

## INF\_SMX MÒDUL 3 : APLICACIONS OFIMÀTIQUES

### UF4 NF1 Activitat N° 1 Spreadsheet

<b>Type of activity:</b> Bingo, speaking and reading task, role playing	<b>Topic:</b> Spreadsheet
<b>Grouping:</b> Whole group / individually	<b>Resources:</b> 1. Student document: spreadbingo for speakers 2. Student grammar support: present and present progressive 3. Teacher document – answer key: We play for bingo! 4. Teacher grammar support - answer key: my actions usually and now 5. New terminology template. 6. Bibliography- COM
<b>Timing:</b> 2 hours	<b>Outcomes:</b> At the end of this lesson, students should be able to create documents and templates of a spreadsheet, describe and apply advanced options.

The **aim** of this activity is to consolidate concepts related to spreadsheets, learn new features of Microsoft excel and create spreadsheets for company use.

#### Directions:

1. The teacher presents the activity and answers any questions from the students.
2. Students play Spreadbingo
3. Students do the exercise in section 2
4. Using the grammar support, students do section 3 in which they take on the role of the boss of a firm and explain to the others how they manage their spreadsheets.
5. Under teacher supervision, the students will use the New Terminology template to write down the new vocabulary for further feedback.

## 1. STUDENT DOCUMENT: SPREADBINGO FOR SPEAKERS

This section consists of three sections, which are the following:

- Spreadbingo, a bingo game about concepts related to spreadsheets.
- Comprehension and speaking, where students should explain in their own words the content of the text they have read aloud.
- Role playing, where they will take on the role of a general manager of a company. They should explain how their company is organised.

### Section 1 Spreadbingo

The teacher puts some numbers in a bag and gives one playing card to each student. One by one, the teacher gets a number from the bag and reads the definition on the teacher's document corresponding to the number. The students who have the word that corresponds to the definition mark it on their paper.

The first student who has their entire paper completed shouts, "spreadbingo!" All answers must be checked by the teacher.

The last student to finish their card will explain every concept on their card to the class.

The teacher's document has the definitions of the words and the playing cards for the students.

### Section 2 Comprehension and speaking

#### Read out loud the next text about Microsoft excel

*Microsoft Excel gives businesses the tools they need to make the most of their data. And when it comes to making the most of resources and maximising return on investment, this is becoming increasingly important. Firms are collecting ever-greater volumes of data from multiple sources, including in-store-transactions, online sales, and social media. They need to be able to collate and analyse this information quickly and effectively.*

*Excel spreadsheets are commonly used across businesses to display financial information and other data relevant to the running of the business. This could be information relevant to the customer relationship management department, sales, marketing, or HR. With so many business functions now reliant on IT and the internet, Excel continues to be seen as a vital tool for administration and the effective running of a business.*

#### 1. Here are five of the top features and benefits of Microsoft Excel. Read them out loud:

##### a. Build great charts

Excel allows business users to unlock the potential of their data, by using formulas across a grid of cells. Data is inserted into individual cells in rows or columns, allowing it to be sorted and filtered, and then displayed in a visual presentation. Using pie charts, graphs, and clustered columns adds meaning to data, which otherwise may just exist as row after row of numbers. These visualisations can add extra emphasis to business reports and persuasive marketing material. Excel recommends charts most suitable for the type of data being presented on the X and Y axis.

##### b. Use conditional formatting

Excel users can format their spreadsheets using different colour shades, bolds, and italics to differentiate between columns and bring the most important data to the fore. This function could be useful when presenting accounting information, such as the pre-tax profit and the balance being

carried forward by the company. Users can select an appropriate colouring scheme via the Quick Analysis button and then by utilising the Formatting tab.

### **c. Help identify trends**

When presenting data in the form of charts or graphs, it can be helpful to include average lines, which explicitly detail the key trends emerging from the information. This may help demonstrate the key points to other users in a straightforward manner. For instance, an executive from a different department during a board meeting. Excel allows trend lines to be extended beyond the graph, to offer predictions of future activity. Such forecasts can help businesses develop their future strategy.

### **d. Bring data together**

Excel can be used to bring information from various files and documents together so that it exists in a single location. As well as raw data and information from other spreadsheets, it is possible to import text and images. Other objects can be added using the Insert tab, or additional spreadsheets can be added to the file.

### **e. Online access**

Excel is available as part of Office 365 Business and Office 365 Business Premium. This means business leaders and employees have access to the program from a range of devices, from almost any location. Provided they have a web-enabled PC, laptop, smartphone, or tablet, it should be possible to access Excel, making remote and mobile working viable.

## **2. Choose one of the top features and explain in your own words its meaning to your partners:**

- a. Build great charts**
- b. Use conditional formatting**
- c. Help identify trends**
- d. Bring data together**
- e. Online access**

## **Section 3 Role playing**

**Imagine a firm where you could work and create a schema about a spreadsheet you could use in this firm.**

### **a) Explain to your partners:**

- What does your firm do?
- How do you manage your spreadsheet?

