

3. Map the Hazard

Real World Goals

1. Sinking Island	Introduce sea-level rise and flooding with a game. [10 mins]
2. Hazard Map	Critically think through extreme weather events, hazards and impacts through a mapping challenge. [30 - 40 mins]
3. Seasonal Calendar B	Discuss how climate has changed around you, by adding your investigation results to the seasonal calendar [10 mins]
4. Future Change	See scientific projections on temperature and rainfall for 2100. Think about the two types of actions we can take; (i) to STOP climate change or (ii) to DEAL WITH its impacts [10 mins]

Preparation

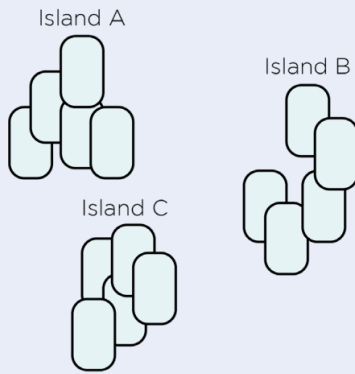
Materials	<ol style="list-style-type: none"> 1. Printed 'Extreme weather and hazard cards' [Resources] 2. Printed 'Future change card' [Resources] 3. Printed 'Taking action, CCA and CCM card' [Resources] 4. 30 sheets of scrap paper, each roughly A4 size 5. Pens / pencils for all players 6. 'Seasonal calendar' from session 2 7. Post-it notes / small pieces of paper in 4 colours
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Activity 1 – Sinking Island

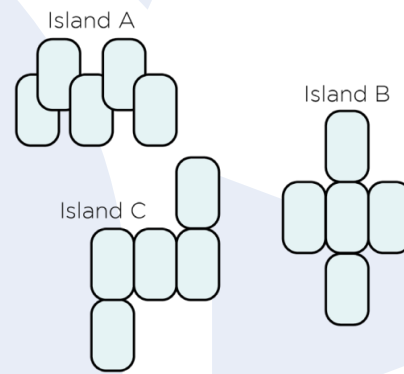
Set-up

1. Give each youth a piece of scrap paper, approximately A4 size.
2. Divide youth into groups of 4 - 6.

- Groups arrange the papers on the floor to make an “island”. The island can be any shape, but all the sheets must touch at least one other sheet.



Example 1



Example 2

Instructions

- Each group stands on their paper island. They represent a population.
- Explain that sea level rise is making all the islands smaller. Each round there is a countdown. The last team to remain on their island wins the game.
- Countdown from 10 to 1
 - If all team members remain safely on the island -by not stepping off the paper- they proceed to the next round!
- Say many years have passed and the sea level has been rising. All remaining players step off the island. Remove 1 piece of paper from each island. Teams CANNOT rearrange their island.
- Players get back on their islands. Countdown from 10 to 1 again and, teams that are safe can proceed to the next round.
- Continue until there is one team left.
 - If multiple teams get down to 1 piece of paper, fold that piece of paper in half and play one last round.
- Announce the winning team!



Sinking island

Activity 2 – Hazard Map

For Facilitators

	Extreme Weather & Climate Events	Hazards	Impacts
Extreme weather event	Heatwaves	<ul style="list-style-type: none"> • Heatstroke • Water shortage • Increased malaria • Dengue 	<ul style="list-style-type: none"> • Animals get sick • People get sick or die • Crops can die • Not enough food • Damaged forests • Less fresh water •
	Drought	<ul style="list-style-type: none"> • Water shortage • Wind erosion • Desertification • Increased risk of wild fires 	<ul style="list-style-type: none"> • Less or no crops • Less fresh water • Incomes are lost • Financial losses
	Extreme Rainfall	<ul style="list-style-type: none"> • Flooding • Flash –floods • Land-slide • Erosion 	<ul style="list-style-type: none"> • Contaminated water • Crops can be washedaway • Animals and people can drown •
	Storms <i>tropical storm, cyclone, typhoon</i>	<ul style="list-style-type: none"> • Severe wind • Storm surge • Flooding 	<ul style="list-style-type: none"> • People dying • Animals dying • Incomes are lost • Loss of incomes •
Climate event	Changing Rainfall Patterns	<ul style="list-style-type: none"> • Delayed or early rainfall • Infrequent and unpredictable rainfall 	<ul style="list-style-type: none"> • Crops can die • Incomes are lost • Interrupted transportation • Financial losses
	Increased Temperatures	<ul style="list-style-type: none"> • Increased malaria • Dengue Sea Level Rise • Increased evaporation 	<ul style="list-style-type: none"> • Animals get sick • People get sick • Less or no crops • Not enough food • Damaged forests • Less fresh water • Water shortages

