# Unit Plan Template

Note: Type in the gray areas. Click on any descriptive text, then type your own.

|  |
| --- |
| Author Information |
| First and Last Name:  | Johanna T. Medura and Charry Mae M. Pestano |
| Email Address: | johannamed19@gmail.com and diehard\_729@yahoo.com  |
| Name of School: | Medellin National High School |
| Division: | Cebu |
| Municipality/City, Province, Region: | Medellin, Cebu |
| Country: | Philippines |

|  |
| --- |
| If your Portfolio is chosen to be uploaded to the Intel® Teach to the Future database, do you want your name displayed as the author? [ ]  Yes [x]  No |

|  |
| --- |
|  Unit Overview |
| Unit Plan Title: | Space Exploration |
| Curriculum-Framing Questions |
|  | Essential Question  | How does space exploration help in science and technology?How does it help the humankind? |
|  | Unit Questions | How does NASA gather information about celestial bodies? |
|  | Content Questions | What does NASA stands for?What are the functions of NASA?How does NASA gather information about celestial bodies?What are the different tools used in space exploration? |
| Unit Summary: |
| Space Exploration is a unit which starts with the topic on how NASA works and studies celestial bodies. This unit will be discussed through video clip and photo presentations. Students will be asked various questions regarding the topics and will be asked to perform varied activities. |

|  |
| --- |
| Subject Area(s): Click box(es) of the subject(s) that your Unit targets |
| [ ]  Business Education [ ]  Engineering [ ]  Home Economics [ ]  Language Arts[ ]  Music [ ]  School to Career [ ]  Social Studies | [ ]  Drama [ ]  Foreign Language [ ]  Industrial Technology [ ]  Mathematics [ ]  Physical Education[x]  Science[ ]  Technology | [ ]  Other: English[ ]  Other: Filipino[ ]  Other: Makabayan |
| Grade Level: Click box(es) of the grade level(s) that your Unit targets |
| [ ]  Kindergarten[ ]  Grade 1 -3[ ]  Grade 4 - 6[ ]  1st Year High School | [x]  2nd Year High School[ ]  3rd Year High School[ ]  4th Year High School [ ]  English as a Second Language | [ ]  Gifted and Talented[ ]  Resource [ ]  Other |

|  |
| --- |
| Targeted Philippine Basic Education Curriculum Competencies |
| * Determine the different tools used in studying the outer space
* Predict the discovery of heavenly bodies based on recorded data
* Explain the significance of space exploration
 |
| Student Objectives/Learning Outcomes: |
| Given varied activities, the second year/Grade VIII students with 75% accuracy will be able to:1. discuss the function of NASA;
2. identify the ways in gathering information about celestial bodies;
3. enumerate the space exploration instruments used by NASA;
4. cite the importance of the studies of celestial bodies.
 |
| Procedures: |
| 1. Review

The teacher will ask the following questions regarding the previous topic:1. What is a comet? An asteroid?
2. How do we name an asteroid?
3. What are the differences between comets from meteoroids?
4. Motivation
5. The teacher will show a video clip “[Kids Educational Videos - The Solar System - Title.avi](file:///C%3A%5CUsers%5CFro%5CDesktop%5CICT%5CKids%20Educational%20Videos%20-%20The%20Solar%20System%20%20-%20Title.avi)” of a specific celestial body for 2 minutes.
6. Afterwhich, the teacher will ask the following questions:
7. How do you describe the video?
8. What do you think the video is all about?
9. How do we know that our solar system looks like the images shown on the video?
10. Presentation of the Topic
11. The teacher will present the topic “How does the NASA gather information about the celestial body?
12. After presenting the topic, the teacher will ask the following questions:
13. What is NASA?
14. How can you describe NASA?
15. How does the scientist study the celestial bodies?
16. What are the ways in studying the heavenly bodies?
17. Lesson Proper
18. The teacher will show a video of the different space instruments and devices used by the astronomers in studying the celestial bodies.
19. Then, the teacher will ask the following questions:

A.1 TelescopeA.1.1 How can you describe this equipment?a.1.2 what are its uses? A.2 Probes a.2 .1 What can you say about its structure? Its appearance? a.2.2 what do you are its function?3. Through [Powerpoint presentation.grade VIII.pptx](file:///C%3A%5CUsers%5CFro%5CDesktop%5CICT%5CPowerpoint%20presentation.grade%20VIII.pptx), the teacher will give input about the various instruments being shown in the video. She will also present various essential discoveries using these equipments.4. Lastly, she will ask the students about the importance of studying the celestial bodies.E. Follow-up activity1. The teacher will group the students into 6(six) groups. Each group will think of one celestial body then they will act out the process of how they discovered that thing.2. Each group would describe their specific celestial body. They have five minutes to do it.3. The presentation of each group will be graded using the criteria below. [Rubric.xlsx](file:///C%3A%5CUsers%5CFro%5CDesktop%5CICT%5CRubric.xlsx)1. Generalization
2. The teacher will summarize the topic by asking the following questions:
3. How do we gather information about celestial bodies?
4. What are the instruments used in astronomical activities?
5. What are those instruments? What are their uses?
 |
| Approximate Time Needed:  |
| Eight 80-minute class periods 1 week |
| Prerequisite Skills: |
| Knowledge about the solar system, the different celestial bodies and skill in manipulating objects in the environment to suit certain situations. |
| Materials and Resources Required For Unit |

|  |
| --- |
| Technology – Hardware: (Click boxes of all equipment needed) |
| [ ]  Camera [x]  Computer(s) [ ]  Digital Camera [ ]  DVD Player[x]  Internet Connection  | [ ]  Laser Disk[ ]  Printer [x]  Projection System [ ]  Scanner [ ]  Television  | [ ]  VCR [ ]  Video Camera [x]  Video Conferencing  Equipment.[ ]  Other:       |
|  |
| Technology – Software: (Click boxes of all software needed.) |
| [x]  Database/Spreadsheet [x]  Web Page Development [x]  Image Processing[ ]  Encyclopedia on CD-ROM  | [x]  Multimedia [ ]  E-mail Software [x]  Word Processing  | [x]  Web Browser [x]  Desktop Publishing [ ]  Other:        |

|  |  |
| --- | --- |
| Printed Materials: | Alumaga, M.J. “K to 12 Science and Technology” pp. 142-145 |
| Supplies: | Video clips, powerpoint presentation |
| Internet Resources: | [www.youtube.com](http://www.youtube.com)[www.explorerscorner.weebly.com](http://www.explorerscorner.weebly.com) |
| Others: |  |
| Accommodations for Differentiated Instruction |
|  | Resource Student: |  |
|  | Gifted Student: |  |
| Student Assessment: | [Evaluation.docx](file:///C%3A%5CUsers%5CFro%5CDesktop%5CICT%5CEvaluation.docx) |
| Key Word Search: | NASA Space TechnologySpace exploration AeronoticsProbeTelescope |