SECONDARY SCHOOL "CONSTANTIN NOICA", SIBIU

LESSON PLAN

Subject: Communication and information technology

Class: a X a

Teacher: Lidia Platon

Date:

Unit: Using the computer and data processing

Lesson: Adding the hiperlinks

Type of lesson: Combined lesson

Place: - Informatics laboratory

Time: 50 min.

AIMS:

INFORMATIONAL

- fixation and consolidation of the new knowledge;
- FORMATIVE
 - developing skills of using the HTML language correctly;

EDUCATIONAL

- -developing a positive attitude towards modern way of communication
- stimulating the will to know better
- expressing a creative way of thinking;

THE LEVEL OF THE CLASS:

- the students assimilated all the theory about HTML language;
- the students use the new information correctly;

GENERAL COMPETENCES:

- to organize and process the documents for the WEB;

SPECIFIC COMPETENCES:

-to use multimedia IT technologies in order to create WEB documents;

OBJECTIVES:

• at the end of the lesson students will be able to define the information presented in the WEB documents:content,accuracy,legibility,design;

STRATEGY:

Didactic Principles

- participation and active learning;
- assure the progress of the performance gradually;
- feedback;

Approach:

- -oral approach: conversation, explanation;
- -practical approach: exercises, problems;

ORGANIZATION OF THE ACTIVITY:

- -frontal;
- -individual;

Resources:

- teacher's talking;
- -functional text;
- -explanation;
- -conversation;
- -exercise;

-computer;

-worksheets;

BIBLIOGRAPHY:

- "Communication and information technology", by Mioara Gheorghe, Ed. Didactică și Pedagogica

STAGES OF THE LESSON

1. Class organization

• preparing the lesson

- pre-plan;

- plan;

- description of the class;

-contents;

-recent work;

2. Warm-up

-announcing the title of the new lesson;

-announcing objectives;

\$	Stage	Teacher's Activity	Students' activity	Approach	Time
Organization The teacher is having the presence and makes sure they have			Tell the teacher who's absent today.	Frontal	2min.
á	Announcing the title and objectives of the new lesson	The teacher tells the students that they are going to learn about how to make menus.		Conversation	3 min.

Teaching the new information	Hyperlinks are marked by the anchor <a>applied to a text or an image. They can be created to: -URL addresses - to assure the access to the navigation process not only through Web but to different Internet networks; -files- local links on the same computer of the new page; they can be accessed by an URL but the easy way is to specify the name of the local file; - a place from the HTML document - internal links. One click on the text or on the image will activate, in each of the cases, the link and show the resource of the link. The resource of a link is described by the parameters of the anchor <a>: HREF - allows the association of an URL address and the creation of a local link by naming the file or of an internal link of the document, the most important parameter to form hyperlinks; NAME -the name of the hyperlink or of the point in a page to which it refers to, in the case of an internal link; METHODS- access methods - this parameter is used only for special processes. A local link can be identified on a text by using the mark : text . For an internal link we use the mark .	The students will write down	Demonstration.	10 min.
------------------------------	---	------------------------------	----------------	---------

	Worksheet			
Knowledge consolidation	Tasks: It helps us to: -insert a background image on aWEB page <body background="url"> -insert lists There are two types of lists: Ordered list: Unordered list: -insert images </body>	Teacher as organizer .The result would be:	Exercise	20 min.
	1. Example of a Web page by using the new knowledge. Save the document with the name pag1.html a. Edit in NOTEPAD the text below: <html> <head> <title>Worksheet1</title> </head></html>			
	 <body background="water.jpg" topmargin="150"> <center></center></body>			

	 	G determinare al.: X G Follogre cadrel: X T Letta 9-Foldin X T Scurtistoric X T axia3-hird X T Fial X T Generalized X	1	
	<pre><div style="width:830px; margin:auto; background-color:#aa66cc; color:white; text-align:justify;"> <center><h1>Lab task</h1></center> <center><h2>Determination of water alkalinity</h2></center> <ol type="1"> <h2>Generalities</h2> <h2>Determination of permanent alkalinity </h2> <h2>Determination of total alkalinity</h2> </div> </pre>	C © Manufacture V Lattack Fource C Sections C Sections C C O Manufacture C O Manufactu		
	The students will work in pair-groups to realize 3 pages html from the			
Feed-back	worksheet in order to exemplify the using of the hyperlinks.		Exercise	8
2 min	Some individual and collective remarks about the activity will be made and some students will be apreciated by the teacher.	The students are paying attention to the teacher' sayings.	Conversation	2

