

## SAN01 \_MÒDUL12: ANGLÈS TÈCNIC

### UF1NF1 Activitat N° 1 Dosage forms. Routes of administration

<b>Type of activity:</b> Collaborative game	<b>Topic:</b> Dosage forms
<b>Grouping:</b> In groups of two or three	<b>Resources: TIC</b> 1. Student document: Collaborative activity. 2. Student grammar support: 2.1 Filling the chart. Useful terms 2.2 Phrases to give a presentation- 3. Teacher documents-Answer key: 3.1 Warm-up video 3.2 Dosage forms and routes of administration-Audio. 3.3The rubric 4. Teacher grammar support-Answer key 4.1 Useful terms 4.2 Giving a presentation- 5. New terminology template. 6. Bibliography- COM
<b>Timing:</b> 2:30'	<b>Outcomes:</b> At the end of the activity. The students should be able to identify and describe the dosage forms and routes of administration.

The **aims** of this lesson are: Fostering verbal communication connected with dosage forms, doses and routes of administration to apply their knowledge on this topic.

#### Directions:

This lesson plan is broken down into six sections.

- 1. Introduction.** A warm-up activity. Project a **2:55** minutes video from [English Care](#). Having watched the video, ask the students to make a prediction on what topic the lesson would be based on for the day. Tell them the name of the topic: Dosage forms.



- 2. Elicitation.** 7 minutes 'extracting' information. Test the students' current knowledge on the topic with the whole group. Write the main ideas on the board. Feed-back: The teacher will review the central thoughts summarized on the board.
- 3. Presenting** The teacher helps students recognize a variety of dosage forms and identify different drug delivery systems. Students write down the new terminology in the document "New terminology template". Timing: **45** minutes.
- 4. Grammar support exercises.** To optimize the process of learning and master the content of this lesson. Timing: **30** minutes. The teacher tells the student to do the grammar exercises and focus on adjectives and verbs to describe dosage forms. Work in in groups of two or three. Correct as a whole class.  
 Next, go on learning useful vocabulary to give a talk. Tell the students they will give a talk on this topic and they will use these phrases. The teacher checks student's comprehension. Students write down the new terminology in the "New terminology template".

**5. Collaborative activity.** Having learned the dosage forms and route of administration, the students will create a paper poster throughout a collaborative activity. And, later on the students will give a brief poster presentation. Timing: **20** minutes

a. Form groups of three or four students. Assign a number to each group (I, II, III, and IV)

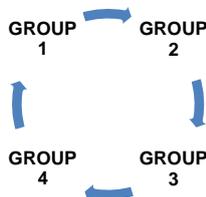
b. **Tell the students:**

- ✓ This is a collaborative game. Each group will be provided with a white bare A3 paper. Write the group number at the bottom and the name of the topic: Dosage forms at the top of the paper. This paper will be filled through a number of stages.
- ✓ Everyone should have a pen. As a team, you should reach an agreement to draw / write according to the teacher instructions. It is important that one student in each group takes the role of facilitator that is he/she helps the group reach the goals.
- ✓ You don't start until the teacher gives the signal. And follow the teacher's instructions
- ✓ At the end of this collaborative activity, each group will give a talk in class based on the work done and each group will be assessed using this rubric. (Show and explain the guide listing specific criteria for grading/scoring the work done)

c. **Check** the given instructions: Any question before we start? Talk to the students in your group and tell each other what you have to do. Call out a student's name and tell give to explain what the teacher has already told in the classroom.

**Now**, give each group a white bare A3 paper. Tell the students to draw as many different dosage forms as they could remember in a given time that is **2** minutes.

d. Allow the groups perform the activity and, after two minutes time, tell the students to pass the A3 document to the next group. The document rotates according to the group's number



**Tell** the students to name the dosage forms next to the drawing. Timing: **2** minutes

e. Again, pass the document to the next group and tell the student to write down next to the name of each dosage form some adjectives and verbs intended to describe dosage forms **2** minutes

f. Next, pass the document to the next group and tell the student to write down the route of administration beside the name of each dosage form.

g. Return the A3 document to the initial groups. And tell them to review and correct the answers.

