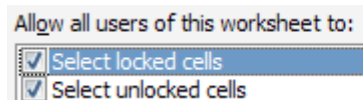
19. **Merge cells R7:T7 type "Play Game" Set the font to Size 10 , Bold and Green.**
20. **Create the Solution to Cursed Angel Game worksheet. Change the name of Sheet1 to SolutionAngel. Right click on the SolutionAngel , select Move or Copy... , select Create a copy , click OK. When the SolutionAngel (2) appears, change the name to PlayGameAngel. In the PlayGameAngel change "Play Game" to "Solution".**
21. **Create the link between Playing page and Solution page.**
22. **In the SolutionAngel , click the picture in cell R1, then click Insert Hyperlink  When the Insert Hyperlink window appears, select Place in this Document. For Cell Reference, select PlayGameAngel, click OK.**



23. **In the PlayGameAngel , click the picture in cell R1, then click Insert Hyperlink  When the Insert Hyperlink window appears, select Place in this Document. For Cell Reference, select SolutionAngel, click OK.**



24. **Check the link** between the 2 sheets to ensure that it can be moved **forward** and **backward** between **PlayGameAngel** and **SolutionAngel**.
25. In the **PlayGameAngel** , delete the number in cells **I12:T12** and **I14:T14**, then you will see the **black cell displayed in the Angel frame**.
26. Unlock cell to be used as **answering space**, only in the **PlayGameAngel** by click cells **I12:T12**, press **Ctrl**, then click to select cells **I14:T14**. Click menu **Format>>Cells>>Protection>>**, click **Locked** lock to **Locked** , then click **OK**.
27. **Create Worksheet Protection**
Click menu **Tools>>Protection>>Protect sheet**,
The window for defining Password shall appear to let you define your password (you can either define or reject to use Password)
Note : To define Password, you have to remember your password otherwise you will not be able to edit your sheet again.
Click **uncheck** select locked cells to become select locked cells as shown in the picture:



Click **OK**.

It can be seen that all cells are locked except cells **I12:T12** and **I14:T14** which can **fill in the number**.

28. In the **SolutionAngel** worksheet, you have to **lock all worksheets** by following the procedure in **item 27**. It can be seen that **all the cells are locked** for seeing solution only.
29. **For Editing**, Click menu **Tools >> Protection >> Unprotect sheet...**

30. To **Cancel the details** of Program window elements, click **Tools >> Options... >> View**, click to cancel the details which you would like to delete in both 2 sheets such as

Formula bar Status bar Gridlines Row & column headers Sheet tabs

Click **OK**

Note : In this game, you could not delete the head row and head column otherwise the position of picture cell will not be in the former position.

31. To save **Cursed Angel Game**
Click the **PlayGameAngel** sheet.
Click menu **File >> Save as...>>** type the name **Cursed Angel**.
Click **Save**.

