LEARNING FOR LIFE

# TEACHERS' GUIDELINE

## CLIMATE CHANGE OBSERVATORY

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MULTIPLE INTELLIGENCES

| INTELLIGENCE | TASKS |
|---|---|
| 1. Interpersonal | 1-3-4-6-7-8-9-10-11-12-13-14-15-16-17-19-20 |
| 2. Intrapersonal | 3-4-6-7-8-10-11-12-13-14-15-16-17-19-20 |
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| 4. Bodily-kinesthetic | |
| 5. Musical-rhythmic | |
| 6. Verbal-linguistic | 2-6-7-8-9-11-12-13-14-15-16-17-19 |
| 7. Logical-mathematical | 6-11-12-13-15-16-17-19 |
| 8. Naturalistic | 6-7-8-9-11-12-13-15-16-17-19 |

DISCIPLINARY OBJECTIVES and CROSS-DISCIPLINARY OBJECTIVES

**What do we want students to understand?**

(COMPREHENSION GOALS)

## DISCIPLINARY OBJECTIVES and CROSS-DISCIPLINARY OBJECTIVES

MAIN OBJECTIVE:

**To be aware of the importance of collecting and observing data in order to carry out scientific reflection**

**0.General objectives**

0.1. Learning to work in teams

**1.Biology**

1.1. Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development

**2.Mathematics**

2.1. Apply mathematical knowledge to understand, appreciate and create information and messages about environmental states and factors

2.2. Express the data collected when analysing the environment by means of charts

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| | |
|---|---|
| | and graphics<br><br>2.3. Compare today's data to the previous data and draw conclusions<br><br>**3.Foreign Language (English)**<br><br>3.1. Improve communicating and writing skills<br><br>**4.ICT**<br><br>4.1. Learn to use software's to make and edit videos.<br><br>**5.Mother Tongue**<br><br>5.1. Improve communicating and writing skills. |
| PROJECT PRESENTATION | Nearby meteorological institutes (or any other institution) want to increase the number of measurement stations. Since they are concerned about the climate change, they want to make people aware of the situation. Therefore, taking into account environmental change, we've been asked to launch a communication channel to give information about Urnieta and surrounding towns.<br><br>In this communication channel, the issue will be addressed by means of daily reports and videos that will be published on the blog or uploaded to YouTube. In this way, you will develop and complete the information day by day.<br><br>In order to set up the communication channel, you will have to research and collect information about Urnieta and surrounding towns inevitably. |
| FINAL PRODUCT | To create and launch an online communication channel about the environment. To post reports or videos on a daily basis. To share the data we get and the conclusions we draw with meteorological centres. |

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## SEQUENCE OF TASKS

Tasks in bold are necessary, and the rest are optional. They depend on the teachers involved in the project and the school facilities.

### A. PREVIOUS TASKS

1. **Task: Team dynamics**
2. **Task: Project presentation**
3. **Task: Team planning**
4. **Task: What I know - What I need to know**
5. **Task: Set dates for each team to post blog entries**

### B. RESEARCH / DEVELOPING TASKS

6. Task: Visit to a weather station
7. **Task: Learn the use of measurement tools**
8. **Task: Expository writing requirements**
9. **Task: Expository content specification:** Is environment changing? Why? What lies on our hands?
10. **Task: Team's topic choice**
11. **Task: What I know - What I need to know**
12. **Task: Analysis of the environment**
    a. UPV's chemistry department measured the amount of pollution in different towns
13. **Task: Interpreting graphics**
14. **Task: Learn the structure of expository texts**
15. **Task: Producing expository texts/videos**
16. **Task: Class expository presentation and team feedback**
17. **Task: Presentation and approval of final expository version**

### C. FINAL TASKS

18. **Task: Make the online communication channel public**
19. **Task: I see - I wonder - I ask**
20. **Task: Final team assessment**