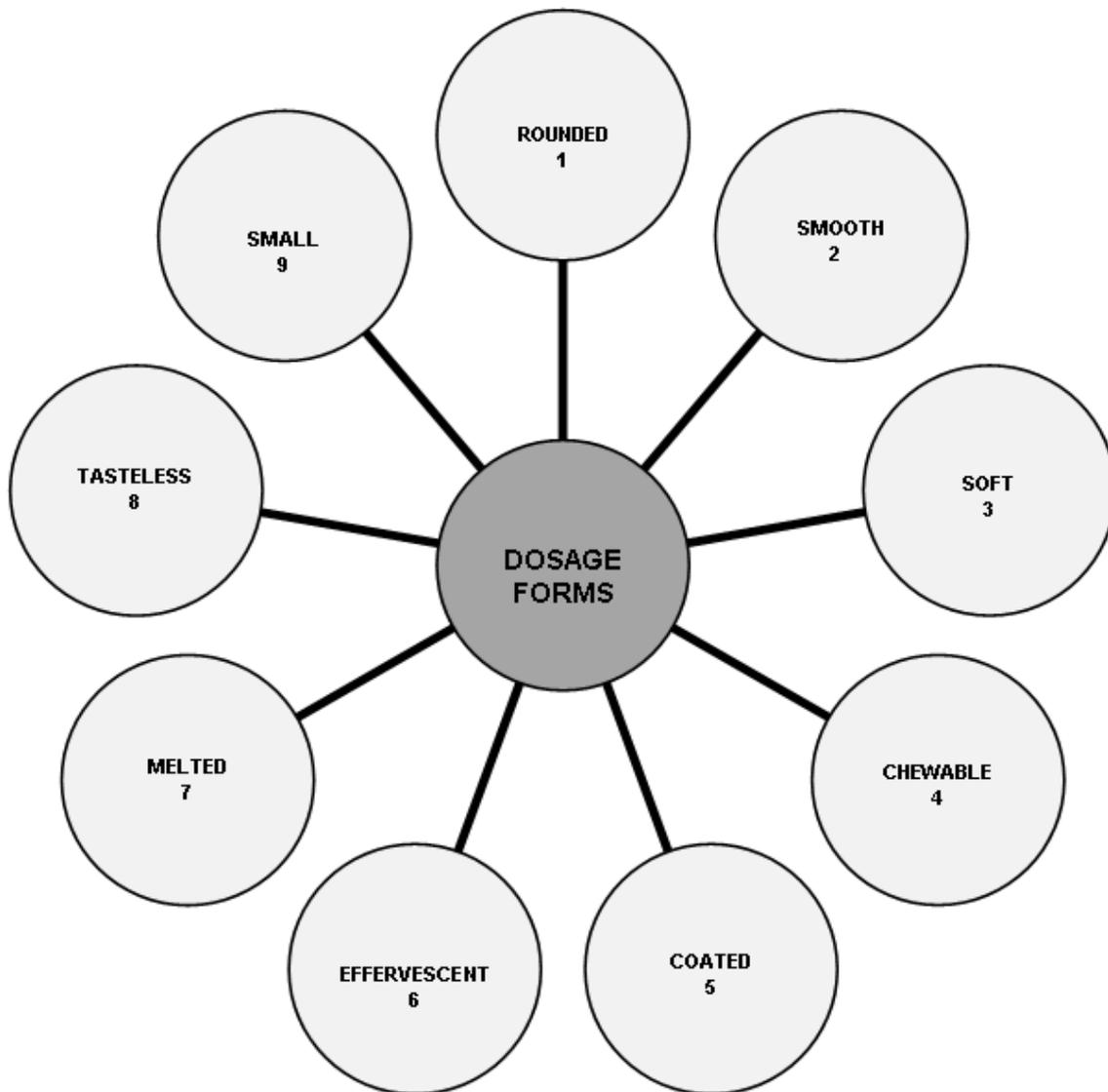
h. Finally, the teacher keeps the A3 document

**6. Analyzing and comparing the collaborative activity. 30** minutes

- Hang the posters on the wall. If you don't have access to double-sided tape, magic tape will do. And it is virtually invisible on most smooth surfaces.
- Give each group the rubric and a suitable number of scoring Charts. Tell the student that they will evaluate each other through these objective criteria
- Give each group two minutes talk about the poster. The purpose of the flash talk is to stimulate the audience to view the poster. Only highlight the major findings of your work.
- Teacher feed-back.

