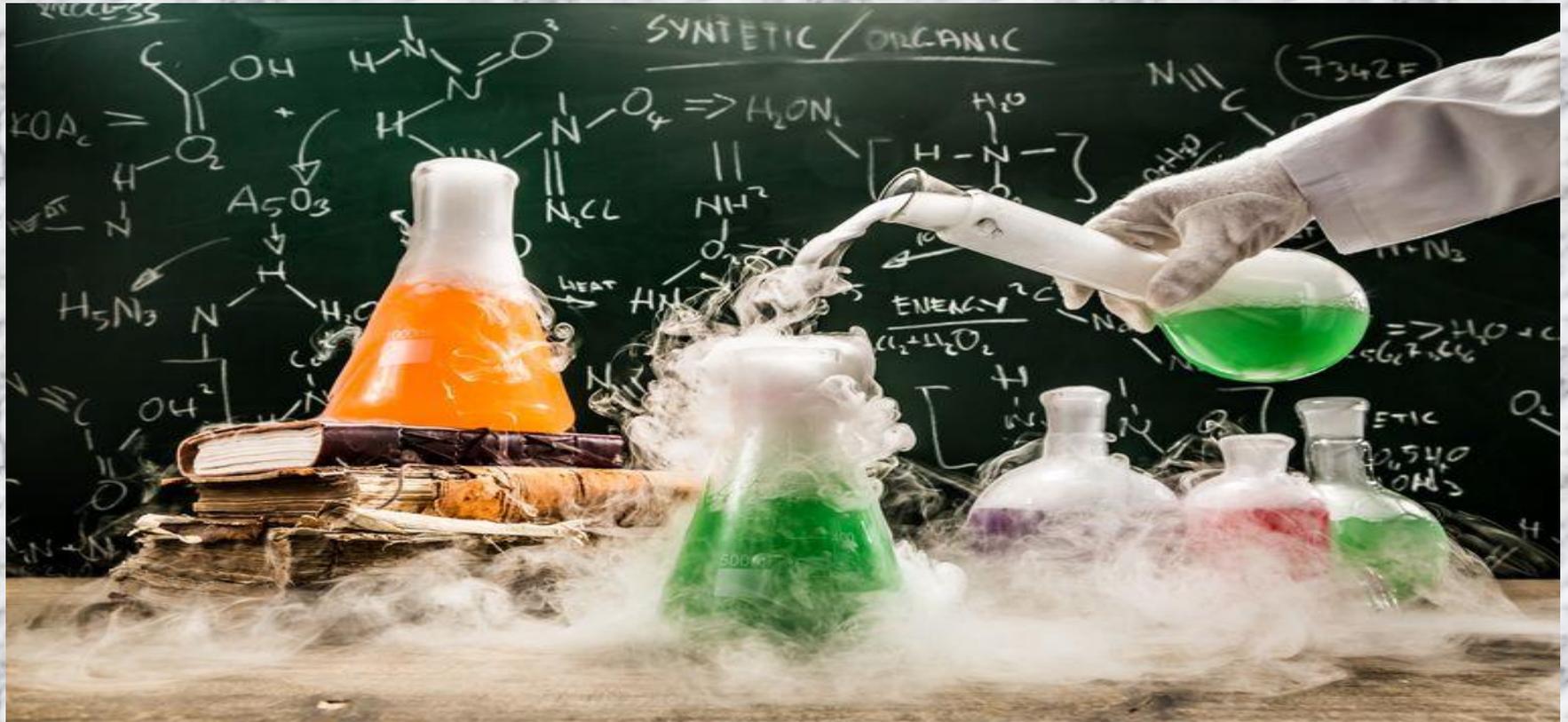




Why should we use percents?



SITUATION 1

James prepared a solution using 400 ml water and 100 ml chlorofile diluted into acetone.

SITUATION 2

Anne prepared a solution with 360 ml water and 90 ml chlorofile diluted into acetone.

Which one of them has a more concentrated solution?

Analyzing James situation:

400 ml water

100 ml clorofile



What concept can illustrate the situation?

A solution of 500 ml

100 ml clorofile diluted into acetone



Calculating what percent is 100 from 600.

$$\frac{p}{100} \cdot 500 = 100$$

$$p = \frac{100}{5} = 20\%$$

Analyzing Anne situation:

360 ml water

90 ml clorofile



What concept can illustrate the situation?

A solution of 450 ml

90 ml clorofile diluted into acetone



Calculating what percent is 90 from 450.

$$\frac{p}{100} \cdot 450 = 90$$

$$p = 90 \cdot \frac{100}{450} = 20\%$$

James's
solution



Anne's
solution

Conclusions

Percents are numbers that can offer an objective way to compare different situations.



The small city of Dej has a population of 38400 inhabitants. On 25-th of Marc 2021 our local authorities registred 192 persons infected with Covid-19. Please calculate the percentage of infected people.



The city of Lublin has a population of 350 000 inhabitants. On 25-th of March 2021, local authorities registered a number of 700 persons infected with Covid 19. Please calculate the percentage of infected people.



The population of Mersin is 960 000 inhabitants. On 25-th of March 2021, local authorities registered a number of 1440 persons infected with Covid 19. Please calculate the percentage of infected people.



The population of Istanbul metropolitan area is 18 000 000 inhabitants. On 25-th of March 2021, local authorities registered a number of 21600 persons infected with Covid 19. Please calculate the percentage of infected people.



The population of Pedara is 15 000 inhabitants. On 25-th of March 2021, local authorities registered a number of 15 persons infected with Covid 19. Please calculate the percentage of infected people.



The city of Sofia has a population of 1 200 000 inhabitants. On 25-th of March 2021, local authorities registered a number of 240 persons infected with Covid-19. Calculate the percent of infected persons.