

## Tackle Climate Change

*Upper Primary and Lower Secondary*

### Key Inquiry Questions

1. What is climate change and how does it affect our planet?
2. Based off of provided resources, what countries are being affected heavily by climate change?

### Learning Outcomes

1. Students will be able to understand the effects of climate change by the end of the lesson.
2. Students will be able to discuss ways to contribute to their community to prevent climate change by the end of the lesson.
3. Students will be able to give a description as to why we need certain resources to have a sustainable community by the end of the lesson.

### Overview

In this lesson, students will determine what climate change means and how they can prevent it further in their community. The lesson will begin with students discussing with one another what they have heard about climate change and what it means to them. They will then, as a class, create a mind-map for climate change (a description of what a mind-map is and how to do it is described further below). After this, they will watch the video “Tackle Climate Change in India With Chakra the Invincible Mighty Girl” while answering questions related to the video while watching. After finishing the video, students will get together in groups and create an island with their idea of “sustainable living”. They will then present this to the class when they are done.

### Materials

#### **SolarSPELL Resource:**

1. “Tackle Climate Change in India with Chakra the Invincible and Mighty Girl” (Reference Tools -> Sustainable Development Goals -> Videos)

#### **Other:**

1. “Tackle Climate Change in India with Chakra the Invincible and Mighty Girl” Questions Worksheet.
2. Paper and writing utensil if possible

## Suggested Procedure

### Before the Lesson:

- Start the lesson off by asking the kids what they think climate change means:
  - Have the students think to themselves for a few minutes and then have them discuss the question with a shoulder partner.
  - After some minutes of them discussing with one another, create a mind-map as a class.
    - Begin by telling the students what a mind map is: “A mind-map is a collection of small ideas for one big main-idea. It allows someone to bring in small concepts to support their central concept. For this particular assignment, our main idea is Climate Change. To start a mind-map, make sure your central concept, which is Climate Change, is in the center of the page. Once that is done, use lines, arrows, etc. to show the branching of supporting ideas. For this discussion, we are using lines to branch.”
      1. Create a small circle in the center of a paper or a board for all students to see and write Climate Change in the middle of the paper.
      2. Ask students to share out ideas that they discussed with their shouldren partners
        - a. When a student shares out an idea, for an example we will say irregular weather conditions, draw a line from the central circle connecting to a smaller circle. Once this smaller circle is drawn, write the idea stated, in this example, it would be irregular weather conditions.
      3. Repeat step two until you feel like the students have a good mind-map laid out.

### During the Lesson:

- Watch the video, “Tackle Climate Change in India With Chakra the Invincible Mighty Girl” located on the Solar SPELL website under Resources- Sustainable Development Goals- Videos.
  - As students are watching the video, pick one of the options to complete while the video is running:
    - Option 1:  
Have students follow along with their own individual worksheet, provided below, while the video is running.
    - Option 2:  
Have students write the questions on a sheet of paper, before the video plays, and have them answer as the video is running.
    - Option 3:  
With each question, provided is a time on the video where the question is answered. Once the video answers the question, pause the video, and ask the students the question verbally. After hearing a few of their answers continue on with the video until the next question comes up. Continue until the end of the video.



After the Lesson:

- Divide the students into even groups and place them far enough from one another around the room.
- Once the students are divided provide them with instructions for their activity:
  - On a piece of paper, you and your team will come up with an island to live on and for sustainable living. When creating your island you want to keep in mind of resources you will need: think of renewable resources as well as anything else you might need for living. Some examples of things you may need may be a school, a place to get water, etc.
- Allow the students to work with their team for a total of 20 minutes.
- Once they are done allow each group to come up and explain their island to the class.
  - After they are done presenting ask them questions like:
    1. What resources are found on your island? How will you utilize these resources?
    2. How will these resources help if a natural disaster happens?
- Assessment:
  - Walk around as students are working to make sure all students are contributing to the project.
  - Watch how students present: Do all of them talk? Do all of them give detail about some part of the project?

## Tackle Climate Change Video Worksheet (Answers)

1. How does the Pollution affect his asthma? (0:59)

Answers may include:

- The air contains harmful particles when burning fossil fuels and other nonrenewable resources.

2. Defined by the video, what is climate change and what has it caused in the environment? (1:25)

Answers may include:

- An increase of carbon dioxide in the air.
- Traps heat in the atmosphere.
- Causes the greenhouse effect.

3. What is the Greenhouse effect and what does it cause? (1:40)

Answers may include:

- Changes the temperature and weather patterns around the world: floods, droughts, damaging floods.

4. What can you do, as individuals, for your community involving climate change? (4:08)

Answers may include:

- Home and school are prepared for floods.
- Evacuation plans and people are aware of these plans.
- Keep the streets clean.

5. How can we conserve water for the community? (4:37)

Answers may include:

- Install rainwater systems in housing.
- Turn off the faucet when brushing your teeth.
- Short showers.

6. What can we do to prevent ecological disasters? (5:18)

Answers may include:

- Encouraging sustainable production: farm oil.
- Discourage burning down forests.

7. What else can we do to decrease the bad effects of climate change? (7:06)

Answers may include:

- Make sure the government is using/ switching to renewable energy.
- Ride a bike or use public transportation.



## Tackle Climate Change Video Worksheet

1. How does the Pollution affect his asthma?
2. Defined by the video, what is climate change and what has it caused in the environment?
3. What is the Greenhouse effect and what does it cause?
4. What can you do, as individuals, for your community involving climate change?
5. How can we conserve water for the community?
6. What can we do to prevent ecological disasters?
7. What else can we do to decrease the bad effects of climate change?