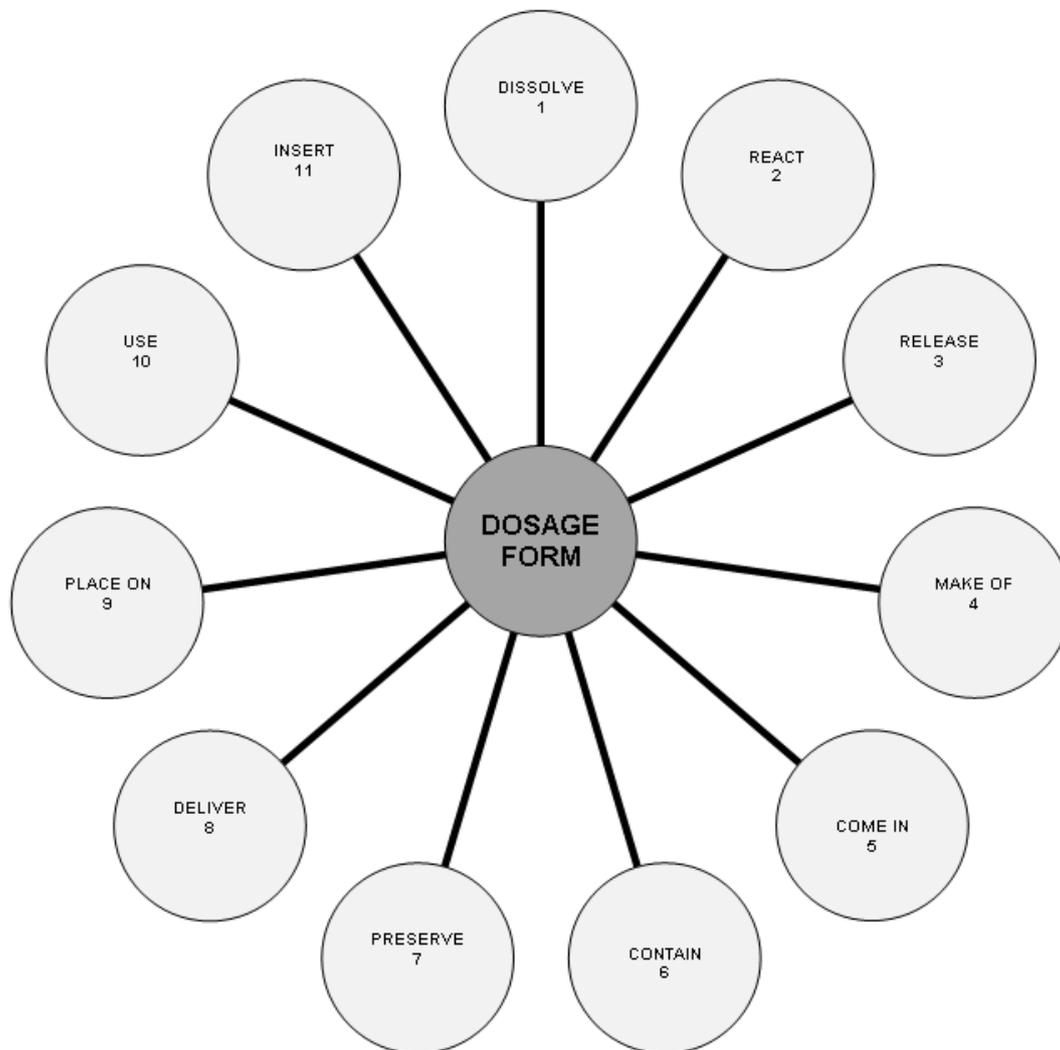
**2. STUDENT GRAMMAR SUPPORT: USEFUL TERMS. PHRASES TO GIVE A PRESENTATION**

1. A- In groups of two find two synonyms for each term. Use the Oxford dictionary online or Cambridge dictionary online. Also, add the key to pronunciation hyperlinked to the page. The first adjective "ROUNDED" is done for you.



ADJECTIVE	PRONUNCIATION	SYNONYMS
1. rounded	<a href="#">/ˈraʊndɪd/</a>	circular, disc-shaped
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

1. B- In groups of two find two synonyms for each term. Use the Oxford dictionary online or Cambridge dictionary online. Also, add the key to pronunciation hyperlinked to the page. The first verb "DISSOLVE" is done for you.



VERB	PRONUNCIATION	SYNONYMS
1. dissolve	<a href="#"><u>/di'zɒlv/</u></a>	go into solution, break down
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

## 2. Phrases to give a presentation. Exercise.

**Explain what your presentation is about at the beginning:**

I'm going to talk about ...

I'd like to talk about ...

The main focus of this presentation is ...

**Use these expressions to order your ideas:**

First of all, ...

Firstly, ...

Then, ...

Secondly, ...

Next, ...

Finally, ...

Lastly, ...

To sum up, ...

In conclusion, ...

**Use these expressions to add more ideas from the same point of view:**

In addition, ...

What's more, ...

Also, ...

Added to this, ...

**To introduce the opposite point of view you can use these words and expressions:**

However, ...

On the other hand, ...

Then again, ...

### Exercise-Finish the sentence with the correct phrase.

- Which sentence might you hear at the beginning of a presentation?  
A Ladies and gentlemen, thank you for arriving today  
B Ladies and gentlemen, thank you for appearing today  
C Ladies and gentlemen, thank you for coming today  
D Ladies and gentlemen, thank you for showing your faces today
- The \_\_\_\_\_ of today's presentation is to discuss my findings.  
A purpose  
B reason  
C cause  
D points
- Now, \_\_\_\_\_ begin by introducing myself.  
A allow me  
B let me  
C I  
D presentation
- I'd be very happy to \_\_\_\_\_ you to ask questions at the end of the session.  
A tell  
B invite  
C order  
D request

**3. TEACHER DOCUMENTS ANSWER-KEY: WARM-UP DOSAGE FORMS AND THE RUBRIC**

**1. Warm-up video from [English Care](#)**

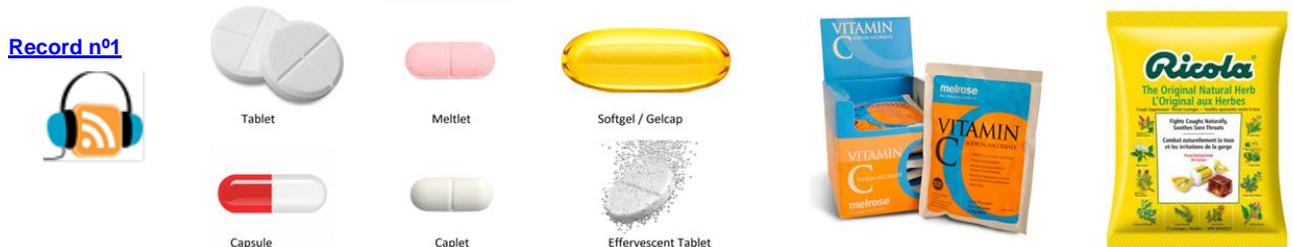
Dosage forms are the carrier/medium through which drug molecule are delivered to the site of action within the body. This video present the most common types of dosage forms.



