





## Our Environment

**TIME** [45 MIN.]

**OVERVIEW** Google earth tools like Google voyager, EE timelapse and Google Enine tool will be used in teaching the chapter Our environment, giving students the real world experience of a visit to Different ecosystems systems, biotic and abiotic component and changes in climate.

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| <b>SUBJECT/TOPIC</b><br><b>Science/Lesson- Our Environment</b>   | <b>AGE LEVEL 14+</b>  |
|  <b>Learning Objectives</b><br><br>1. Given the content (chapter) the learners will be able to <ul style="list-style-type: none"> <li>➤ Describe biodegradable and non- biodegradable waste with 100% accuracy.</li> <li>➤ Write the definitions of Biosphere, ecosystem, biotic and abiotic components with 90 % accuracy.</li> <li>➤ Interpret and describe the 10% law giving examples with 90% accuracy</li> </ul> |  <b>Inquiry</b><br><br>1 - Students would be able to <ol style="list-style-type: none"> <li>1. Critically analyse and compare biodegradable and nonbiodegradable waste</li> <li>2. Predict the effect of removal of organism of a trophic level on previous and next trophic level</li> <li>3. Draw food chain and food web for given organisms</li> <li>4. Interact with peers and discuss 10% law of energy and Biological magnification and develop critical thinking and collaboration in the process</li> <li>5. Built character and citizenship amongst themselves by discussing /communicating the importance of proper management of waste in their daily life.</li> </ol> |
|  <b>Materials Needed</b><br><b>Pdf of lesson</b><br><b>Access to google tools</b><br><b>Black board chalk</b><br>Text Book: NCERT text book for science<br>Reference Book -CBSE Exemplar Sample papers / last years paper<br>PPT/ Video  |  <b>Lesson Summary</b> <ul style="list-style-type: none"> <li>➤ Engage: Students to read the chapter</li> <li>➤ Explore: To explore different concepts given in chapter</li> <li>➤ Explain: Idea behind</li> <li>➤ Revise: content</li> <li>➤ Apply: knowledge gained to daily life.</li> </ul>  |



## Sustainable Development Goals




## Culminating Task/Assessment

Students knowledge will be assessed through Q/A and MCQ'S.



Textbook Science Class 10 Chapter 5. Our Environment

### Engage (5 minutes)

1. Activate prior knowledge and prepare students for new concepts,  skills or processes.
2. Introduce the essential question that will guide the inquiry investigation.

### Explore (25 minutes)

1. Teachers introduce the first source of information using an Earth story or [Voyager Story](#).
2. Students record observations or evidence as it relates to the inquiry.
3. Students identify relationships or patterns and form a hypothesis based on information gained.

### Explain (20 minutes)

1. Teachers organize students into small groups or partners.
2. Students share first “hypothesis” with small group or a partner.
3. Teachers facilitate whole group discussion in which students share their hypotheses and evidence.
4. Students test hypotheses and record findings (for science/math based inquiries).

### Revise (10 minutes)

1. Students will make adjustments to their hypothesis based on information gained in discussion or test findings.

Next, repeat the process with a second source of information.

### Explore (25 minutes)

1. Teachers introduce the second source of information.
2. Students record observations or evidence as it relates to the inquiry.
3. Students identify relationships or patterns and form a hypothesis based on information gained.

### Explain (20 minutes)

1. Teachers organize students into small groups or partners.
2. Students share first “hypothesis” with small group or a partner.
3. Teachers facilitate whole group discussion in which students share their hypotheses and evidence.
4. Students test hypotheses and record findings (for science/math based inquiries).

### Revise (10 minutes)

1. Students will make adjustments to their hypothesis based on information gained in discussion or test findings.

**(Option to repeat this process with additional sources of information, each time resulting in an updated hypothesis.)**

### Apply (80 minutes)

1. Students reflect on outcomes and communicate findings.
2. Students use findings to draw conclusions and generate a solution to a problem.

### Evaluate: Exemplar Response and/or Rubric

- Tools for assessing mastery of learning objectives to be used by teachers or students for self or peer assessment.

### Additional Resources

- Links to texts or websites that relate to the topic and/or lesson.

### Options for Differentiation

- Possible modifications, adaptations or extension activities specific to this lesson.

### Credits

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1).Google Earth Resources

<https://www.biointeractive.org/classroom-resources/interactive-exploration-coralbleaching#.X23FLmeyqt8.gmail>

<https://earth.google.com/earth/rpc/cc/drive?state=%7B%22ids%22%3A%5B%221LdQAqczP1QUIYKYRV03tYjFp8MDYfbks%22%5D%2C%22action%22%3A%22open%22%2C%22userId%22%3A%22103220650329352109595%22%7D&usp=sharing>