ANIMAL AID

Wasted Lives

Student Activities

Student Activities

Student Activities to accompany the film

Wasted Lives

Introduction

The **Wasted Lives** film looks at the issue of vivisection and puts the case against the use of animals in scientific experiments. It is suitable for use with students at KS4 and sixth form.

This resource book contains a package of structured lessons or workshop activities relevant to a wide range of subjects including citizenship, PSHE, English, RE, social studies, media studies, general studies and science. (See p29/30 for National Curriculum coverage)

Each work unit consists of teachers' notes and photocopiable student worksheets.

All work units are balanced. Students are encouraged to investigate and discuss the issues, consider the differing points of view and arrive at their own conclusions.

Contents

Video Response

Unit 1 consists of three alternative activities

- **Before and After**
- **You are a Film Critic**
- **Quiz**

The aim of the first two exercises is to encourage students to reflect critically upon their responses to the DVD, to communicate their opinions, and to appreciate that others may have differing, even conflicting points of view or perspectives. In formulating the group's composite responses, students need to negotiate either a shared joint position or, if this is not possible, to clarify the nature of the disagreements that exist.

- **'Before and After' relates mainly to the issues raised in the film.**
- **'You are a Film Critic' relates to the DVD as an example of a persuasive medium.**

Before and After

Photocopiable worksheet 1

Method

- Before viewing the DVD, provide each student (or pair of students) with a copy of worksheet 1. Ask them to complete tasks 1 - 5.
- Following the DVD, ask them to complete task 6. *10 min*
- Task 7: Form students into small groups. Ask group members to listen to each person's responses to the DVD and to discuss them as a group.

  Each group's task is to produce a list of responses that accurately expresses how they felt about the film. Some groups may be able to arrive at a consensus, while others may find there is such a wide difference of opinion that agreement is impossible. *15 min*
- Feedback session: Someone from each group reports back with their response to the DVD. Follow up with a class discussion. *20 min*

Total time 45 min

You are a Film Critic

Photocopiable worksheet 2

Method

- After viewing the film, provide each student (or pair of students) with a copy of worksheet 2. Introduce the exercises e.g. using the text at the top of the worksheet.

  Ask students to complete tasks 1 - 2. *10 min*
- Task 3: Form students into groups of 3 or 4 and ask them to imagine they are taking part

  in a TV programme reviewing the film they have just seen. Ask group members to listen to each person's response to the video and discuss.

  Each group's task is to produce a list of responses that accurately expresses how they felt about the film. Some groups may be able to arrive at a consensus, while others may find there is such a wide difference of opinion that agreement is impossible. *15 min*

- Feedback session: Someone from each group reports back with their response to the film. Follow up with a class discussion. *20 min*

Total time 45 min

Quiz

Photocopiable worksheet 3

Method

- After viewing the film, provide each student (or pair of students) with a copy of worksheet 3. Allow students time to complete the quiz. *10 min*
- Read out answers and ask students to total their scores. *5 min*

Total time 15 min

Answers to quiz on worksheet 3

1) (d) Around 3.5 million animals are used in experiments in the UK.

2) Reasons for animal experiments include medical research, toxicity testing (medicines, cosmetics, food additives, household products, agricultural and industrial chemicals), genetic engineering, psychology, weapons research, agricultural (more productive farm animals), veterinary, etc.

3) Toxicity testing (or 'safety' testing) is the testing of a substance to see if it is poisonous.

4) A wide variety of everyday products are commonly tested on animals - for example, medicines, most cosmetics, toiletries, household cleaning products, and even food additives.

5) Rabbits.

6) Animal species most commonly used in experiments are mice, rats, fish, birds, guinea pigs and rabbits.

7) Apart from the physical pain of the experimental procedures, animals also suffer fear, stress and mental deprivation as a result of the emotionally and socially deprived conditions in which they are kept.

8) Examples of species reacting differently to drugs cited in the video include:

Morphine which sedates people but produces 'morphine mania' in cats. **Aspirin**, which is a useful drug in man but poisons cats and dogs. **Penicillin,** which kills guinea pigs and hamsters. The **contraceptive pill,** which accelerates blood coagulation in humans but has the opposite effect in rats and dogs.

9) Examples of drug failures cited in the video:

Eraldin, Thalidomide, Opren, Encainide, Clioquinol, Clidamycin, Flosint, Manoplax, Zipeprol, Zelmid, Selacryn.

10) Improvements in living and working conditions - better housing, sewerage, sanitation, clean water, better diet.