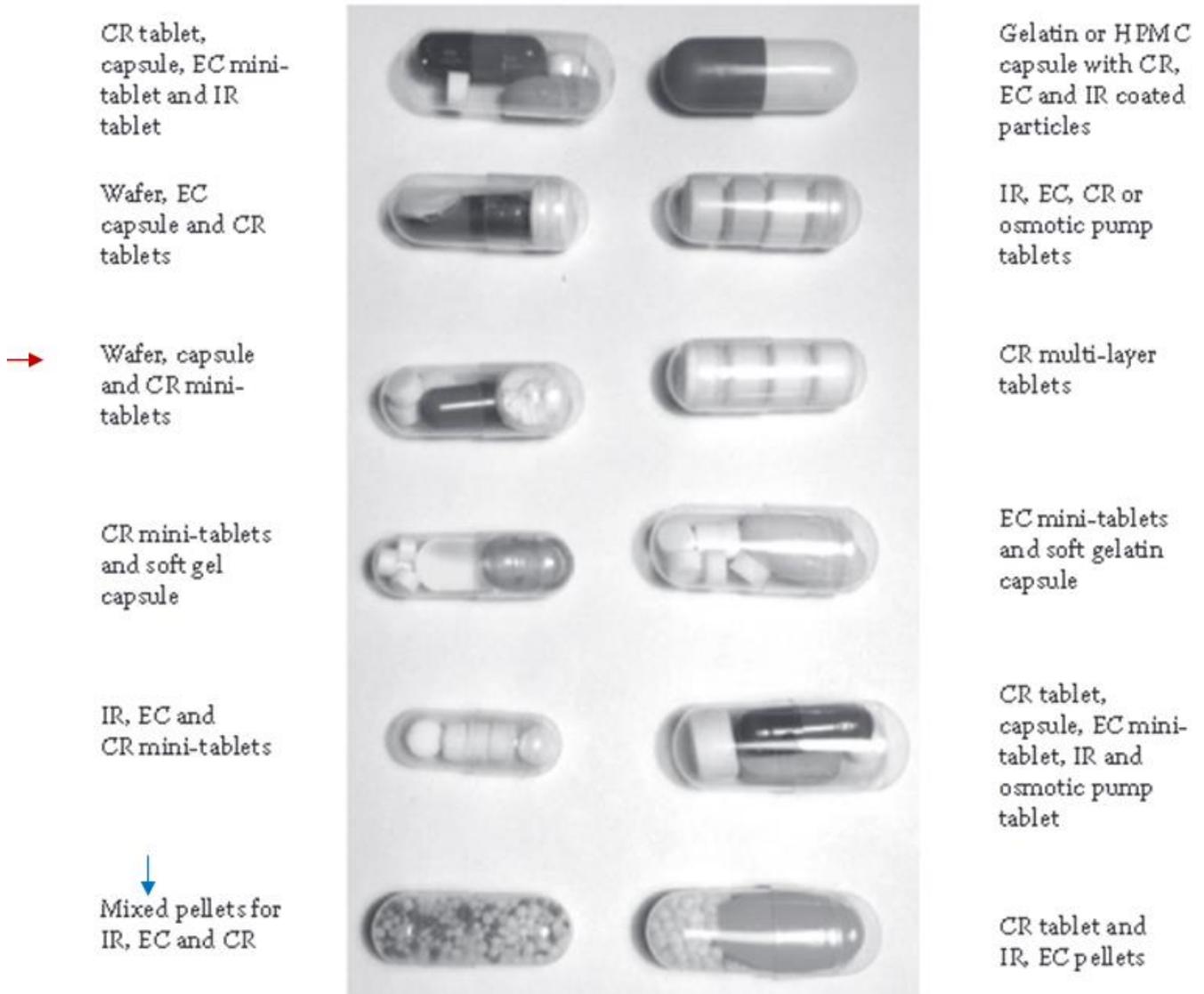
**2. Dosage forms and drug delivery system-Audio**

**2. A-Dosage forms**

<b>ORAL DOSAGE FORMS (SOLIDS)</b>	
<b>Pills</b>	This is a general term for medication presented in any small, rounded mass.
<b>Tablets</b>	A tablet is a hard, compressed medication.
<b>Scored tablets</b>	These tablets have special scored marks on them to make breaking the tablet easy.
<b>Melted tablets</b>	Tablets that dissolve in liquid.
<b>Effervescent tablets</b>	They react rapidly in the presence of water by releasing carbon dioxide.
<b>Chewable tablets</b>	They are chewed prior to swallowing.
<b>Coated tablets/ enteric-coated tablets</b>	Coating is applied to hide the taste, make it more resistant and delay release (DR) of the medication.
<b>Extended-release tablets (ER)</b>	It is intended to make the contained medicament available over an extended period of time following ingestion.
<b>Capsules</b>	A medication in a hard gelatine container.
<b>Enteric-coated capsules</b>	To make it more resistant and delay release (DR) of the medication.
<b>Extended-release capsules (ER)</b>	It is intended to make the contained medicament available over an extended period of time following ingestion.
<b>Gelcap /Softgel</b>	A medication in a soft gelatine container.
<b>Caplets</b>	A smooth-coated tablet shaped like a capsule.
<b>Lozenges, Pastille (Troche Lollipops)</b>	Solid forms that dissolve slowly in the mouth. Pastille are softer than lozenges.
<b>Single-dose sachet</b>	It consists of solid, dry aggregates of powder. The medicine is dissolved in water before taking.



**Figure 1** Oral dosage forms



**Figura 2** What are these capsules **made of**? Controlled-release capsule drug delivery systems are made of different types of dosages or encapsulated formulations (transparent shell is chosen to show the content). Some of these are commercially available; others are possible examples that can be for investigation. EC, enteric coated; CR, controlled release; IR, immediate release. **Wafer** the word is used for a special type of tablet which dissolves in a few seconds when placed on the tongue. **Pellet** a small pill or granule.

<b>ORAL DOSAGE FORMS (LIQUIDS)</b>	
<b>Syrup</b>	It is a concentrated aqueous solution of a sugar, usually sucrose to which medicine is added.
<b>Drops</b>	Oral drops are liquid preparations to be administered in small volumes with the aid of a suitable measuring device.
<b>Solution</b>	Oral solutions are clear liquid preparations for oral use the active ingredient(s) is /are dissolved in a suitable vehicle.
<b>Emulsion</b>	Oral emulsions are stabilized oil-in-water dispersions.
<b>Suspension</b>	This may show a sediment which is readily dispersed on shaking.
<b>Elixir</b>	This vehicle may contain different proportion of ethanol or sucrose together.
<b>Ampules /ampu:l/ , vials /'vʌɪəl/</b>	A small sealed vial which is used to contain and preserve a sample, usually a solid or liquid. Ampoules are commonly made of glass, although plastic ampoules do exist.
<b>Mouthwash / Gargle</b>	These are used for oral hygiene and to treat infections of the mouth / These are used in the prevention or treatment of throat infections.

