

## Desarrollo.

**1R** Es la unidad utilizada para expresar la cantidad de una determinada sustancia en el sistema internacional de unidades, el resultado de expresar la masa atómica de un elemento o la masa molecular de un compuesto en gramos.

Así para estos últimos números se calcula la masa molecular sumando las masas atómicas de cada elemento participante multiplicada por el número de veces que aparece y el número resultante se expresa en gramos.

**2R** Se entiende al número de entidades elementales (es decir, de átomos, electrones, iones, moléculas) que existen en un mol de cualquier sustancia. Por lo tanto que significa esto.

Como mol se denomina a la unidad contemplada por el sistema internacional de unidades que permite medir y expresar a una determinada cantidad de sustancia.

**3R** Partícula más pequeña de una sustancia que tiene todas las propiedades físicas y químicas de esa sustancia. Las moléculas están compuestas por uno o más átomos. Si contienen más de un átomo, los átomos pueden ser iguales (una molécula de oxígeno tiene 2 átomos de oxígeno) o distintos (una molécula de agua tiene 2 átomos de hidrógeno y un átomo de oxígeno). Las moléculas biológicas como las proteínas y el ADN pueden estar compuestas por muchos miles de átomos.

**4R** Suma de las masas atómicas de todos los átomos de una molécula con base en una escala en la cual las masas atómicas del hidrógeno, el carbono, el nitrógeno y el oxígeno son 1, 12, 14 y 16, respectivamente. Por ejemplo, la masa molecular del agua, que tiene 2 átomos de oxígeno y un átomo de hidrógeno es 18 (es decir,  $2 \times 16$ ) también se llama molecu-



## br relativo

### Desarrollo de geracio

Peso molecular del acido clorhidrico (HCl)

$$\# = 1 \times 1 = 1$$

$$\text{Cl} = 35 \times 1 = \frac{35}{36 \text{ g/m}}$$

Molecular del acido sulfurico (H<sub>2</sub>SO<sub>4</sub>)

$$\# = 1 \times 2 = 2$$

$$\text{S} = 32 \times 1 = 32$$

$$\text{O} = 16 \times 4 = \frac{64}{98 \text{ g/m}}$$

peso molecular del cloruro de sodio

$$\text{Na} = 23 \times 1 = 23$$

$$\text{Cl} = 35 \times 1 = \frac{35}{38 \text{ g/m}}$$

peso molecular del <sup>nitrate</sup> nitrato de plata (AgNO<sub>3</sub>)

$$\text{Ag} = 108 \times 1 = 108$$

$$\text{N} = 14 \times 1 = 14$$

$$\text{O} = 16 \times 3 = \frac{48}{170 \text{ g/m}}$$

peso molecular del hidroxido de sodio (NaOH)

$$\text{Na} = 23 \times 1 = 23$$

$$\text{O} = 16 \times 1 = 16$$

$$\text{H} = 1 \times 1 = \frac{1}{40 \text{ g/m}}$$



Donnas

gerundio vs infinitivo

INFINITIVO

1 Acciones sueltas en general (No V)

Not to start - Not to sweep - Not to be gerundio

1 Forma progresiva del verbo (ando - endo)

I was studying - We are learning

INFINITIVO

2 Sujeto - objeto de la oración

+ to read is what I love → sujeto

what love is reading → objeto

INFINITIVO

3 Indicar R.I.P (razon - intencion - proposito)

you are here to learn

John drove again to rest

gerundio

3 Despus de una preposicion R.I.P

you are here for learning

John drove again after resting



**i** Choose the correct gerund or infinitive from the parenthesis at the end of the sentence. See the example.

1. She likes to get up early in the morning. (likes / dislikes)
2. Alan can't stand to ride on trains. (riding/ to ride)
3. Mr. Harris enjoys inviting people out to dinner. (inviting / to invite)
4. In the old days, gentlemen challenged their rivals to fight. (fighting / to fight)
5. As the famous saying goes, there's no use crying over spilt milk. (crying / to cry)
6. Jim stopped to tie his shoelace. Wait for him. (tying / to tie)



- 7. My wife always volunteers to bake cakes PTA meetings. (baking / to bake)
- 8. Don't waste my time complaining about your salary. (complaining/ to complain)
- 9. Eva is having trouble concentrating on the exam. (concentrating / to concentrate)
- 10. Please allow me to join your Facebook page. (joining / to join)
- 11. You won't forget to pick up on your way home, will you? (picking up /to pick up)

2 Complete the following passage with either the gerund or the infinitive form of the verbs in brackets.



Dennis was in his first year at university, studying History. He was rather a lazy student and he tended to avoid (1) working (work) whenever he could. In the middle of the term, his history professor gave out an assignment to be handed in within two weeks. The assignment was quite a difficult one, so his professor advised them (2) to start (start) earlier. Dennis intended (3) to do (do) the assignment, but he postponed (4) writing (write) it for a week. He had a bad habit of (5) delaying (delay) things. The following week, he forgot (6) doing (do) it totally.

The night before the assignment was due, he suddenly remembered it and rushed to the library to find the books he needed. He tried (7) to read (read) as much as possible on the topic, but there wasn't enough time. Dennis considered (8) asking (ask) for more time to do his paper, but his History professor was known to be very tough on students, so he finally decided (9) cheat (cheat) and copy his paper from somewhere else. He found an old article on the same topic and quickly typed it out. The next day, he submitted the paper.

The following week, he was alarmed (10) to see (see) his professor approaching him, looking angry. "Is this your own work, or did you copy it?" asked the professor. Dennis denied (11) copying (copy) the paper. The professor was angry with Dennis for not (12) telling (tell) the truth. "If you expect me (13) to believe (believe) that, you must be very stupid," said the professor. "Every word is taken from an article I wrote myself five years ago. Did you really think I would forget (14) writing (write) it?" Dennis couldn't help (15) feeling (feel) sorry for telling such a lie.

3 Correct the wrong sentences.

- 1. Peter enjoys playing tennis. Peter enjoys playing tennis
- 2. Sam forgot to send the e-mail. Sam forgot to send the e-mail
- 3. Alice spent three hours to look for a shirt. Alice spent three hours looking for a shirt
- 4. Would you like to come swimming? would you like to go swimming
- 5. She apologized for to be late. she apologized for to be late
- 6. He helped her doing her homework. he helped her to do her homework