Protect the Planet

IT'S ABOUT US

Aim: To gain insights into environmental issues facing the global community

Objectives: Young people will...

- Be informed about the issues facing the planet.
- Explore the vulnerability of our ecosystem and atmosphere.
- Consider their role and responsibility addressing these issues.

You will need: Balloons, Sellotape, ballpoint pens.

View:

- Is the Earth past the tipping point? This video gives a brief description of the environmental issues brining our planet close to the tipping point. The question is have we reached a point we cannot return from?

4m

Handout:

- **'Our World, Our Impact'** fact sheet or display it on the whiteboard.

20m

Activity: Our Sensitive Planet

- **Depending on group size, do the exercise in a large group or divide the class in half.**

A sustainable world is a world in which our planet can meet the needs of our present society without compromising the needs of future societies. To do this we need to find a balance between an economic system that can sustain a just social system within a finite ecosystem. This can be a difficult balance to reach and many suggest we are at a cliffs edge and need to make rapid changes before it is too late. **See if you are able to make the changes in time.**

1. Blow up a balloon fully. Hand it to a participant and ask them to think of or read out an issue the planet is facing that we need to change (they can use the handout provided).
2. Ask them to take a piece of tape and stick it to the balloon. Write the issue on the tape using a ballpoint pen. Pass it to the next person.
3. The next person must remove this piece of tape unless they have done something to deal with this issue (example Pollution: they cycle to school instead of drive).
4. Once they have removed the tape they can then read out and add the next issue to the balloon and pass it on. Repeat.

- **Note: If the balloon bursts early you can start another. If it doesn't burst they have succeeded in sustaining the delicate balance of the earth.**

10m

Discussion Points: How did you feel about this exercise?

- Does it represent how you feel about our planet?
- Do you feel a sense of urgency to change the way we are managing our planet?
- Do you feel you can make a difference or are you overwhelmed by all the information and feel powerless?

 **3m**	**View:** • Youth Sustainability Challenge - YSC Video Carmel Green Teen Micro-Grant Program. In this video young people talk about ways they have improved their environments. • **Note: If you have more time these are a few more 3 minute videos, inspiring young people to get involved and make a difference.** • Growth • Chloe Maxmin • Secret Life of the Mobile Phone
 **5m**	**Closure:** "The future depends on what you do today." **Mahatma Gandhi** • Write down a pledge of what you plan to do with the information you have learned today.
  **10m**	**At Home:** • Handout and assign a profile card to each participant. Include profiles from all four groups. • Ask participants to visit the It's About Us website and view the matching video from their profile card. Answer the questions on their sheet. Ask participants to think about how the environment has impacted on their chosen profile.

Take Action 'Taking on the responsibility challenge'

1. Brainstorm and decide on how your group can take action and encourage people to take on the responsibility challenge.
    1. Hold an art exhibition on what needs to change in our community, nation or world
    2. Perform a flashmob about change
    3. Create an art installation, graffiti wall, mosaic, community garden
    4. Stage a play
    5. Put up an information stand, ask people what they are responsible to change in our world, ask them to make a commitment pledge
2. Plan your event using our toolkit
3. Contact local media to cover the event
4. Spread your message online
5. Prepare, Rehearse, Motivate and Participate

