**Lesson Plane Table**

|  |  |
| --- | --- |
| **Subject:** | **Chemistry** |
| Authors: | Teachers: Martano Michele, Petrachi Maria AntoniaStudents: Coricciati Emanuele, Mastrolia Claudia, Sergio Alessandro, Stomeo Eleonora |
| Date: | 01/05/2019 |
| Estimated time: | 60 minutes + 60 minutes |  |  |
|  |  |  |  |
| Summary: | Extraction of the DNA of a plant |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Objectives**(Specify skills information that will be taught) | **Activity/ Information****Teacher Guide/ Student guide** | **Materials Needed**(Other resources - web, book...) | **Assessment Methods**(steps to check for student understanding) | **Time****Where?** |
| Promote a more efficient use of technology,Understand and apply the concepts,Develop skills on the use of laboratory material,Encourage group work and peer learning***Know Concepts or Keywords:***- theoretical knowledge on DNA (Deoxyribonucleic acid),- DNA extraction (practical laboratory activity) | **Motivation Activities** Do you know the meaning of DNA?Do you know the chemical structure of DNAHow do the four nitrogenous bases join together?**Field outing:**Draws the double helix of DNA;Write in the worksheet the the backbone chain of a polymer; | WorksheetsDevices:Smartphone or tablet,Personal computerSoftware application:DNA apps,Genome apps | QuizTestPractical activities | Classroom / LaboratoryOverall about 2 hours |

|  |
| --- |
| **Description of the activity:** |
| **Introduction** | Main features of the Deoxyribonucleic acid (DNA)DNA extraction  |
| **Main activity** | DNA extraction  |
| **Lesson Guide (Step by step)** | Projection of presentations and videos |
| **Exercises (2 or 3 levels of difficulty)**  | DNA extraction (practical laboratory activity) |
| **Conclusion and Evaluation** | Final tests and quizzes on the proposed topics |
| **Notes** | Students are divided into small groups to carry out practical activities and solve the proposed tests |

Bibliography

* Original and self-produced teaching material, based on information taken from school textbooks and educational websites