Lab -worksheet

1Give example of a web page by using the new information. Save the document with the following name: file 1.html

```
<html>
<head>
<title>File1</title>
</head>
<br/><body background=water.jpg top margin=150>
<center>
<div style="width:830px; margin:auto; background-color:#aa66cc; color:white; text-align:justify;">
<img src=tester.jpg align=right>
<center><h1>Lab-worksheet</h1></center>
<center><h2>Determine the alkalinity of water</h2></center>
type=1>
<a href=Generalities.html> <h2>Generalities</h2></a>
<a href=Alpermanent.html> <h2>Determination permanent alkalinity</h2></a>
<a href=Altotal html> <h2>Determination total alkalinity</h2></a>
</div>
</center>
</body>
</html>
```

a. Edit in NOTEPAD the text below:

Observation: The students will search on the internet 2 images ,the first one is a representation of a drop of water wich will be saved as apa.jpeg and the second one is a testing instrument of water wich will be saved as tester jpg.

2. Create the following web pages:

a.Generalities.html

Will contain the following text:

Water alkalinity is given by the presence of bicarbonates alkaline carbonates, hydroxides.

The method principle: the neutralization of the amount of water to be analyzed with a diluted acid in the presence of a basic-acid indicator.

The alkalinity determined by phenol-phthalein(pH = 8,2) is called **permanent alkalinity**:

$$NaOH + HCI \rightarrow NaCI + H_2O$$

 $K_2CO_3 + HCI \rightarrow KHCO_3 + KCI$

The alkalinity determined by methyl-orange (pH= 4,4) is called total alkalinity:

$$\begin{aligned} \text{NaOH} + \text{HCI} &\rightarrow \text{NaCI} + \text{H}_2\text{O} \\ \text{K} \ _2\text{CO}_3 + \text{HCI} &\rightarrow \text{KHCO}_3 + \text{KCI} \\ \text{Ca}(\text{HCO}_3)_2 + 2\text{HCI} &\rightarrow \text{CaCI}_2 + 2\text{H}_2\text{CO}_3 \end{aligned}$$

Reagents and necessary instruments:

- HCI 0,1 N solution with unknown factor
- Berzelius glasses
- Phenol-phthalein alcoholic solution 0,1%
- burette; Erlenmeyer glasses, filter
- methyl-orange watery solution 0,1%

b. Alpermanent.html with the following text:

Permanent alkalinity determination:

- put 100 ml of water in an Erlenmeyer glass;
- add 2-3 drops of phenol-phtalein:
 - if the water doesn't change color-the alkalinity is zero
 - if the water changes its color red we use HCI 0,1N until it loses colour.

$$Alc_P =$$

ml HCI 0,1 N/dm³

 V_p – water amount volume to analyze, ml;

V – HCI 0,1N amount volume used for the loss of colour, ml;

f – the factor used to correct the HCI 0,1N solution

c. Altotal.html with the following text:

Total alkalinity determination:

- add 2-3 drops of methyl-orange in the same solution and continue titration with CI 0,1N until colour changes in yellow-orange (total alkalinity T)

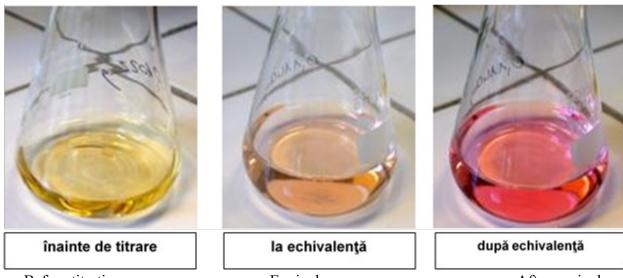
$$Alc_T = ,$$

ml HCl 0,1 N/dm³

unde: V_p – water amount volume to analyze, ml;

V – HCI 0,1 N amount volume used for the loss of colour, ml;

f – the factor used to correct the HCI 0,1N solution



Before titration

Equivalence

After equivalence