



# Chemistry

## 11<sup>th</sup> grade

### The end of second Term

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Let's make chemistry a little bit complicated!

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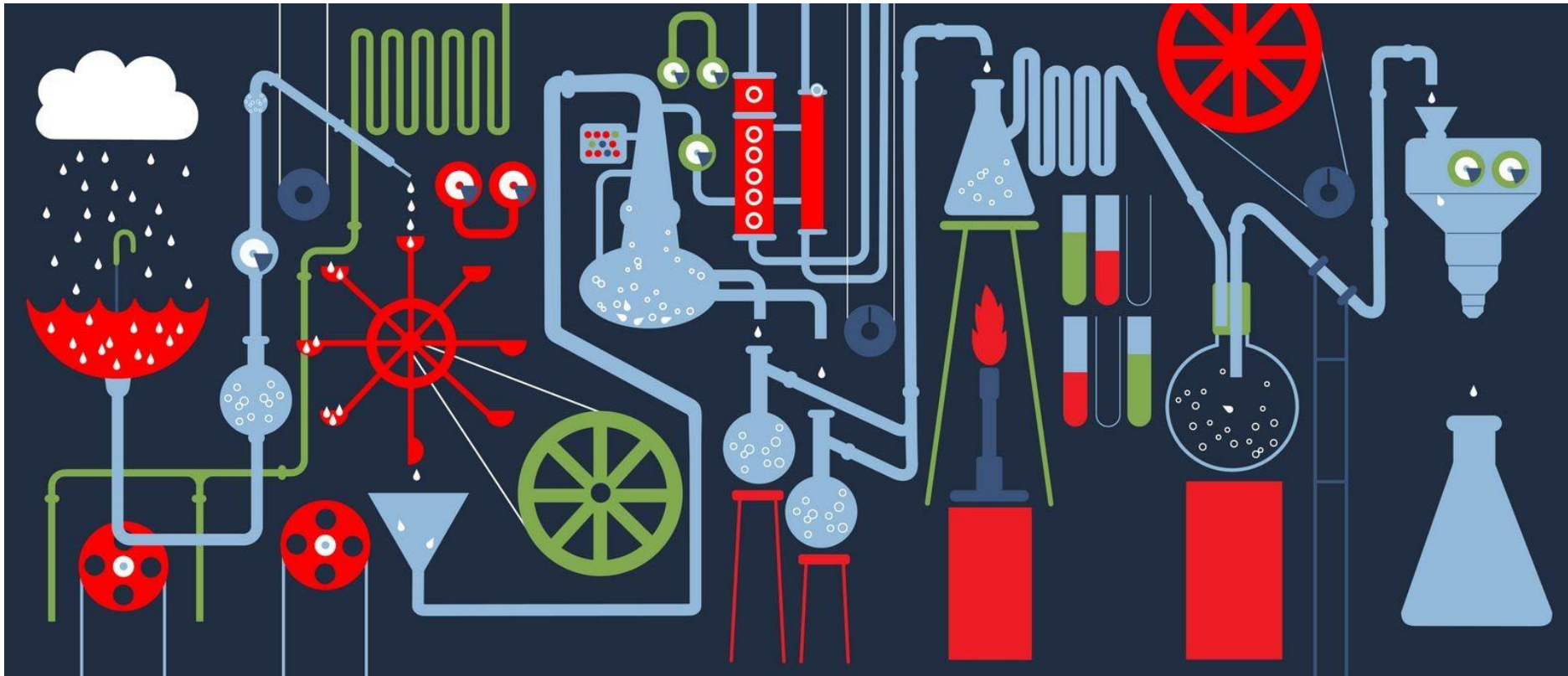
**Химия – просто**

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# Chemistry



Let's make chemistry a little bit complicated!



# Most know



We should know some special words (terms):

Chemistry – химия

Metals – металлы

Nonmetal - неметаллы

Chemical elements – химические элементы

Chemical reaction – химическая реакция

# Today's Theme is ...



... chemistry in English and chemical elements in English.

Let's try to guess what is the name of elements in English.



# Elements quiz



... chemistry in English and chemical elements in English.

Let's try to guess what is the name of elements in English.

Au

# Elements quiz



... chemistry in English and chemical elements in English.

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Au

Gold

# Elements quiz



... chemistry in English and chemical elements in English.

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F



# Elements quiz



... chemistry in English and chemical elements in English.

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F

Iron

# Elements quiz



... chemistry in English and chemical elements in English.

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O

# Elements quiz



... chemistry in English and chemical elements in English.

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O

Oxygen

# Elements quiz



... chemistry in English and chemical elements in English.

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Ag

# Elements quiz



... chemistry in English and chemical elements in English.

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Ag

Silver

# Elements quiz



... chemistry in English and chemical elements in English.

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S

# Elements quiz



... chemistry in English and chemical elements in English.

Let's try to guess what is the name of elements in English.

S

Sulfur



... chemistry in English and chemical elements in English.

But how can I pronounce a chemical reaction?

Au	Gold
Fe	Iron
O	Oxygen
Ag	Silver
S	Sulfur

$Na + H_2O = NaOH + H_2$   
*Sodium plus h two o yields N a O H plus H two*





... chemistry in English and chemical elements in English.

But how can I pronounce a chemical reaction?

Au

Gold

Fe

Iron

O

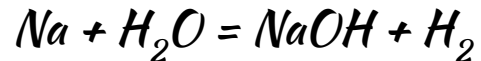
Oxygen

Ag

Silver

S

Sulfur



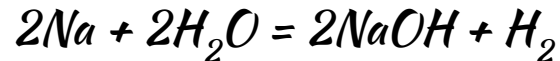
*Sodium plus h two o yields N a O H plus H two*

Let's balance this one:

We have one sodium, two hydrogens and one oxygen in left part.

And still one sodium, one oxygen, but 3 hydrogens.

So, the coefficients are:



# Problems



Let's try to solve chemical problem in English.

*Problem: Convert 20 grams of  $H_2O$  to moles.*

Task

$$m_{H_2O} = 20 \text{ g}$$

-----  
v - ?

To get moles of  $H_2O$  we need...

# Problems



Let's try to solve chemical problem in English.

*Problem: Convert 20 grams of  $H_2O$  to moles.*

Task

$$m_{H_2O} = 20 \text{ g}$$

-----  
 $v = ?$

To get moles of  $H_2O$  we need divide mass (grams) by molar mass:  
Molar mass of water is 18 grams per mole.

$$v = m_{H_2O} / 18 = 20 / 18 = 10 / 9 = 1.1 \text{ mol}$$

# Problems



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# Feedback



Насколько понятен был материал?

1 2 3 4 5 6 7 8 9 10

Я так ничего  
и не понял

Все просто и  
понятно

Удалось ли учесть Ваши замечания с прошлого триместра?

- Да
- Нет
- Не всё



Что в этом курсе было самым ценным и полезным?

Мой ответ

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Что самым бесполезным?

Мой ответ

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Чтобы Вы добавили (эксперименты, наглядные пособия, групповую работу, видео/аудио и т.д.)

Мой ответ

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Чтобы Вы убрали?

Мой ответ

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Насколько тяжело Вам было в процессе обучения? Почему?

Мой ответ

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Содержание курса

	Однозначно нет	Нет	Затрудняюсь ответить	Да	Однозначно да
Цели обучения были ясны	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Курс был хорошо организован и спланирован	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Нагрузка на учащихся была обоснована	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Все учащиеся могли участвовать в занятиях в полной мере	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>