Our World, Our Impact

Issue:		Fact:	Source:
1	**Climate Change**	CO2 is responsible for 2/3 of all additional warming caused by humans.	IPPC February 2007 Report.
2	**Global water crisis**	3 times more water is being used today compared to 50 years ago, compared to only a twofold increase in population.	"Out of Water: From Abundance to Scarcity" - Chatres & Varma.
3	**Poverty**	Over 80% of the world lives on less than $10 a day.	www.globalissues.org/article/26/poverty-facts-and-statistics
4	**Overpopulation**	We have already overshot the world's carrying capacity.	www.earthday.org/blog/2013/08/20/earth-overshoot-day-2013
5	**Deforestation**	An area of trees the size of Ireland is destroyed each year in the Amazon.	www.greenfacts.org/en/forest/l-3/2-extent-deforestation.htm#3p0
6	**Malnutrition**	1/8 of the world's population is malnourished.	www.worldhunger.org
7	**Inequality**	The top 10% of U.S. households control 73.1% of the wealth in the U.S.	"Recent Trends in Household Wealth in the U.S." - Levy Economics Institute.
8	**Sanitation**	88% of all waterborne diseases are caused by inadequate sanitation.	World Bank / "All About: Water and Health" - CNN 2007.
9	**Biodiversity**	Many of these issues cause dwindling biodiversity, and biodiversity is key to ecological stability.	http://www.ncbi.nlm.nih.gov/pubmed/23346947
10	**Air Pollution**	At one time, volcanic activity was the main cause of air pollution, now humans are.	http://www.thenakedscientists.com/HTML/questions/question/2008/
11	**Soil Pollution**	The increase in acid rain, fertilizer run-off and rising temperatures are polluting waters and reducing aquatic biodiversity.	http://www.sciencelearn.org.nz/Contexts/Life-in-the-Sea/Science-Ideas-and-Concepts/Human-impacts-on-marine-environments
12	**Overconsumption**	The first world consumes 32 times more resources than the third world.	http://www.theatlantic.com/past/docs/issues/97jun/consume.htm
13	**Overfishing**	If current fishing rates continue, ALL of the world's fisheries will collapse by 2048.	Science Magazine 2006.
14	**Food waste**	Up to 50% of all food produced is wasted.	"Global Food; Waste Not, Want Not" - IMechE.
15	**Ozone depletion**	Most Ozone depletion occurs as a result of CFC's and halocarbons from industrial processes. Most of these chemicals are now banned worldwide.	www.newscientist.com

Issue:		Fact:	Source:
16	**Waste/Landfill**	Over 40 million tonnes of landfill gas is produced annually. This contains trace amounts of Mercury gas, a harmful toxin.	www.ghgonline.org
17	**Energy consumption**	86% of the world's energy is generated from non-renewable resources.	The U.S. Energy Information Administration.
18	**Acid Rain**	Aquatic life is sensitive to pH, as a result, acid rain harms many aquatic organisms.	http://www.epa.gov/acidrain/effects/surface_water.html
19	**Dead zones in oceans**	These areas of water contain almost no oxygen, due to algal bloom. As a result, aquatic life is killed off.	http://oceanservice.noaa.gov/facts/deadzone.html
20	**Species Extinction**	The current rate of species extinction is 100-1000 times greater than before humans.	"IUCN Red List - Species Extinction - the Facts".
21	**Urbanization**	Today, almost half the population of the planet lives in an urban environment.	UN-HABITAT - World Urban Forum 3 - Urbanization Facts & Figures.
22	**Dwindling natural resources**	1.5 earths worth of resources are consumed each year. This is due to rise to 2 by the end of the century.	www.earthday.org/blog/2013/08/20/earth-overshoot-day-2013
23	**Proliferation of weapons**	There are currently 20000 nuclear warheads in existence, more than enough to effectively end life as we know it.	www.ploughshares.org
24	**Desertification**	The rate of desertification increases exponentially with loss of vegetation from over farming.	"Mediterranean Desertification" - Geeson, Nichola et al.
25	**Electronic Waste**	In Guiya, China (the e-waste capital of the world) 82% of children have dangerous levels of lead in their blood.	Prof. Huo Xia, Shantou University Medical College.
26	**Light pollution**	The excess light wastes energy, adding to CO2 emissions	"Public Lighting - Energy Efficient Street Lighting" www.environment.gov.au
27	**Pollinator decline**	Bees account for much of the pollination of food crops. Their loss would devastate food production.	Roger Morse & Nicholas Calderone (Cornell University).
28	**Rising ocean temperatures**	Higher temperatures lower the oxygen content of water, leading to widespread aquatic devastation.	http://water.epa.gov/type/rsl/monitoring/vms52.cfm
29	**Energy consumption**	China is burning almost as much coal as the rest of the world combined.	U.S. Energy Information Administration.
30	**Food Shortage**	The world's cattle alone consume an amount of food equal to the caloric needs of 8.7 billion people.	http://www.greenpeace.org/usa/en/multimedia/goodies/green-guide/green-lifestyle/go-vegetarian/
31	**Greenhouse Gases**	Worldwide livestock farming generates up to 18% of the planet's greenhouse gas emissions — by comparison, all the world's cars, trains, planes and boats account for a combined 13% of greenhouse gas emissions.	Read more: Meat: Making Global Warming Worse - TIME http://content.time.com/time/health/article/0,8599,1839995,00.html#ixzz2kM0dwpLR
32	**Waste/landfills**	Every day, America produces waste equal to the weight of the Empire State Building.	http://www.unep.org/wed/quickfacts/
33	**Recycling**	Recycling one aluminum can saves enough electricity to power a TV for three hours.	http://www.recycling-revolution.com/recycling-facts.html