[Record nº2](#)



<b>TOPICAL DOSAGE FORMS</b>	
<b>Ointment</b>	Semi-solid emulsion of oil and water. Oil dominant component. Greasy.
<b>Cream</b>	Semi-solid emulsion of oil and water. Water dominant component. Non greasy.
<b>Liniment</b>	Sometimes called balms or heat rubs, they are of a similar or greater viscosity than lotions.
<b>Lotion</b>	Suspension of drug in water base. Non greasy.
<b>Gel</b>	A gel is a solid jelly-like material that can have different properties.
<b>Patches</b>	It is a medicated adhesive patch that is placed on the skin to deliver a specific dose of medication through the skin and into the bloodstream.

[Record nº3](#)



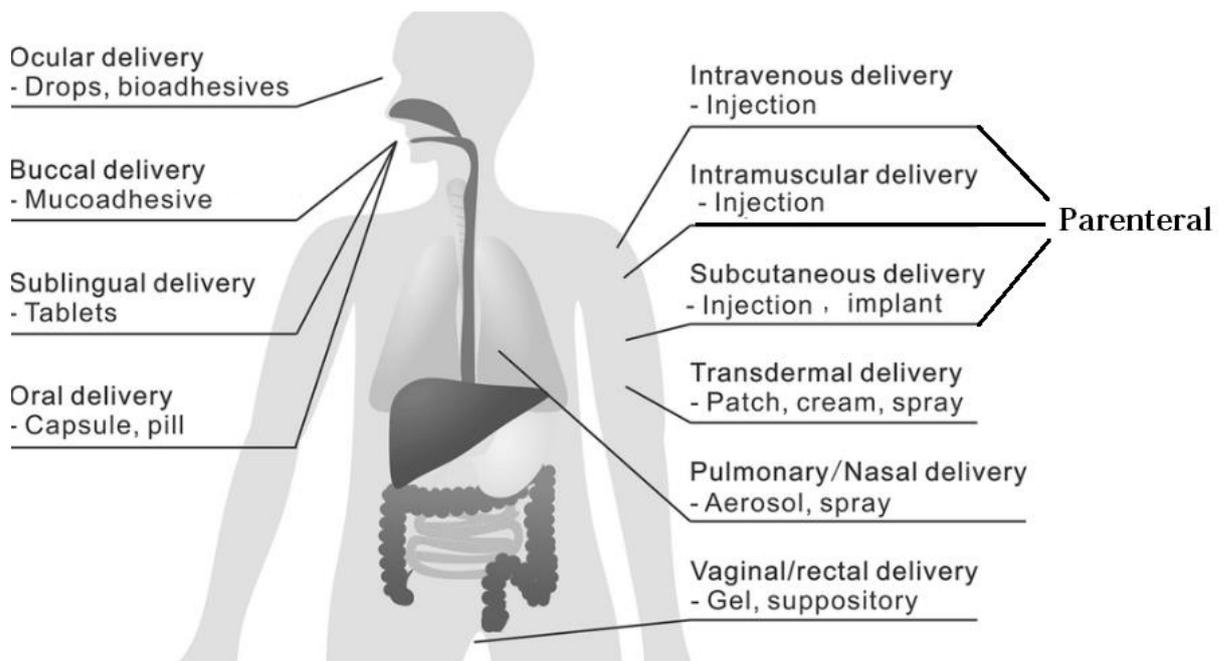
<b>OTHER DOSAGE FORMS</b>	
<b><u>Inhalers</u>, <u>Nebulizer</u></b>	Buccal (/ˈbʌkəl/) drug delivery.
<b>Aerosol spray</b>	Intranasal (/ˈneɪz(ə)l/) buccal, topical drug delivery. Aerosol spray is a type of dispensing system in which liquid or solid particles are dispersed. It is used with a can or bottle that contains a propellant under pressure.
<b>Suppository</b>	A suppository is a solid dosage form that is inserted into the rectum.
<b>Vaginal ovule</b> (/ˈvɒjʊ:l/)	It is a solid dosage form that is inserted into the vagina.
<b>Injections:</b> Ampoules /ˈæmpu:l/ vials /ˈvaɪəl/	A small sealed vial which is used to contain and preserve a sample, usually a solid or liquid. Ampoules are commonly made of glass, although plastic ampoules do exist.

[Record nº4](#)



## 2. B- Routes of administration.

There are different routes of administration



**Figura 3** 2018 National Pain Centers

### More about routes of administration

- 1) Oral Mouth. Buccal.
- 2) Per-oral Gastro intestinal tract (via mouth).
- 3) Sublingual Under the tongue.
- 4) Parenteral Other than gastro intestinal tract (by injection).Injectable preparations.
  - a) Intramuscular. Injected into the muscle.
  - b) Intravenous. Injected into the vein. This allows for immediate absorption.
  - c) Intra-arterial. Artery.
  - d) Intracardiac Heart. Injected into the heart.
  - e) Intra-synovial.Joint-fluid area.
  - f) Intra-articular. Joints.
  - g) Intracutaneous or intradermal Skin. Injected into the top layer of the skin at a slight angle.
  - h) Subcutaneous. Beneath the skin. Injected into the fatty layer under the skin.
- 5) Epicutaneous (topical) Skin surface. Transdermal.
- 6) Conjunctival. Conjunctiva.
- 7) Intraocular. Eye.
- 8) Intranasal. Nose.
- 9) Aural. Ear.
- 10) Intrarespiratory. Lung.
- 11) Rectal. Rectum 12) Vaginal. Vagina 13) Urethral. Urethra