### **b) Partners will ask you some questions about your explanation. Answer and try to convince them that your choice and your firm are the best choices.**

**2. STUDENT GRAMMAR SUPPORT: PRESENT AND PRESENT PROGRESSIVE**

The following videos are quite good to learn about the present simple and present progressive. The videos also have some exercises which could be useful for the students.

**TO KNOW MORE**

You can find the videos in the following links...



[Present simple](#)

[Present progressive](#)

In order to talk about their own firm in section 3 of the students document and to give their words some kind of continuity, linking words or connectors are a good option while speaking. Here are some examples:

**Connectors:**

**Though, Although, Even Though**

**Although** the initial cost will be high, we will eventually profit from the time spent. It's important to remember that time is money **even though** many believe that money is more important.

Your sentence:  
.....

**However, Nevertheless**

We need to improve the local infrastructure. **However**, we must also respect nature. The government should invest in job training programs. **Nevertheless**, these will be expensive.

Your sentence:  
.....

**Despite, In Spite Of**

**Despite** the difficulty, students will soon see the benefit of this topic of study. The situation will improve **in spite of** the economy.

Your sentence:  
.....

### 3. TEACHER DOCUMENTS-ANSWER KEY: WE PLAY FOR BINGO

Here the teacher will find solutions and clues for every section in the student document, which were:

- Spreadbingo
- Comprehension and speaking
- Role playing

#### Section 1: Spreadbingo

Here are the definitions of different concepts involved in the video. The teacher has to read the corresponding number, and students have to mark on their cards the word in bold if they have this particular word according to the definition read by the teacher.

1. **Cell**: intersections of a row and a column in a spreadsheet which is identified with a letter and a number and may contain data.
2. **Row**: line of cells, identified by a number, which goes from left to right
3. **Column**: line of cells, identified by a letter, which goes from top to bottom
4. **Spreadsheet**: an interactive computer application for organization, analysis, and storage of data in tabular form
5. **Formula**: mathematical, logical, or arithmetic operation which produces some changes on the data in a cell or group of cells on which it is applied.
6. **Boolean**: type of data for a cell which can show either the value true or false.
7. **Suma / sum**: function that adds together the values of the different numbers in a range.
8. **Suma.si / sumif**: function that adds values to each other if they accomplish the condition given in the formula
9. **suma.si.conjunto / sumifs**: function that adds values to each other if they accomplish conditions given in the formula
10. **:** (**colon**) : symbol used in functions to separate the beginning and the end of a range.
11. **Rang**: set of cells which are used together with a function
12. **;** (**semicolon**): symbol which is used to separate different parts of a function or individual cells.
13. **O / or**: logical function used as a disjunctive; it has two parameters and returns true if one of them is evaluated as true
14. **y / i / and** : logical function used as a union; it has two parameters and returns true if both are evaluated as true
15. **producto / prod**: function that multiplies all values in the specified range or all values of cells passed as parameters.
16. **Promedio/ Average**: function that returns the average of its values
17. **if / si**: function that returns one value if a condition is true and another value if it's false
18. **mín**: function that returns the minimum value of a range
19. **max**: function that returns the maximum value of a range
20. **count / contar**: returns the number of cells with a number inside
21. **counta /contara**: returns the number of cells with content
22. **countif /contar.si** : returns the number of cells in a range which accomplishes the condition given in the parameters of the function
23. **countifs /conar.si.conjunto** : returns the number of cells in a range which accomplishes conditions given in the parameters of the function
24. **countblank / contar.blanco** : returns the number of cells in a range without content inside
25. **esblanco / isblank**: function that returns true if the specified cell has no content inside
26. **<** : logical operator meaning that first operand is lower than second
27. **>=**: logical operator meaning that first operand is greater or equal than second

28. **\$**: operator used to block some column or row in case we drag a formula
29. **abs**: function that returns the absolute value of a number
30. **round /redondear/arrod**: function that puts the selected number from a cell or range in a way with the precision you choose.
31. **concatenar / concatenate**: function that puts two or more texts together, one below the other
32. **lookup/buscar**: function that lets you look for a specific value in a range of values
33. **hlookup / buscarh**: function that lets you look for a specific value in a range coming from a reference that you find on a row
34. **vlookup / buscarv**: function that lets you look for a specific value in a range coming from a reference that you find in a column
35. **format** : specifies which type of data can be stored in the cell.
36. **!** : symbol used to reference one cell of another spreadsheet, preceded by the name of the sourcing spreadsheet and followed by the selected cell.
37. **=** : symbol used at the beginning of a cell when you want to introduce either a formula or a function.
38. **today, hoy** : formula that returns today's date
39. **conditional format**: it can be used, for example, to paint a cell a color depending on the number in it; for example, red if it's lower than 5, blue otherwise.