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## INDICATORS

**MAIN OBJECTIVE**

Remains constant in the data collection

**0. General objectives**

0.1.1. The student achieves team objectives

0.1.2. The student achieves individual objectives

0.1.3. The student fulfils his/ her responsibilities

**1. Biology**

1.1.1. Makes daily measurements in an appropriate way

1.2.1 Analyses and interprets measurements and statistical data

1.2.1 Makes reasonable suggestions about permanent development

**2. Mathematics**

2.1.1. Interprets environmental charts and graphics

2.1.2 Expresses collected data by means of charts and graphics

2.1.3 Compares today's data to the previous data and draws conclusions

**3. Foreign Language (English)**

3.1.1. Hands in by the deadline

3.1.2. Presents the work neatly

3.1.3. The text is well-structured

3.1.4. The text is coherent and cohesive

3.1.5. The text is grammatically well-written with no significant spelling mistakes

**4. ICT**

4.1.1. Makes and edits videos

**5. Mother Language**

5.1.1. Hands in by the deadline

5.1.2. Presents the work neatly

5.1.3. The text is well-structured

5.1.4. The text is coherent and cohesive

5.1.5. The text is grammatically well-written with no significant spelling mistakes

**TOOLS:**

- **Rubrics**

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- **Reflections and evidences**

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# TASKS

## PREVIOUS TASKS

| **1. Task: Team dynamics** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Social and civic | **INTELLIGENCES** | Interpersonal |
| **GOALS** | Learning to work in teams | | |

**Task description:**

We will suggest a team dynamics so that students get to know each other better.

**Teacher's notes:**

See annex *1T- Manuel's team dynamics*

**Manuel's team**

This team dynamics aims at showing that more ideas are originated from teamwork than from individual work.

*Task development:*

1. *Reading Manuel's team's case*

*Manuel is fed up with working in teams. He says he works better on his own. He thinks working in teams is a waste of time. Besides, he is not happy with his teammates. Rosa does nothing and she takes advantage of others. Juan is really chatty, he doesn't respect his turn to talk, and he doesn't listen to his partners. Ramon usually tries to impose his ideas on others, and the rest always have to follow his will. Maria never says anything, she doesn't take part and she just listens to what others say. Consequently, Manuel has decided to work by himself.*

2. *Explanation*
   - After having read the case, we can talk to the whole class and ask whether they have ever experienced something similar (at primary or secondary school when having to work in teams)...
   - The teacher who is in charge of the dynamics can give the following explanation in order to end up with the opinion exchange:

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*"It is probable that the problem with this team is that they don't know how to work in teams or how to help each other, in other words, the team has not been able to organise themselves to work together. With the following tasks, we'll try to consider the advantages of working in teams".*

3. *Tasks related to Manuel's team's case*
   - Students will have a sheet divided into three parts (A, B and C). In section A, students will write on their own the advantages of working in teams - although Manuel says the opposite.
   - Later on, students will pair up in teams of four and they will unify the answers they have written in section A. In the first round, each student will read just an advantage -only one- and another student (the one responsible for being the secretary) will write down all the answers in a separate piece of paper. There will be as many rounds as necessary, until every student has read all the answers from section A. If answers are repeated, they won't be written down in the separate piece of paper. After that, each student will note those answers they previously haven't written down in the following section (B).
   - Finally, all teams will unify all the answers. In the first round, each team will just mention an advantage -just one- and there will be as many rounds as necessary, until all the answers are mentioned. One of the students will be in charge of writing down all the answers in the whiteboard. Later on, each student will write the answers from the whiteboard in section C, the ones he or she hasn't written in the previous two sections.
4. *Conclusion*

   The teacher who is in charge of the task will ask to raise their hands to those students who have written just one answer in sections B and C. There probably won't be anyone who has written all the final answers in section A. In this case, this shows that the student has learnt something from his teammates or other classmates, as a matter of fact, they have found more advantages in teams than individually.

   This is one of the main advantages of teamwork (it might not be included in the final list), it generates more ideas than when work is done individually.

| **2. Task: Project presentation** | | | **Sessions:** 30 min |
|---|---|---|---|
| **COMPETENCES** | | **INTELLIGENCES** | Verbal-linguistic |
| **GOALS** | | | |

**Task description:**

Nearby meteorological institutes (or any other institution) want to increase the number of measurement stations. Since they are concerned about the climate change, they want to make people aware of the situation. Therefore, taking into account environmental change, we've been asked to launch a communication channel to give information about Urnieta and surrounding towns.

