

WithOnePlanet

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Investigate

Lesson 6

Teacher notes

Carbon's call to action

Years

5 to 6



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INQuIRY     

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Open education
An xpend Foundation initiative

Carbon's call to action

Lesson 6: Teacher notes

This document provides the teacher with the details of the lesson.

At a glance

To provide students with hands-on, shared experiences of:

- > advertising campaigns that increase public awareness of the effects on Earth's climate of using energy and resources
- > the development of similar campaigns at a school level.

To support students in representing and explaining their understanding of the role of human activity in the production of carbon dioxide, its connection to climate change, and the education and awareness-raising strategies that help reduce human impact on the environment.

Students:

Analyse the Victorian Government's Black Balloons advertising campaign and plan a similar campaign for their school.

INQuIRY focus: Investigate

The *Investigate* phase is designed to provide students with hands-on experiences of the science phenomenon. Students explore ideas, collect evidence, discuss their observations and keep records, such as science journal entries. The *Investigate* phase ensures all students have a shared experience that can be discussed and explained.

In the *Investigate* phase students develop a literacy product to represent their developing understanding. They discuss and identify patterns and relationships within their observations. Students consider the current views of scientists and deepen their own understanding.

Assessment guide

This assessment guide supports teachers in identifying the types of assessment that are appropriate for this lesson.

Formative assessment is an important aspect of the *Investigate* phase. It involves monitoring students' developing understanding and giving feedback that extends their learning. It involves monitoring students' developing understanding of:

- > the production of carbon dioxide (in the form of black balloons) from human activity, the connection to climate change and the education and awareness-raising strategies to help reduce human impact on the environment.

You will also monitor their developing science inquiry skills.

Summative assessment of the science inquiry skills is another important focus of the *Investigate* phase. Rubrics can be used to gauge the level of student achievement on performance tasks.

Key lesson objectives

Science

Students will be able to:

- > analyse the effectiveness of an advertising campaign in terms of its ability to raise awareness and educate the public on the link between the energy and resource consumption of daily activities and the release of greenhouse gas, contributing to climate change
- > develop a school-based campaign based on this analysis

Literacy

Students will be able to:

- > contribute to discussions about the effectiveness of an advertising campaign in raising awareness and educating the public about energy and resource use and their links to climate change
- > create multimedia presentation tools to communicate ideas, descriptions and explanations to a wider audience

This lesson also provides opportunities to monitor the development of students' general capabilities.

Teacher background information

The Victorian Government's 'You have the Power. Save Energy' campaign involved a series of black balloon television commercials about greenhouse gases. The NSW Government also ran a very similar black balloon campaign entitled 'Save Power'.

The black balloons represented the volume of greenhouse gas (ghg) produced when people used energy in their homes. Each balloon represented 50 grams of carbon dioxide and therefore the more balloons produced by a particular household activity, the greater the number of black balloons produced. In the commercials, black balloons poured out of various household appliances including an air-conditioning unit, a television and a clothes-dryer.

The campaign encouraged the public to increase their awareness of the energy consumption of various household activities and to actively minimise high-energy appliance use as one way of reducing greenhouse gas production and therefore minimising the effects of human-induced climate change.

Equipment

For the Class

- > Nil

For each Student

- > A copy of the *Black balloons campaign Student worksheet*
- > A pencil, pen and a ruler
- > Access to a computer
- > Video-making equipment and facilities, including cameras and editing software
- > Optional: Access to the internet

Preparation

- > *Black balloons campaign Student worksheet:*
 - Read through the Student worksheet and prepare all necessary materials and equipment.

Lesson steps

1. Students to watch the following commercials that were part of the Victorian and NSW Governments' Save Energy (VIC) and Save Power (NSW) black balloons advertising campaigns in 2009 (this forms Part A of the *Black balloons campaign Student worksheet*).
 - > Save Energy (VIC), <http://youtu.be/gcMNZuelyNI> and <http://www.youtube.com/user/SaveEnergyVic/videos> (11 more videos from the same advertising campaign)
 - > Save Power (NSW), <http://youtu.be/YhcZQmt6Spo>
2. Complete the *Black balloons campaign Student worksheet* – Part B: School survey.
3. Complete the *Black balloons campaign Student worksheet* – Part C: Create your own commercial.