**3. The rubric. Analyzing and comparing the collaborative activity. Giving a talk**

Category	1	2	3
<b>Poster Details.</b> Title and group number.	Some information is missing.	Most of the information is correctly.	The name of the topic and number of the group are cited and placed correctly.
<b>Variety of dosage forms.</b>	There is a seemingly random collection of information.	Few variety of dosage forms stand out.	A variety of dosage forms stands out.
<b>Supporting details about dosage forms.</b> Adjectives, verbs and routes of administration.	They are typically unclear or not related to the topic.	Few telling, quality details.	Relevant, telling, quality details.
<b>Grammar &amp; Spelling.</b>	Writer makes More than 8 errors in grammar, spelling.	Writer makes 3-8 errors in grammar, spelling.	Students make less than 3 errors in grammar, spelling.
<b>The presentation.</b> Student grammar support: Phrases to give a presentation.	Speaker doesn't use the correct "the useful language for presentations".	Speaker makes some errors when using "the useful language for presentations".	Speaker makes no errors when using "the useful language for presentations".

**The Scoring Chart per group. Assessed by N° ..... group**

Group N°	Whole group	Student Name	Student Name	Student Name	Student Name
Presentation Phrases to give a presentation.					
Poster Details.					
Variety of dosage forms.					
Supporting details about dosage forms.					
Grammar & Spelling.					
Final grading.					

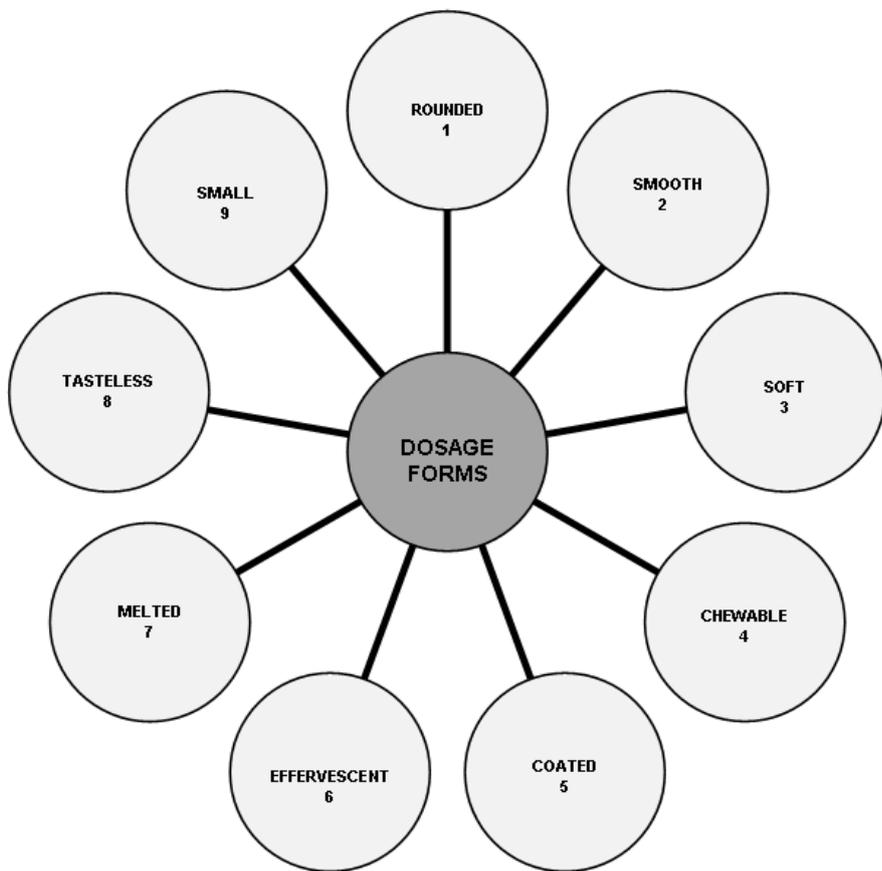
**4. TEACHER GRAMMAR SUPPORT - ANSWER KEY: USEFUL TERMS. GIVING A PRESENTATION**

1. A- As you have learned\* adjectives are some of the most common words in the English language and they modify perhaps the most common words in the English language, nouns. With a list of common adjective words at hand, you can describe your surroundings. Adjectives help create a more vivid picture in our minds about the named object.

These adjectives displayed in the chart are useful when it comes to talking about dosage forms.



In groups of two find two synonyms for each term. Use the [Oxford](#) dictionary online or [Cambridge](#) dictionary online. Also, add the [key to pronunciation](#) hyperlinked to the page. The first adjective "ROUNDED" is done for you.