In this communication channel, the issue will be addressed by means of daily reports and videos that will be published on the blog or uploaded to YouTube. In this way, you will develop and complete the information day by day.

In order to set up the communication channel, you will have to research and collect information about Urnieta and surrounding towns inevitably.

**Teacher's notes:**

When we present the project we need to motivate the students. The presentation of the project needs to be appealing. It is very important to create a special atmosphere to attain motivation. This is the moment when we can boost their interest. In order to present this project the participation of the customer (headmaster, parents association, a cook…) is essential, considering that this person will be the one who will make the request for the book.

It is also convenient, when there is more than one class, to gather all the classes and to present the project to all the students together. Apart from the customer, the teachers that will take part in the project will also be present in the project presentation, explaining their role in the project.

| **3. Task: Team planning** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Social and civic<br>Sense of initiative and entrepreneurship<br>Digital | **INTELLIGENCES** | Interpersonal<br>Intrapersonal |
| **GOALS** | Learning to work in teams and to control teamwork | | |

**Task description:**

Each team will define its team planning, which will consist of three parts: team objectives, individual objectives and responsibilities.

Team objectives:

All teams will have four objectives: two will be the same for every team, and the other two will be defined by each team.

Individual objectives:

Each student will have 2 individual objectives: one suggested by his/her team and the other suggested by themselves.

Responsibilities: Responsibilities will be assigned by the teacher.

**Teacher's notes:**

See annex 3T-Team Planning

| **4. Task: What I know – What I need to know** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Digital | **INTELLIGENCES** | Interpersonal<br>Intrapersonal |
| **GOALS** | To think about the topic | | |

**Task description:**

Each team will consider what they already know about the task and what they need to know in order to carry it out.

**Teacher's notes:**

The teacher will pay special attention to students' answers, and based on these answers he/she will suggest suitable tasks to carry out the project.

We will use annex 4T-9T-11T-17T-What I know-What I need to know-What I've learnt before or after the tasks, it is specified in the annex.

See annex 4T-9T-11T-17T-What I know-What I need to know-What I've learnt

| **5. Task: Set dates for each team to post blog entries** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Sense of initiative and entrepreneurship<br>Social and civic | **INTELLIGENCES** | Interpersonal<br>Verbal-linguistic |

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| | |
|---|---|
| **GOALS** | Learning to work in teams |

**Task description:**

We will fix dates and deadlines in a chart so that each student team knows when they have to carry out the weather measurements, when they have to hand in their work and when they have to publish it online.

At the beginning we will just upload measurements and photographs, but as we go deeper into the topic we will also add texts and videos.

**Teacher's notes:**

See annex 5T -Set dates

It is advisable to have the chart visible for both students and teachers.

## RESEARCH / DEVELOPING TASKS

| **6. Task: Visit to a weather station** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Mathematical, scientific and technological<br>Cultural awareness and expression | **INTELLIGENCES** | Intrapersonal<br>Interpersonal<br>Visual-spatial<br>Verbal-linguistic<br>Naturalistic |
| **GOALS** | Learning to work in teams<br>Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development | | |

**Task description:**

We will visit a weather station which is close to our school. It will be an exceptional opportunity to find answers to the questions that arouse during the previous exercise. Before visiting the station, we should write down our questions and choose a representative to make the questions in the visit. Needless to say, everyone will pay attention to what it is said and explained in the station.

**Assessment tools (rubrics …):**

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Student's behaviour will be assessed. The teacher will also take into account whether the students write down the answers or not.

**Teacher's notes:**

It is advisable that students take the report with all the questions with them in order to write down all the answers.

| **7. Task: Learn the use of weather measurement instruments** | | | **Sessions:** 2 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Mathematical, scientific and technological<br>Digital | **INTELLIGENCES** | Intrapersonal<br>Interpersonal<br>Visual-spatial<br>Verbal-linguistic<br>Naturalistic |
| **GOALS** | Learning to work in teams<br>Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development | | |

**Task description:**

Since we have to observe weather patterns and make appropriate measurements, we will first need to learn how to use the weather instruments. The instruments that we need to learn are the following: thermometer, hygrometer, barometer, anemometer and rain gauge.

