TEACHER'S PAGE

THIS IS THE PLACE WHERE WE ARE GOING TO FIND MANY INTERESTING LINKS TO LEARN A BIT OF PHYSICS AND CHEMISTRY IN ENGLISH. ALONG THE COURSE, WE WILL VISIT THE DIFFERENT PAGES (VIDEOS, EXERCISES OR SONGS) AS WE GO FORWARD ALONG THE SUBJECT.

▪ **Unit 2: "MATERIAL SYSTEMS"**

PROPERTIES OF MATTER

[**http://www.chem4kids.com/files/matter\_intro.html**](http://www.chem4kids.com/files/matter_intro.html) **Matter is the stuff around you**

[**http://studyjams.scholastic.com/studyjams/jams/science/matter/properties-of-matter.htm**](http://studyjams.scholastic.com/studyjams/jams/science/matter/properties-of-matter.htm)(narrated by kids; **Study Jams Page**; it's a great page! **They speak fast, so it is a bit difficult**). It has a good test to know how much we have learnt.

<http://idahoptv.org/dialogue4kids/season7/matter/facts.cfm> **A very good explanation about states of matter.**

<http://recursostic.educacion.es/newton/web/materiales_didacticos/matter/index.html>

**What is matter? Ministerio de Educación y Ciencia (Proyecto Newton)**

CHANGES OF STATE, GASES AND KINETIC THEORY

[**http://studyjams.scholastic.com/studyjams/jams/science/matter/solids-liquids-gases.htm**](http://studyjams.scholastic.com/studyjams/jams/science/matter/solids-liquids-gases.htm)

**Study Jams Page again; speaks us about states of matter, changes of state and a bit of kinetic Theory**

<http://www.chem4kids.com/files/matter_gas.html>  **Very good page about gases**

<http://www.school-for-champions.com/science/matter_kinetic_theory.htm>

**Kinetic Theory**

▪ [SOLIDS, LIQUIDS AND GASES.](http://www.abpischools.org.uk/page/modules/solids-liquids-gases/.cfm?coSiteNavigation_allTopic=1) **This a very good link**

▪ **Unit 3: "MIXTURES AND SOLUTIONS"**

▪ [MIXTURES](http://studyjams.scholastic.com/studyjams/jams/science/matter/mixtures.htm) (VIDEO). **Study Jams Page**

▪ [SOLUTIONS AND MIXTURES](http://www.chem4kids.com/files/matter_solution.html) (**Chem4Kids**)

▪ [SOLUBILITY BASICS](http://www.solubilityofthings.com/basics) (Basic concepts about solubility)

▪ [CHEMICAL MIXTURES](http://www.ducksters.com/science/chemistry/chemical_mixtures.php). This is an extensive page about mixtures.

▪ [ELEMENTS AND COMPOUNDS](http://studyjams.scholastic.com/studyjams/jams/science/matter/elements-and-compounds.htm) (**VIDEO**). **Study Jams Page**

▪ [ELEMENTS vs COMPOUNDS](http://www.diffen.com/difference/Compound_vs_Element). A Very good page to distinguish between them.

▪ **Unit 4: "ATOMIC NUMBER AND MASS NUMBER. ISOTOPES. IONS"**

▪ [ATOMIC NUMBER AND MASS NUMBERS](http://www.ndt-ed.org/EducationResources/HighSchool/Radiography/atomicmassnumber.htm). Definitions.

▪ [ATOMIC NUMBER AND MASS NUMBERS](http://www.youtube.com/watch?v=ufeZCeu_TSo) (**VIDEO**). Very well described.

▪ [ISOTOPES.](http://www.ivy-rose.co.uk/Chemistry/GCSE/What-is-an-isotope.php) Concept.

▪ [IONS.](http://www.youtube.com/watch?v=WWc3k2723IM) (**VIDEO**). Very well described.

▪ **Unit 5: "ELEMENTS AND COMPOUNDS"**

PERIODIC TABLE OF ELEMENTS

▪ [PERIODIC TABLE OF ELEMENTS.](http://www.chem4kids.com/files/elem_intro.html) A good page to work.

▪ [PERIODIC TABLE OF ELEMENTS VIDEO.](https://www.youtube.com/watch?v=0RRVV4Diomg&feature=youtu.be) A good video to look.

▪ [PERIODIC TABLE GAME.](http://www.funbrain.com/periodic/index.html) To check how much we know about the symbol of elements.

▪ [PERIODIC TABLE OF ELEMENTS.](http://www.webelements.com/) Exhaustive.

IONIC AND COVALENT BONDS

▪ [BONDING BASICS.](http://www.chem4kids.com/files/atom_bonds.html) An easy page where basics of bonding are explained.

▪ [IONIC AND ACOVALENT BONDS.](http://chemwiki.ucdavis.edu/Organic_Chemistry/Fundamentals/Ionic_and_Covalent_Bonds) A very good summary of both types of links among atoms.

▪ [CHEMICAL STRUCTURE. BONDS.](http://www.avogadro.co.uk/structure/chemstruc/structure.htm) Exhaustive.

▪ [DIFFERENCE BETWEEN MOLECULES AND IONIC COMPOUNDS](https://www.youtube.com/watch?v=dHWqJeSs8ms). Video.

▪ [MODELS ON CHEMICAL BONDING.](http://www.chem1.com/acad/webtext/chembond/)

MOLE

▪ [MOLE CONCEPT.](http://www.chemistryexplained.com/Ma-Na/Mole-Concept.html)

▪ ["FAQ" ABOUT MOLE.](http://antoine.frostburg.edu/chem/senese/101/moles/faq/why-use-moles.shtml)

▪ [EXTENDED VIDEO OF MOLE.](https://www.youtube.com/watch?v=wORiAOnvw8g) (18 minutes)

**STOICHIOMETRY**

This "strange" word refers to the mass and volume relationships that can be established among all the substances involved in a chemical reaction. It seems to be difficult, but it's not. So let's take a look to the following links, that help us to understand this issue.

▪ [STARTING WITH STOICHIOMETRY](http://www.chem4kids.com/files/react_stoichio.html). Introducing what is stoichiometry.

▪ [SKILLS TO DEVELOP](http://www.science.uwaterloo.ca/~cchieh/cact/c120/stoichio.html). Some rules to bear in mind. This rules are going to help us to resolve problems.

▪ [PRACTICE PROBLEMS](http://www.chemistry.wustl.edu/~coursedev/Online%20tutorials/Plink/Stoichiometry/stoichset.htm).

▪ [UNDERSTANDING STOICHIOMETRY](https://www.youtube.com/watch?v=XnfATaoubzA). Video.

KHANACADEMY LINKS. These are practice links, they are really useful and help us to learn a bit more:

▪ [STOICHIOMETRY. STEP BY STEP](https://www.khanacademy.org/science/chemistry/chemical-reactions-stoichiome/stoichiometry-ideal/a/stoichiometry).