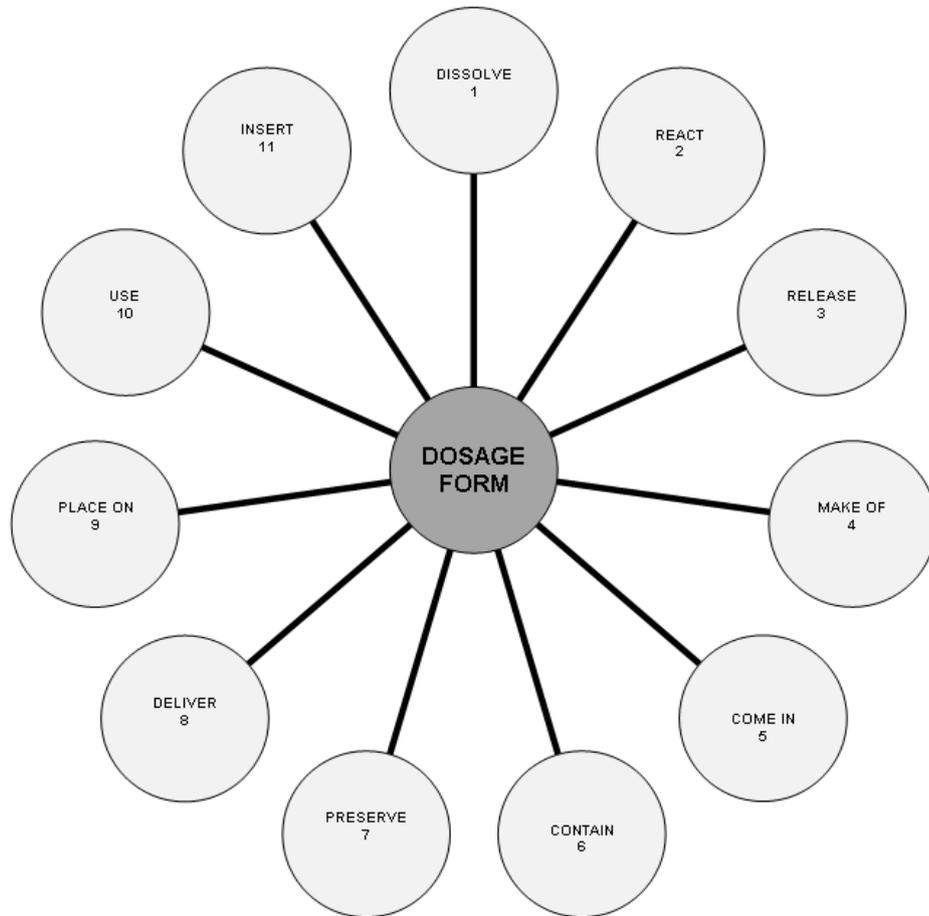


ADJECTIVE	PRONUNCIATION	SYNONYMS
1. rounded	<a href="#">/'raʊndɪd/</a>	circular, disc-shaped
2. smooth	<a href="#">/smu:ð/</a>	level, flat
3. soft	<a href="#">/sɒft/</a>	spongy, flexible
4. chewable	<a href="#">/'tʃu:əb(ə)l/</a>	masticable
5. coated	<a href="#">/'kəʊ.tɪd/</a>	covered, protected
6. effervescent	<a href="#">/ɛfə'vesənt/</a>	fizzy, bubbly
7. melted	<a href="#">/'meltɪd/</a>	liquefied, dissolved
8. tasteless	<a href="#">/'teɪs(t)ləs/</a>	bland, insipid
9. small	<a href="#">/smɔ:l/</a>	little, compact

\* Learnt or learned? These are alternative forms of the past tense and past participle of the verb learn. Both are acceptable, but learned is often used in both British English and American English, while learnt is much more common in British English than in American English.

1. B- These verbs displayed in the chart are useful when it comes to talking about dosage forms. A verb expresses action or a state of being. Verbs typically come after the subject of the sentence and before the object of the sentence.

In groups of two find two synonyms for each term. Use the Oxford dictionary online or Cambridge dictionary online. Also, add the [key to pronunciation](#) hyperlinked to the page. The first verb "DISSOLVE" is done for you.



VERB	PRONUNCIATION	SYNONYMS
1. dissolve	<a href="#">/dɪˈzɒlv/</a>	go into solution, break down
2. react	<a href="#">/rɪˈækt/</a>	interact, undergo
3. release	<a href="#">/rɪˈliːs/</a>	liberate, let go
4. make of	<a href="#">/meɪk/</a> / <a href="#">/ɒv/</a>	be composed of, be formed from
5. come in	<a href="#">/kʌm/</a>	be offered for sale, appear
6. contain	<a href="#">/kənˈteɪn/</a>	Include, have
7. preserve	<a href="#">/prɪˈzɜːv/</a>	protect, maintain
8. deliver	<a href="#">/dɪˈlɪvə/</a>	transport, distribute
9. place on	<a href="#">/pleɪs/</a>	set , put
10. use	<a href="#">/juːz/</a>	employ, apply
11. insert	<a href="#">/ɪnˈsɜːt/</a>	put, introduce



**2. A presentation.** [Useful language for presentations](#) British council.

SECTION OF PRESENTATION	SIGNPOST LANGUAGE
<b>Introducing the topic</b>	The subject/topic of my talk is ... I'm going to talk about ... My topic today is... My talk is concerned with ...
<b>Overview (outline of presentation)</b>	I'm going to divide this talk into four parts. There are a number of points I'd like to make. Basically/ Briefly, I have three things to say. I'd like to begin/start by ... Let's begin/start by ... First of all, I'll... ... and then I'll go on to ... Then/ Next ... Finally/ Lastly ...
<b>Finishing a section</b>	That's all I have to say about... We've looked at... So much for...
<b>Starting a new section</b>	Moving on now to ... Turning to... Let's turn now to ... The next issue/topic/area I'd like to focus on ... I'd like to expand/elaborate on ... Now we'll move on to... I'd like now to discuss... Let's look now at...
<b>Analysing a point and giving recommendations</b>	Where does that lead us? Let's consider this in more detail... What does this mean for...? Translated into real terms... Why is this important? The significance of this is...
<b>Giving examples</b>	For example,... A good example of this is... As an illustration,... To give you an example,... To illustrate this point...
<b>Summarising and concluding</b>	To sum up ... To summarise... Right, let's sum up, shall we? Let's summarise briefly what we've looked at... If I can just sum up the main points... Finally, let me remind you of some of the issues we've covered... To conclude... In conclusion ... In short ... So, to remind you of what I've covered in this talk, ... Unfortunately, I seem to have run out of time, so I'll conclude very briefly by saying that ..... I'd like now to recap...
<b>Paraphrasing and clarifying</b>	Simply put... In other words..... So what I'm saying is.... To put it more simply.... To put it another way....
<b>Invitation to discuss / ask questions</b>	I'm happy to answer any queries/ questions. Does anyone have any questions or comments? Please feel free to ask questions. If you would like me to elaborate on any point, please ask. Would you like to ask any questions? Any questions?