We will learn how to use them and what to use them for. Apart from that, we will also learn the units of measurement of each tool.

**Teacher's notes:**

It would be fantastic to have all the tools available at school, otherwise we will need to use other resources (textbooks, photographs, Internet…).

Online resources:

https://www.youtube.com/watch?v=ySSyT44nma4

https://es.slideshare.net/Slasiter/weather-instruments-13381218

See annex 4T-9T-11T-17T-What I know-What I need to know-What I've learnt.

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| **8. Task: Expository writing requirements** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital<br>Mathematical, scientific and technological<br>Cultural awareness and expression | **INTELLIGENCES** | Intrapersonal<br>Interpersonal<br>Visual-spatial<br>Verbal-linguistic<br>Naturalistic |
| **GOALS** | Improve communicating and writing skills<br>Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development | | |

**Task description:**

Students will have to create both short written texts and videos. In order to do so, it is important to know the structure of these expository productions. Therefore, we will analyse some texts (Text1 Text2) and videos (Video1, Video2, Video3) about environmental issues. After reading the texts, students will have to identify the features of the text genre (register, language, paragraph structure, vocabulary…). They will do the same with the videos, after watching them they will identify oral communicative features (voice, intonation, pauses, fluency, pronunciation…). It will be useful to note down all the identified features in a chart for future writing compositions.

**Teacher's notes:**

Each team will write down all the identified features in a chart.

Resources:

http://mcnair5thgrade.yolasite.com/resources/Characteristics%20of%20Expository%20Text.pdf

https://es.slideshare.net/jmcgee6/expository-text-features

| **9. Task: Expository content specification** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Mathematical, scientific and technological | **INTELLIGENCES** | Interpersonal<br>Verbal-linguistic<br>Naturalistic |
| **GOALS** | Analysis and reflection of the topic that needs to be chosen later<br>Improve communicating and writing skills<br>Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development | | |

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**Task description:**

The following task aims at reflecting on these three questions: Is the environment changing? Why? What lies on our hands?

Students will have to discuss these topics together with the ones suggested by themselves. In order not to repeat the same topics, we need to share the work.

Each team will have to choose an issue and will have to specify the reasons of that choice by **using the rotating sheet cooperative structure**. The arguments need to be solid in order to convince those who might have chosen the same topic. Bear in mind, that if there is no consensus among teammates, topics will be chosen by raffle:

1. Pollution caused by cars
2. To increase the use of public transports or bicycles and decrease the use of private cars.
3. Deforestation: removing forests and green areas
4. Reforestation; the opposite of deforestation
6. Climate change
7. Discharging chemicals and nuclear materials
8. Acid rain
9. The use of fertilizers and pesticides
10. Incinerators
11. Man-made artificial materials
12. Recycling and reusing
13. Avoiding the use of aerosols
14. Excessive use of plastics
15. Forest fires
16. The ozone hole
17. The greenhouse effect
18. Global warming; natural and human causes

**Teacher's notes:**

The teacher should dedicate some time to explain all the topics and to choose one. By means of the rotating sheet, all the teammates will brainstorm on the different topics. It is advisable to write down all the ideas to later on comment them orally.

See annex 4T-9T-11T-17T-What I know-What I need to know-What I've learnt

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See annex 9T-Rotating Sheet

Resources:

https://wedocs.unep.org/bitstream/handle/20.500.11822/20269/Major-Environmental-Problems.pdf?sequence=1&isAllowed=y

http://www.dphu.org/uploads/attachements/books/books_4224_0.pdf

| **10. Task: Team's topic choice** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Sense of initiative and entrepreneurship<br>Social and civic | **INTELLIGENCES** | Interpersonal<br>Intrapersonal<br>Visual-spatial |
| **GOALS** | Learning to work in teams | | |

**Task description:**

Each team will tell their classmates their topic and the reason why they have chosen it. If you all have decide on a different topic, great. However, if there are two or more teams that have chosen the same subject, then we will encourage an agreement and if that is not possible, we will decide on the topic by raffle.