Set-up

1. Divide 'Extreme weather event cards' and 'hazard cards' in 2 separate piles.
2. Divide the youth into 4 groups.

Instructions

Part 1:

1. Give groups 3 minutes to write a list of extreme weather events that impact their community.
2. Each group should pick one extreme weather event from their list.
3. Each group now has 5 minutes to create a series of 3 'freeze frames'.
4. Using only their bodies and freezing in place, just like a photograph, groups must show (i) the beginning, (ii) middle and (iii) end of how the extreme weather event impacts their community.
5. Each group presents their 3 freeze frame photographs. The facilitator can introduce by saying; 'Freeze frame 1', Freeze frame 2', Freeze frame 3'.
6. The other groups watch and guess what the sequence of events is.



Freeze Frame 1



Freeze Frame 2

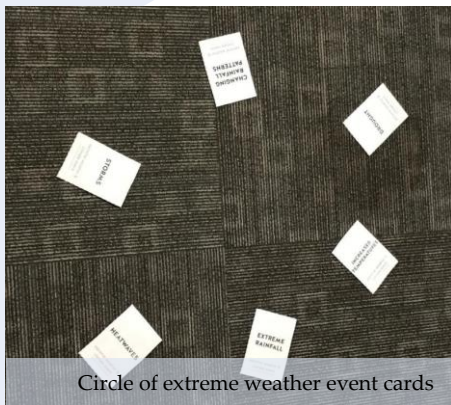


Freeze Frame 3

Part 2:

1. Youth stay in the 4 groups.
2. Place the 'extreme weather event cards' in a circle facing outwards.
3. Ask youth if any of these extreme weather events do NOT happen in their community? If yes, remove these cards from the circle.
4. Distribute all the 'hazard cards' between the 4 groups.
5. Ask youth if any of the hazards do NOT happen in their community. Groups should return these cards to the facilitator.

- Groups should place the hazard cards under the extreme weather event cards that causes that hazard. Example: Heavy rain can cause floods; therefore, you could place the 'floods' card under the 'heavy rain' card.



Part 3:

- Ask youth to return to their 4 groups.
- Ask youth to think about the impacts of the hazards in their community.
- Ask if the hazards impact different groups of people in different ways. For example, how does a flood affect children, youth, elderly, men, women?
- Explain that the same hazard can impact different people in different ways. For example, flooding may cause a school to close. This impacts youth as their education stops, teachers are impacted as their income may stop and farmers may be effected as crops could fail. These are 'differentiated impacts.' It is important to think about this when planning actions.
- Give each group 4 pieces of paper in 4 colours. Assign each colour:
 - Colour 1 represents youth
 - Colour 2 represents men and boys
 - Colour 3 represents women and girls
 - Colour 4 represents a social group of the youth's choice
- Groups choose a hazard and write the impacts on relevant coloured papers.
- Add the impact papers to the map, under the relevant hazard.
- Repeat 6 and 7 until youth are happy impacts are captured or time runs out.



