

LESSON PLAN 1. TOOLS

Aim: Students will learn the names of the different tools and their correct use.

Teaching objectives:

- Definition of tool. Difference between hand tools and power tools. C1-C2
- Definition of the different operations done with each different tool. C1-C2
- Differences between tools that are used for the same operation. C2-C3

Learning outcomes:

- Knowing the name of the tools and their use C1-C2
- Choosing the right tool for the correct operation when constructing.C3
- Classifying tools depending on the operation.C1-C3
- Using the tools properly and in safety.C3

Activities:

1. The teacher explains what a tool is and gives the students handout 1 (tools). It could be interesting to show real tools to the students at the same time and ask them to find out the name in their own language.
2. The teacher gives them the handout 2 (TOOLS TABLE) with a table where most of the tools of the workshop and their names appear. This implies learning a big amount of new vocabulary so it will be helpful to play games that help memorizing, such as domino and taboo cards (available in other handouts: A and B). One option could be that they make up the games themselves.
3. Handout 3 (EMPTY TABLE) is given to the students and they're asked to work in groups and write down all the names of the objects, without looking at the previous handout.
4. The teacher gives the students handout 4 (OPERATIONS) and handout 5 (TOOLS DEFINITION) and explains the different kinds of operations we can do with the different tools. After the explanation students have to classify a list of tools, they can use handout 2 with the table of tools. And then they have to construct sentences. Handout 5 explains the function of concrete tools that will help them to do the next gapfill task.
5. Tasks related with the different materials are proposed to help the students with new vocabulary (handout 6:MATERIALS)
6. Tasks proposed in handout 7 (MATCHING).
7. Students go to the computer room and have to make up a filling card like the one in the example (handout 8 FILLING FORM). They have to follow the same structure, search for an image in the Internet and insert it in the form.

Most of the activities of this lesson will be done in pairs, except the games played in groups of four or five and the filling card that will be done individually

Resources:

The teacher will give the students the handouts mentioned above one by one while developing the lesson.

Evaluation:

- While they are working individually, in pairs or in groups the teacher will move round the class and evaluate their work.
- At the end of the lesson the teacher can check the work they have been doing collecting the handouts and looking at the filling forms saved in the computers
- When results are checked with the plenary, they will show how they have been working.

C1 means content, C2 means communication, C3 means cognition, C4 means culture

LESSON PLAN 2. LENGTH

Aim: Students will learn how to measure length with different measuring tools.

Teaching objectives:

- Definition of length. Different magnitudes of length. C1-C2
- Differences between tools that are used for the same operation. C2-C3
- Use of International Standard Units C1-C4
- Other units used in other countries. C1-C4

Learning outcomes:

- Knowing the names of the different tools and their correct use C1-C2
- Choosing the right tools depending on the magnitude when measuring C3
- Comparing dimensions and results.C2-C3
- Using measuring tools properly.C3
- Researching for information about different units C2-C4

Activities:

8. The teacher shows a PowerPoint that deals with measuring different kinds of dimensions and some of the basic tools we have for that purpose. Then give the students handout 1 that shows names of units and dimensions (UNITS)
9. Then the students will be given handout 2 (MEASURING LENGTH) where there are different tasks: choosing the best tool for each object or distance, making sentences explaining their choices, and finally measuring real dimensions with the tools. There is another handout just to do some practice with the ruler (handout 3:RULER)
10. The teacher shows the students how to use a vernier caliper. The PowerPoint provided in the supplementary material (Vernier caliper) can be very useful. The students will first try to find out the measure shown in handout 4 (CALIPER), then will measure with a real one and complete handout 5 (MEASURING CALIPER).
11. The teacher gives handout 6 (OTHER UNITS) and students will have to research information about different units used in other countries. If there's time they can do it in the computer classroom or in the school library, otherwise they can do it as homework.

Most of the activities of this lesson will be done in pairs, specially the practical ones.

Resources:

The teacher will give the students the handouts mentioned above one by one while developing the lesson. Also will provide them with the corresponding tools they are going to need.

Evaluation:

- While they are working individually, in pairs or in groups the teacher will move round the class and evaluate their work.
- At the end of the lesson the teacher can check the work they have been doing collecting the handouts
- When results are checked with the plenary , they will show how they have been working.

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LESSON PLAN 3. HEALTH AND SAFETY

Aim: Students will learn the importance of working properly and with safety and the signs related to health and safety.

Teaching objectives:

- Definition of rules. The rules in the workshop C1-C2-C4
- Safety Signs; their meaning and their position in the workshop C1-C3

Learning outcomes:

- Knowing and applying the rules of the workshop. Understanding the need for having rules C3-C4
- Getting used to an international sign language and being able to use it to express different meanings. C3-C4
- Choosing signs for the workshop and discussing their importance C2-C3

Activities:

12. The teacher shows a PowerPoint that shows the need for having rules as well as the main rules in the workshop (Rules in the workshop)
13. The students will be given a handout (HEALTH AND SAFETY). In the handout there is first a visual explanation of the main kinds of signs of health and safety we can find. The first activity consists in drawing one of the signs and explaining its meaning.
14. The following handout (H&S2) asks the students to invent their own sign paying attention to the meaning of shapes and colours meaning, and to explain the meaning of their creation.
15. In groups of four the students will decide which are the most important signs in a workshop and each of them will draw a sign to be placed in the right place in the workshop.
16. To help the students remember all the contents proposed they complete the crosswords in the corresponding handout (H&S3) about all they have been learning about safety and health.

The activities of this lesson can be done individually or in pairs except for the group work activity.

Resources:

The teacher will give the students the handouts mentioned above one by one while developing the lesson.

Evaluation:

- While they are working individually, in pairs or in groups the teacher will move round the class and evaluate their work.
- At the end of the lesson the teacher can check out the work they have been doing collecting the handouts
- When results are checked with the plenary , they will show how they have been working. In the plenary they will decide which of the signs drawn are the most suitable to hang in the workshop.

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LESSON PLAN 4. THE PROJECT

Aim: Students will apply in the workshop all they have learnt in the classroom and realize the importance of working safely and accurately.

Teaching objectives:

- Definition of a project and its parts. C1-C2-C4
- The project as a summary of the application of all the knowledge learnt C1-C3
- The report of the project C1-C2

Learning outcomes:

- Knowing the steps in a project and the importance of each one of them C1- C3
- Applying all the theoretical contents learnt in the classroom; use of tools, rules, safety and health, vocabulary. C1-C2-C3-C4
- Making decisions about their work and being critical of the results. C3
- Creating a report of all the process. C1-C2-C3
- Observing the environment and realizing how real projects are, and how solutions can change depending on the country, tradition, materials... C4

Activities:

17. The teacher shows a PowerPoint with the different steps of a project (THE PROJECT) and explains the meaning of each of these parts.
18. The students will start a practical project, a simple one, such as a TANGRAM. They will start finding the information about it and then follow all the steps of a project. Throughout the project they will have to decide how to solve each part and at the same time generate the report.
19. For the report the teacher will give the students the corresponding handouts (REPORT) that will help them for that purpose.

Students will work in pairs or in small groups all the time, although each one of them has to do his/her own project and report.

Resources:

The teacher will give the students the handouts mentioned above one by one while developing the lesson.

Evaluation:

- While they are working individually, in pairs or in groups the teacher will move round the class and evaluate their work.
- At the end of the lesson the teacher will evaluate the results of the project as well as the report.

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