**Teacher's notes:**

After having chosen the topic, students will have to represent their ideas on a poster (subject, the reason for choosing the theme, keywords…). In the previous class, students will be asked to bring their paints, crayons and markers.

| **11. Task: What I know / What I need to know** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital<br>Mathematical, scientific and technological<br>Cultural awareness and expression | **INTELLIGENCES** | Naturalistic<br>Logical-mathematical |
| **GOALS** | To be aware of the importance of data collection and observation for scientific reflection | | |

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**Task description:**

Each team will start working on their topic. In order to do so, you will fill in the What I know / What I need to know chart.

**Teacher's notes:**

The teacher will keep track of each team, and will make appropriate suggestions.

See annex 4T-9T-11T-17T-What I know-What I need to know-What I've learnt

| **12. Task: Analysis of the environment** | | | **Sessions:** 4 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital<br>Mathematical, scientific and technological<br>Cultural awareness and expression | **INTELLIGENCES** | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Verbal-linguistic<br>Logical-mathematical<br>Naturalistic |
| **GOALS** | Improve communicating and writing skills<br>Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development<br>Apply mathematical knowledge to understand, appreciate and create information and messages about environmental states and factors<br>Express the data collected when analysing the environment by means of charts and graphics | | |

**Task description:**

Taking into account the steps of the scientific method (observation, hypothesis, experiment, conclusion and scientific law), students will start to do some research. In order to do so, we will use all the resources that are handy.

**Teacher's notes:**

To start with, each team will specify what they will observe, in order to follow the steps.

| **13. Task: Interpreting graphics** | | | **Sessions:** 2 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital | **INTELLIGENCES** | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Verbal-linguistic<br>Logical-mathematical |

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| | | | |
|---|---|---|---|
| | Mathematical, scientific and technological<br>Cultural awareness and expression | | Naturalistic |
| **GOALS** | Compare today's data to the previous data and draw conclusions<br>Analyse the interaction between science and technologyand societyand environment from a critical point of view, taking part actively in the permanent development | | |

**Task description:**

We will obtain data (temperature, precipitation, humidity…) from 50 years ago. In order to get the information, students can ask the weather station or get the information from the Internet.

The data from nowadays will be written down in the same format. This way, we will learn to create and interpret graphics.

At the same time, we will compare today's data to that from the past.

**Teacher's notes:**

Resources:

http://www.aemet.es/es/portada

https://datosclima.es/

http://www.aemet.es/es/serviciosclimaticos/datosclimatologicos

| **14. Task: Learn the structure of expository texts** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital | **INTELLIGENCES** | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Verbal-linguistic |
| **GOALS** | Improve communicating and writing skills | | |

**Task description:**

Taking into account task number 8, teams will start writing their first draft versions.

**Teacher's notes:**

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Texts and videos can be produced in any language, either in the mother tongue or in the foreign language.

Resources:

http://mcnair5thgrade.yolasite.com/resources/Characteristics%20of%20Expository%20Text.pdf

https://es.slideshare.net/jmcgee6/expository-text-features

| **15. Task: Producing expository texts/videos** | | | **Sessions:** 2 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital<br>Mathematical, scientific and technological<br>Cultural awareness and expression | **INTELLIGENCES** | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Verbal-linguistic<br>Logical-mathematical<br>Naturalistic |
| **GOALS** | Improve communicating and writing skills<br>Learn to use software's to make and edit videos<br>Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development | | |

**Task description:**

Taking into account features from tasks 8 and 14, you will have to write texts and produce oral videos about your chosen topic. Bear in mind that in order to upload the texts and videos to our blog, you must try to create interesting works.

**Teacher's notes:**

Texts and videos can be produced in any language, either in the mother tongue or in the foreign language.

