



Caring for the Planet, Feeding Our World

The Environment

MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY

The aim of these lesson plans is to enable teachers to explore the relationship between the environment and people, particularly those living in poverty, with 5th and 6th class pupils.

This lesson plan will:

1. Introduce your pupils to global environmental issues
2. Examine the links between the environment and people
3. Introduce your pupils to the Millennium Development Goals (MDGs)
4. Highlight the links between MDG7 and the other MDGs, particularly MDG1 (reducing poverty and hunger).

STRUCTURE OF THE LESSONS:

There are four lesson plans. Each lesson takes between 40 minutes and 1.5 hours. They can be adapted to your pupils' abilities, knowledge and experience. It is not necessary to use all of the lesson plans but they have been developed to lead you through the topics, each lesson building on the one before. They can be done separately or together in a way that fits into your schedule.

CONTENTS OVERVIEW:

Glossary	Key terms used in the lesson plans and their definitions
Lesson 1 overview:	Introduction to the Millennium Development Goals
Lesson 2 overview:	Introduction to environmental issues
Lesson 3 overview:	Case study on farming in Malawi
Lesson 4 overview:	Simulation game on subsistence farming
Lesson 5 overview:	Acting for Rio +20

PLEASE NOTE:

A good way to help your pupils remember the MDGs is to put up a poster of the MDGs in the classroom. Here are different posters for you to choose from:

- Change the World in 8 steps: downloaded from the MDGs Resources section of Oxfam
http://www.oxfam.org.uk/education/resources/change_the_world_in_eight_steps/?37
- Caritas Australia: downloaded from:
<http://www.bemore.org.au/attachments/db/bmp/140.pdf>

GLOSSARY

*Where words in the glossary appear in the lesson plans they are marked in by a **blue surround***

Agriculture	Growing crops and raising livestock (e.g. cows and sheep).
Agro-forestry	Growing crops and trees together. This helps the crops to grow better. It creates healthy soils and land, and allows the land to be farmed for longer.
Climate change	The changing temperature, rainfall, and wind of a particular place over a long time. Changes in the climate are happening now because of humans and our use of fossil fuels (see below). The changing climate is causing drought in some places and flooding in others. The world's poorest people are most affected by climate change.
Deforestation	The cutting, clearing, removal of forest to make way for other land uses, like farming or building.
Environment	The area where something/someone lives.
Fossil fuel	Oil, coal, or natural gas found in the earth; Made from dead plants and animals which would have lived millions of years ago and now used for fuel.
Grafting	Taking a bud or shoot from one plant, and putting it into a stem of another plant, in which it continues to grow. Doing this makes a better plant, which can provide more food.
Greenhouse effect	The air around the earth does a very important job. It lets the sun's warmth in and traps it, like a blanket. The gases which trap the sun's rays are carbon dioxide, water vapour, and methane. But now, there are too many of these gases in the air and they are trapping too much heat causing the earth's temperature to rise, and causing climate change.
Greenhouse gases	Gases that cause the greenhouse effect e.g. carbon dioxide, water vapour, and methane. Humans have put too much of these gases into the air by burning fossil fuels, causing climate change.
Interaction	A two – way action that occurs as two or more objects have an effect upon one another.
Irrigation	Bringing water to land or soil.
Malaria	A disease which causes a high fever and affects the red blood cells. The disease is given to humans by the bite of a type of female mosquito found in tropical countries.
Nutrients	Ingredients in food which are nourishing and healthy; that is, used by a body to grow and be healthy e.g. vitamins.
Nutrition	Food which provides the body with all the nutrients that is needed for growth and repair.
Undernutrition	When a person does not have enough food to eat and goes hungry.
Malnutrition	Malnutrition can occur when a person does not have good quality, nourishing food to remain healthy; the person can be either overweight or underweight.
Pollution	The damage to soil, water, or the air by harmful substances such as bacteria, chemicals and waste

Sanitation	What we use for getting rid of body waste safely or hygienically, e.g.: a toilet.
Siltation	The pollution of water by very fine (small) pieces of soil
Slum	Area of very poor and overcrowded housing in a city.
Soil erosion	The way that soil is removed from the earth's surface by nature e.g. rivers or by people e.g. when the soil is over used and the rain washes it away.
Soil fertility	Soil which has the right conditions, including nutrients, for growing plants
Smog	Fog that has become mixed and polluted with smoke
Species	A category of a particular plant or animal.
Subsistence farming	Farming that focuses on growing enough food to feed families.
Sustainability	The idea of living within the limits of the environment, so that it can support humans now, and in the future.