On the next page there are some playing cards.

## Section 2: comprehension and speaking

The following text is an example of what a student could say when choosing a paragraph:

*According to the text, we can say that with Excel you can join data from different documents together, either text or images.*

## Section 3: role playing

Using both present tenses, students speak about their own companies and answer questions that their classmates ask. Examples of sentences they can say about their firm using present tenses are:

In our firm **we sell** cars.

The colour **we use** most for our cars is red.

Present continuous

**We are working** on a new model of auto with automatic brakes.

**We are presenting** account statements to our employees on the 28th of this month.

Some playing cards

Vslookup/ buscarv	boolean	Cell
Y / i / and	Lookup /buscar	spreadsheet

!	Or	row
counta	=	Boolean

Abs	=	min
count	\$	Hslookup/ buscarh

Conditional format	hlookup	;
today	cell	<

Abs	and	:
<	Round / redondear / arrodonjar	\$

>=	counta	spreadsheet
min	Esblanco /isblank	concatenate

Sum	vlookup	boolean
Cell	:	average

Formula	row	today
cell	>=	sum

spreadsheet	cell	hlookup
prod	column	min

countblank	Prod	<
Average	Max	:

:	prod	sumifs
rang	countif	Or

;	If / si	min
Countifs	Row	cell

!	Countblank	max
Average	Cell	sum

format	countifs	Concatenate
isblank	today	>=

Today/hoy	Max	;
Prod	countif	Rang

Or	!	average
Concatenar/ concatenate	Conditional format	Lookup / buscar

Row	Format	If
>=	abs	countifs

Or	average	\$
;	Boolean	max

and	sum	:
<	min	average

hlookup	row	format
concatenate	sum	isblank

rang	spreadsheet	!
;	min	Conditional format

<	row	!
spreadsheet	\$	If / si

Or	>=	Min
average	Y / i / and	Sum

formula	spreadsheet	max
;	average	boolean

counta	spreasheet	min
isblank	:	average

prod	count	max
boolean	sumif	cell

#### **4. TEACHER GRAMMAR SUPPORT - ANSWER KEY: MY ACTIONS USUALLY AND NOW**

Here are some examples of sentences using the present tenses that students can use to defend the their own firm and some connectors to use for continuity.

##### **Tenses**

Present

In our firm **we sell** cars.

The colour **we use** most for our cars is red.

Present continuous

**We are working** on a new model of auto with automatic brakes.

**We are presenting** account statements to our employees on the 28<sup>th</sup> of this month.

##### **Connectors**

And here are some sentences using connectors to give more continuity to speech.

We think automatic cars are the best option. **Nevertheless**, people still choose manual ones.

**Despite** the economic crisis, we have high levels of sales.



## 6. BIBLIOGRAPHY. REGISTRE DE DOCUMENTACIÓ COMPLEMENTÀRIA (COM)

Supplementary documentation considered: catalogues, articles, instructions, photographs, audios, and videos, pages of reference websites, documents, graphics, and links to similar documents.

Imatge	Dades
	<b>Nom:</b> Present simple and present continuous
	<b>Autoria:</b> English Language Centres
	<b>Llicència:</b>
	<b>URL:</b> <a href="http://www.englishlanguagecentres.com/">English Language Centres</a>
	<b>Nom:</b> Microsoft excel
	<b>Autoria:</b> Microsoft
	<b>Llicència:</b> eula
	<b>URL:</b> <a href="https://support.office.com/en-us/article/excel-2013-quick-start-guide-4337fe93-0690-47cb-89a1-8424d5fdd886">https://support.office.com/en-us/article/excel-2013-quick-start-guide-4337fe93-0690-47cb-89a1-8424d5fdd886</a>
	<b>Nom:</b> libre office calc
	<b>Autoria:</b> Document foundation
	<b>Llicència:</b> gnu lgpl
	<b>URL:</b> <a href="https://www.libreoffice.org/discover/calc/">https://www.libreoffice.org/discover/calc/</a>
	<b>Nom:</b> teacherPhilEnglish
	<b>Autoria:</b> teacher Phil English
	<b>Llicència:</b> standard youtube
	<b>URL:</b> <a href="https://www.youtube.com/watch?v=nUqXvEbRpWw">https://www.youtube.com/watch?v=nUqXvEbRpWw</a>
	<b>Nom:</b> Jessica Lu, Bachelor of Arts (Cell Biology), Columbia University
	<b>Autoria:</b> Grammar correction
	<b>Llicència:</b>
	<b>URL:</b> <a href="https://www.linkedin.com/in/jessica-lu-89b15348">https://www.linkedin.com/in/jessica-lu-89b15348</a>