Resources:

http://mcnair5thgrade.yolasite.com/resources/Characteristics%20of%20Expository%20Text.pdf

https://es.slideshare.net/jmcgee6/expository-text-features

| **16. Task: Class expository presentation and feedback** | **Sessions:** 4 h |
|---|---|

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| | | | |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital<br>Mathematical, scientific and technological<br>Cultural awareness and expression | **INTELLIGENCES** | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Verbal-linguistic<br>Logical-mathematical<br>Naturalistic |
| **GOALS** | Improve communicating and writing skills<br>Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development | | |

**Task description:**

We have two options:

Teams can either pair up together (teams 1-2, teams 3-4, teams 5-6, teams 7-8) and make presentations and recommendations for further improvements to each other, or members of a team can make their presentation and the rest of the teams can give them feedback.

Later on, we will work on suggested improvements.

**Teacher's notes:**

Before the presentation it would be advisable to agree on the things that will be observed and to have a template to suggest improvements.

| **17. Task: Presentation and approval of final expository version** | | | **Sessions:** 4 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital<br>Mathematical, scientific and technological<br>Cultural awareness and expression | **INTELLIGENCES** | Interpersonal<br>Intrapersonal<br>Visual-spatial<br>Verbal-linguistic<br>Logical-mathematical<br>Naturalistic |
| **GOALS** | Improve communicating and writing skills<br>Learn to use software's to make and edit videos<br>Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development | | |

**Task description:**

We have two options:

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Teams can either pair up together (teams 1-2, teams 3-4, teams 5-6, teams 7-8) and make presentations and recommendations for further improvements to each other, or members of a team can make their presentation and the rest of the teams can give them feedback.

Later on, we will work on suggested improvements.

**Teacher's notes:**

Students will have a template with the things to be improved and they will check if they are carried out or not.

See annex 4T-9T-11T-17T-What I know-What I need to know-What I've learnt

## FINAL TASKS

| **18. Task: Make the online communication channel public** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Digital | **INTELLIGENCES** | Visual-spatial |
| **GOALS** | Improve communicating and writing skills | | |

**Task description:**

We will upload the texts and videos day by day, following the order established in task number 5.

| **19. Task: I see - I wonder - I ask** | | | **Sessions:** 1 h |
|---|---|---|---|
| **COMPETENCES** | Learning to learn<br>Sense of initiative and entrepreneurship<br>Social and civic<br>Communicating in the mother tongue<br>Digital<br>Mathematical, scientific and technological<br>Cultural awareness and expression | **INTELLIGENCES** | Intrapersonal<br>Interpersonal<br>Verbal-linguistic<br>Logical-mathematical<br>Naturalistic |
| **GOALS** | Analyse the interaction between science and technology and society and environment from a critical point of view, taking part actively in the permanent development | | |

**Task description:**

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Students will reflect upon their own work and later on they will do the same with their classmates' work.

**Teacher's notes:**

See annex 19T-I see-I wonder-I ask

| **20. Task: Final team assessment** | | | **Sessions:** 2 h |
|---|---|---|---|
| **COMPETENCES** | Social and civic | **INTELLIGENCES** | Interpersonal<br>Intrapersonal |
| **GOALS** | Learning to work in teams | | |

**Task description:**

We will assess the objectives and responsibilities established in the team planning before to reflect upon the things we have done well and the issues that must be improved.

**Assessment tools (rubrics …):**

Rubric and excel sheet.

**Teacher's notes:**

See annex 3T-Team Planning.

## BIBLIOGRAPHY

**Weather twitter accounts**

https://twitter.com/severeweathereu?lang=es

https://twitter.com/meteo_europe?lang=es

https://twitter.com/WeatherCoEurope

**Different weather stations**

https://www.nordicweather.net/nwn.php?en

http://wws-map.com/

**Weather balloon launching**

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https://www.nasa.gov/multimedia/imagegallery/image_feature_2514.html

**Environmental agencies**

https://www.eea.europa.eu/

http://www.unep.org/

UK:

https://www.gov.uk/government/organisations/environment-agency

**Mauna Loa Observatory, Hawaii  Example station on CO2 measurements**

https://www.esrl.noaa.gov/gmd/obop/mlo/

https://www.esrl.noaa.gov/gmd/ccgg/trends/monthly.html

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