Lesson 1 – Introducing the Millennium Development Goals

Outline: Using writing and matching activities to explore the Millennium Development Goals

Learning outcomes

The children will:

- Understand the origins of, and reasons for, the Millennium Development Goals (MDGs)
- Be able to describe the Millennium Development Goals in their own words

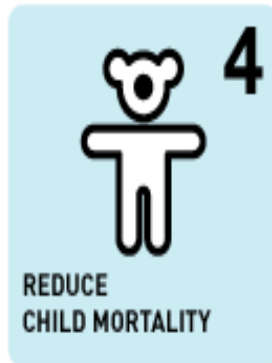
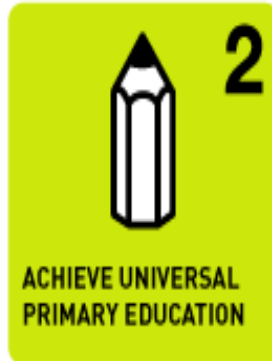
You will need

- Millennium Development Goals Teacher Information Sheets (for your information)
- The MDGs: In my own words worksheet (see following pages)
- MDG Linking work sheet (see following pages)
- 8 Dictionaries
- Pens/pencils
- Whiteboard/blackboard

Learning experience

- 1. Introduce the MDGs:** Explain to your class: In 2000, 189 countries including Ireland, signed up to achieve the Millennium Development Goals (MDGs). The MDGs are 8 goals to help the world's poorest people meet their needs. The aim of the Goals is try to overcome the biggest problems that face the world's poorest people. We are going to learn what these Goals are.
- 2. Writing activity (a) – The MDGs In my own words:**
 - a. Divide your class into 8 teams. Give each team an MDG from the MDGs 'In my own words' worksheet (on the next page).
 - b. Ask each team to put their MDG into their own words. They can use dictionary to find out what the words mean. While your pupils put the MDGs into their own words, write the full MDGs list – with logos – on the board.
 - c. Ask each group to feed back to the other groups. Each group reads out their own explanation which is written up as a parallel list on the blackboard/whiteboard.
- 3. Writing activity (b) – linking problems to the MDGs:** This activity can be done in groups, or each pupil can do it individually.
 - a. **Hand out the MDG Linking worksheet (one per group/per pupil).** Ask each group/pupil to link each problem to an MDG. (e.g. PROBLEM: OVER HALF THE WORLD'S CHILDREN ARE BORN INTO POVERTY = MDG 1)

WRITING ACTIVITY (a):
THE MDG's in your own words



My/Our MDG is:

**My/ Our MDG means in my/own
own words:**

WRITING ACTIVITY (b):

THE MDGs linking worksheet

Match the problem with the correct MDG. On this worksheet there are 8 problems. Meeting the MDG targets would help to solve these problems. Match the problem with the right MDG. Here's one example to get you started...

Over half of the world's children are born into poverty

1 child under 5 years of age dies every 4 seconds due to hunger or preventable

In developing countries almost 3 million people die every year from TB (a lung disease) and malaria. Hundreds of millions more

72 million children around the world are out of school



A woman in sub-Saharan Africa is over 200 times more likely to die when having a baby than a woman in Ireland

The world's poorest people are the least powerful. They can find it difficult to get governments and rich countries to listen to them

Women grow most of the food in poor countries, but women only own 1% of the land

1 in 3 of the world's people don't have proper toilets or washing facilities and almost 1 in 3 children in developing countries has no clean water to drink