



# Chasing the Wind

## Climate Change - crisis or con?

Teacher: ..... Lesson: .....

Group: ..... SEN students: .....

Date: ..... Support Staff: .....

Room: ..... .....

In this activity students will be involved in a role play TV debate where they will present different perspectives on the causes and effects of global warming. They will also engage in small group and whole class discussions - also in role. This activity will take more than one lesson.

### Students will learn to:

- Identify and select the evidence for global warming and its possible causes, including the effect of human activity.
- Interpret evidence for and against global warming.

### All students will be able to:

- Identify evidence for global warming and its possible causes.
- Describe the effects of global warming on the Earth.

### Most students will also be able to:

- Construct a scientific explanation for the greenhouse effect.
- Explain the arguments against global warming.

### Some students will also be able to:

- Identify strong and weak arguments in the global warming debate using evidence to back up your decisions.

- 'Chasing the Wind' programme
- *Climate Change – Crisis or con?* introduction sheet
- *Climate Change – Crisis or con?* general briefing sheets
- *Climate Change – Crisis or con?* speaker role cards
- 2 computers with web access per expert group
- computer, projector and screen for speakers to show presentations
- speaker role labels for tables to provide speaker group bases
- For Lesson 2 prepare the room for the TV debate. Try and make it as realistic as possible, with the speakers sitting in panel formation either side of the TV presenter (you). They should stand to make their presentations. Put name cards in front of each speaker. You may choose to do a room swap if you feel your lab is too inflexible. Set up a camera if you have one.



# Chasing the Wind

## Climate Change - crisis or con?

### Starter (10 mins)

Ask students if Jerry Springer style TV programmes could be used to debate science issues. By careful questioning bring out that, in fact, the programme depends on different people presenting 'evidence' and then discussing it. It is not in a scientific mode and much of the evidence may be incomplete or downright lies. Explain that they are going to produce their own TV debate about global warming. The rules are simple:

1. Students will present different interpretations of the evidence (some of these will be contradictory but may be based on the same evidence).
2. The audience will ask questions of the speakers.
3. The audience will decide eventually on who they think has a clearer idea of what is really happening.

### Lesson 1

1. Show the 'Chasing the Wind' programme.
2. Give out the speaker role cards, you may do this in a random way, or organise students into specific speaker groups of 3 to 4 members. Give all students a copy of the introductory sheet, general briefing and audience member briefing.
3. Reinforce the expectations for groups and individuals at each stage.  
This will include:
  - Read their role card thoroughly, and clarify any points they are not sure about.
  - As a team, carry out the research needed to prepare their presentation using the websites suggested on their role cards.
  - Prepare their presentation remembering that they only have 5 minutes to present, so they must present their cases very clearly and concisely.
  - Elect a member of the group to make the presentation and answer the questions from the audience.
  - Prepare their representative by using a hot seat technique (see additional notes for further details). Predict questions that they may be asked, and fire these questions at their representative. They will also help their representative to answer the questions more effectively.
  - Those not representing the group should also prepare to be a member of the audience by preparing questions to ask the other speakers. They should put these questions on a sheet of paper along with their name and which speaker the question is targeting. The questions should be given to you.
  - During this period the speakers will continue to rehearse their presentations.
4. During the briefing phase ensure that the groups are getting into role within the remit set out on their role card. Test this by checking what they are going to say and by firing questions at them that they could be asked. It is important that all students are in role before you start the TV debate.
5. Collect the questions from the audience members and select the questions that you will use in the debate so that there is balance across all speakers.

### Lesson 2

1. Prepare the room for the TV debate as outlined above.
2. Introduce the TV debate in role as the presenter with a brief introduction to the topic for the audience at home. Then ask the speakers to introduce themselves.
3. Tell the audience that you will be asking each speaker to present and then following the final presentation you will be asking selected members of the audience to ask questions.
4. After the question and answer session, ask the audience to vote on whether they think that global warming is caused by human activity.

### Main (90 mins)



# Chasing the Wind

## Climate Change - crisis or con?

### Plenary (20 mins)

1. Summarise the arguments presented through the presentations and Q&A. Sensitive correct any misconceptions (rather than interrupting presentations to do this).
2. Ask students to pair up with someone from a different speaker group and then to tell each other:
  - What their role was and what they presented in role.
  - Did they personally agree or disagree with what they had to say and why.
  - Had they changed or developed their ideas as a result of the activity
3. Ask two or three groups to give feedback.

### Notes

For homework ask the pupils to write a newspaper editorial article on global warming. This should include the different information presented by the different groups and their own personal thoughts about the causes and effects of global warming and what action should be taken. The Role Play Techniques sheet provides alternative approaches to this activity.

For further suggestions on developing students' argumentation skills see Ideas, Evidence and Argument in Science (IDEAS) (<http://www.kcl.ac.uk/schools/sspp/education/research/projects/ideas.html>).