

Google Earth Education

BIOSPHERE RESERVES IN INDIA

TIME: 80 minutes

OVERVIEW: Students will use Google Earth creation Tool to see importance of Biosphere reserves in India for conservation and development of the country.

SUBJECT/TOPIC: BIOSPHERE

RESERVES IN INDIA

AGE LEVEL: Grade 8 to 10



Learning Objectives:

- 1. To understand the need to conserve diversity and integrity of plants and animals within natural ecosystem.
- To ensure the safeguard genetic diversity
 Of species on which their continuing evolution depends.
- 3. To ensure sustainable use of natural resources through most appropriate technology for improvement of economic well-being.



Inquiry:

How world network of Biosphere reserves can be used for sustainable development and biodiversity conservation?



Materials Needed:

- Access to Google Earth.
- Link for Biosphere Reserves In India with Google Earth Creation Tool:

https://earth.google.com/earth/rpc/cc/drive?state=%7B%22ids%22%3A %5B%2216SKazjJxLbEpzxbnEv-G9PNZtpkBuvGW%22%5D%2C%22a ction%22%3A%22open%22%2C%22u serId%22%3A%2210489164703500059 4916%22%7D&usp=sharing

• Student internet access.



Lesson Summary :

- **Engage:** To understand the need to conserve plants and animals as well as endangered species.
- **Explore:** Relationship between Biosphere reserve and National Parks and how they maintain balance in biodiversity .
- **Explain**: Research and their role for sustainable development and conservation of biodiversity.
- **Revise:** Conservation of flora and fauna Role of biosphere reserves in the form of conservation function and development function
- **Apply:** Identify the role of Biosphere reserves to balance economic and social development and maintenance of associated cultural values along with preservation of nature.



Sustainable Development Goals:







Culminating Task/Assessment:

Students will find the ways in accelerating the progress in establishing sustainable development towards Biosphere Reserves.



Textbook Chapter:

CLASS VIII: CONSEVATION OF PLANTS AND ANIMALS

Engage (5 minutes)

- 1. Share the map of India showing the location of Biosphere reserves in different parts of the country.
- 2. Ask students to observe the location of Biosphere reserves.
- 3. Introduce the essential question that will guide the inquiry .What is Biosphere?

Explore (25 minutes)

- 1. Present the first source of information on Biosphere reserves in India using Google Earth Creation tool and highlight the areas of Biosphere reserves.
- 2. Students record observations or evidence as it relates to the inquiry.
- 3. Students identify relationship between Sanctuary, National park and Biosphere reserve.

Explain (20 minutes)

- Teachers organize students into small groups or partners to share observations featured in Google Earth Tool.
- 2. Ask Students share first "hypothesis" with small group or a partner. Why Biospheres are important for conservation of flora and fauna.
- Teachers facilitate whole group discussion in which students share their hypotheses and evidence and discussion about Biophere reserves.
- 4. Allow time for students to share their ideas with class and ask record their observations.

Revise (10 minutes)

1. Students will update their hypothesis based on information gained in discussion or test findings and record their observations about advantages of Biosphere reserves to maintain ecological balance.

Apply (80 minutes)

- 1. Students will reflect on the outcomes of lesson and understand why human activity is not allowed inside Biosphere reserve.
- 2. Students use findings to draw conclusion that how Biosphere Reserves can contribute to the conservation of landscapes, ecosystems, species and genetic variations along with economic development which is socio-culturally and ecologically sustainable.

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

- Biosphere reserves in India- Wikipedia
- Biosphere reserves in India Class VIII NCERT

Options for Differentiation

- Provide options for presentation format (video, audio, visual, etc).
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Credits

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