**Exercise. Answer key.** [Presentations: opening](#)

Finish the sentence with the correct phrase.

1. Which sentence might you hear at the beginning of a presentation?

A Ladies and gentlemen, thank you for arriving today

B Ladies and gentlemen, thank you for appearing today

**C Ladies and gentlemen, thank you for coming today**

D Ladies and gentlemen, thank you for showing your faces today

2. The \_\_\_\_\_ of today's presentation is to discuss my findings.

**A purpose**

B reason

C cause

D points

3. Now, \_\_\_\_\_ begin by introducing myself.

A allow me

**B let me**

C I

D presentation

4. I'd be very happy to \_\_\_\_\_ you to ask questions at the end of the session.

A tell

**B invite**

C order

D request

**TO KNOW MORE**



[Presentations: body.](#) [Presentations: questions](#)

[Presentations: tips](#) [Presentations Challenge](#) *"To complete this interactive game you need to use some of the phrases you have learnt in this module. Remember to get the level of politeness and friendliness right!"*



Juny 2019



**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
	<p><b>Nom:</b> Presentations: language expert. British Council</p> <p><b>Autoria:</b></p> <p><b>Llicència:</b></p> <p><b>URL:</b> <a href="http://www.bbc.co.uk/worldservice/learningenglish/business/talkingbusiness/unit3presentations/expert.shtml">http://www.bbc.co.uk/worldservice/learningenglish/business/talkingbusiness/unit3presentations/expert.shtml</a></p>
<p>Dosage forms</p> 	<p><b>Nom:</b> Dosage forms Video</p> <p><b>Autoria:</b> English Care</p> <p><b>Llicència:</b></p> <p><b>URL:</b> <a href="https://www.youtube.com/watch?v=1VNA0T9s-Cs">URL: https://www.youtube.com/watch?v=1VNA0T9s-Cs</a></p>
	<p><b>Nom:</b> DentaGama</p> <p><b>Autoria:</b></p> <p><b>Llicència:</b></p> <p><b>URL:</b> <a href="https://dentagama.com/news/what-s-the-difference-between-pills-capsules-tablets-caplets-and-chewables">https://dentagama.com/news/what-s-the-difference-between-pills-capsules-tablets-caplets-and-chewables</a></p>
	<p><b>Nom:</b> Taylor &amp; Francis Group, LLC</p> <p><b>Autoria:</b></p> <p><b>Llicència:</b></p> <p><b>URL:</b> <a href="https://pharmacy.temple.edu/sites/pharmacy/files/documents/2017-Fassihi-Chapter-12%20on%20MR%20capsules.pdf">https://pharmacy.temple.edu/sites/pharmacy/files/documents/2017-Fassihi-Chapter-12%20on%20MR%20capsules.pdf</a></p>
	<p><b>Nom:</b> 2019 National Jewish Health 1400 Jackson Street Denver, Colorado 80206</p> <p><b>Autoria:</b></p> <p><b>Llicència:</b></p> <p><b>URL:</b> <a href="https://www.nationaljewish.org/treatment-programs/medications/inhaled-medication-asthma-inhaler-copd-inhaler">https://www.nationaljewish.org/treatment-programs/medications/inhaled-medication-asthma-inhaler-copd-inhaler</a></p>
	<p><b>Nom:</b> Drug Forms</p> <p><b>Autoria:</b> Jason Moir</p> <p><b>Llicència:</b></p> <p><b>URL:</b> <a href="https://www.youtube.com/watch?v=lyoj4uh2WCc">https://www.youtube.com/watch?v=lyoj4uh2WCc</a></p>

<b>Imatge</b>	<b>Dades</b>
	<p><b>Nom:</b> Victoria is originally from Washington, DC and encourages everyone to visit at least once. Before moving to Barcelona, she studied Political Science at The George Washington University. In her free time, Victoria enjoys exploring Barcelona, trying new foods and relaxing at the beach</p> <p><b>Autoria:</b> She helps with editing and proof reading lesson plans. Equip de millora CITE 18-19 <b>Institut La Guineueta</b></p>
<b>Imatge</b>	<b>Dades</b>
	<p><b>Nom:</b> Grammar and vocabulary. English grammar.</p> <p><b>Autoria:</b> © British Council. Learn English</p> <p><b>Llicència:</b></p> <p><b>URL:</b> <a href="https://learnenglish.britishcouncil.org/en/english-grammar">https://learnenglish.britishcouncil.org/en/english-grammar</a></p>
<b>Imatge</b>	<b>Dades</b>
	<p><b>Nom:</b> Oxford English Dictionary</p> <p><b>Autoria:</b> © 2018 Oxford University Press</p> <p><b>Llicència:</b></p> <p><b>URL:</b> <a href="https://es.oxforddictionaries.com/">https://es.oxforddictionaries.com/</a></p>
<b>Imatge</b>	<b>Dades</b>
	<p><b>Nom:</b></p> <p><b>Autoria:</b></p> <p><b>Llicència:</b></p> <p><b>URL:</b></p>