Part 4:

1. Ask each youth to choose 1 extreme weather event or hazard that happens most OFTEN in their community. They draw a tick (✓) on that card. They cannot choose their coloured impact papers.
2. Ask each youth to choose 1 extreme weather event or hazard that has the biggest IMPACT in their community. They draw a star (*) on that card. They cannot choose their coloured impact cards.
3. Select the 5 cards that have the most ticks and stars combined.
4. Write these top 5 extreme weather events and hazards on separate papers.



Ranking hazards using tick and star markings

Activity 3 – Seasonal Calendar B

Set-up

1. Stick the seasonal calendar from session 2, activity 2 up on a wall or board.
2. Add the top 5 extreme weather events and hazards, chosen by the youth in Session 3 to the seasonal calendar, below the weather conditions.



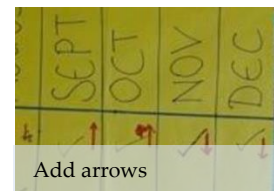
Adding top 5 extreme weather event and hazards (green papers on left)




Instructions

1. Ask youth to make a semi-circle around the seasonal calendar in order of their birthday month.
2. Ask a volunteer to stand at the calendar with a marker pen.
3. Starting with the top ranked extreme weather event and hazard. Ask the youth if this happens in January. They should shout 'Yes!' or 'No!'
4. If 'Yes', the volunteer should draw a tick mark (✓) under January.
5. If 'No', the volunteer leaves the space blank.
6. Repeat step 3 with the remaining months. Try to do it as quickly as possible!
7. Repeat with the remaining four top hazards.

Review Investigation

1. Ask youth to discuss with others in their birthday month their investigation findings -asking elders about how the weather has changed.
2. Each 'month' should agree whether the normal or average weather today is:
 - a. Hotter, colder or the same as compared to 30 years ago?
 - b. Wetter, drier or the same as compared to 30 years ago?
3. Ask 1 youth from each month to add their findings to the seasonal calendar.
4. Use arrows or equals symbols to show how the normal weather conditions (hot, cold, rainy or dry) may have changed over the last 30 years.



Increased: Now more than 30 years ago 	Decreased: Now less than 30 years ago 	The same: Similar now to 30 years ago 
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Future Change

1. Explain that the seasonal calendar shows their experience of what the normal weather is like in their community and how it may have changed.
2. Explain that we can also use scientific information to learn more about how the climate is changing.
3. Show youth the 'future change' resource card, showing how temperature and rainfall is predicted to change between now and the year 2100.
4. Read the back of the card and talk through the discussion points.

Taking Action

1. Discuss that there are two types of action we can take on climate change:
 - a. Actions to STOP climate change from getting worse: 'Mitigation.'
 - b. Actions to DEAL WITH the impacts of climate change: 'Adaptation.'
2. Explain 'Climate Change Mitigation' by talking through the resource card. Discuss to effectively stop climate change getting worse, we need all the countries in the world to agree to reduce their greenhouse gas emissions.
3. Explain 'Climate Change Adaptation' by talking through the resource card.
4. Ask the youth which type of action Y-Adapt focuses on. Ask if they remember the adaptation cards in session 1.
5. Discuss that Y-Adapt focuses on youth-led climate change ADAPTATION: youth-led action to deal with climate change and reduce impacts in your communities.

Debrief

1. Ask the questions below. Youth can discuss with the person next to them:
 - a. Review the weather, hazards, and impacts map. What do you notice?
 - b. Review the updated seasonal calendar. Did anything surprise you?

Session 3 Closing

1. Congratulations, we have completed Session 3 of Y-Adapt!
2. Remember in Session 2 we saw the link between greenhouse gases, global warming, climate change and extreme weather events across the world? In Session 3, we saw the links between extreme weather and the impacts in your community. The chain is getting complete!
3. We discussed actions to stop climate change, and actions to deal with climate change. In the next sessions you will plan your own actions to deal with climate change in your community. We'll start by prioritising important people, places and things (resources) and thinking about how these interact as systems.