11) Alternative non-animal methods include: In-vitro (test tube) studies using cell cultures and micro-organisms, epidemiology, clinical studies, computer models.

12) (a) Vivisection was first practised in second century Greece.

13) (d) There has never been a successful conviction of a vivisector for animal cruelty under the Act.

14) (d) None of the above.

Before and After

Before seeing video:

1) How well informed about the issue of animal experiments would you say you are?

Not very Very

0 ◄..... 1 ..... 2 ..... 3 .....► 4

❑ ❑ ❑ ❑ ❑

2) Do you agree with animal experiments?

Definitely yes Don't Know/Undecided Definitely Not

0 ◄..... 1 ..... 2 ..... 3 .....► 4

❑ ❑ ❑ ❑ ❑

3) What are the key factors or issues you considered in making your decision?

4) What extra information do you feel you need to have?

Before and After

5) Before you watch the film, briefly summarise your thoughts about animal experiments.

Before . . . .

6) Having seen the film, briefly summarise your immediate response. For example, feelings and thoughts, or things that shocked or surprised you. Have you changed your mind at all? Do you feel better informed or more confused? Use single words, phrases or complete sentences.

After . . . .

7) Your group's task is to produce a list of responses that accurately expresses how your group felt about the DVD. Listen to each group member's response to the film. Can you agree or not? You may be able to arrive at a consensus, or you may find there is such a wide difference of opinion that you can't agree on a joint group response.

Feedback session: Someone from the group reports back with your group's response to the rest of the class.

You are a Film Critic

DVDs and programmes on TV are produced for various reasons - to entertain, inform, educate, advertise or sell you something, or to persuade. It helps to be able to distinguish between fact and opinion, bias and objectivit

1) The film has been produced for a purpose. What do you think was the aim of the DVD? What were the main points made in the film?

Aim: _____

_____

Points: _____

_____

2) Would you describe the film as:
(Put a tick or cross or give a score out of five for each of the points below

objective	❑	**persuasive**	❑
subjective	❑	**unconvincing**	❑
biased	❑	**sensationalist/over-emotional**	❑
balanced	❑	**informative**	❑
boring	❑	**covered the issue thoroughly**	❑
interesting	❑	**raised more questions than it answered**	❑

3) Imagine your group is taking part in a TV programme reviewing the DVD that you have seen.

Your group's task is to produce a list of responses that accurately expresses how your group felt about the film. Listen to each group member's response to the DVD. Can you agree or not? You may be able to arrive at a consensus, or you may find there is such a wide difference of opinion that you can't agree on a joint group response.

Feedback session: Someone from the group reports back with your group's response to the rest of the class.

Quiz

After watching the DVD, try this quiz - see how many of the questions you can answer.

Possible Score

1) How many animals are used in experiments in the UK every year?

a) Several hundred ❑
b) Between 10,000 and 40,000 ❑
c) Approximately 500,000 ❑
d) Around 3 million ❑

1

2) List 4 types of animal experiments.

_____ /_____

_____ /_____ 2

3) What is Toxicity Testing?

_____ 2

4) List two products that you regularly use, that may have been tested on animals.

_____ /_____ 2

5) Which animal is used for the Draize test?

_____ 1

6) Name six animal species commonly used in experiments.

_____ /_____ /_____

_____ /_____ /_____ 2

7) Apart from the pain of the actual experiments, in what other ways do you think animals in laboratories may suffer?

_____

_____ 6

_____

		Possible Score
8)	Name one example of an animal reacting differently to a drug or medicine compared to humans. _____	1
9)	Name one example of a medical drug that caused harmful side effects in humans despite being tested first on animals. _____	1
10)	Name two measures that were largely responsible for more people living longer today. _____ /_____	2
11)	List four ways of doing medical research that do not involve the use of animals. _____ /_____ _____ /_____	4
12)	When and where do you think vivisection started? a) Second Century BC Greece ❑ b) In Middle Ages France ❑ c) Early 1700s England ❑ d) 1920s America ❑	2
13)	Since the introduction of the Animals Scientific Procedures Act 1986 (the law governing animal experiments in labs), which, if any, of the following statements do you think are correct? a) Any worker in a lab who witnesses cruelty to an animal must report it. ❑ b) All experiments causing pain must be conducted with the use of anaesthetic. ❑ c) The nature of all experiments must be published for public inspection. ❑ d) There has never been a successful conviction of a vivisector under the Act. ❑	2
14)	Which of the following animal experiments, if any, do you think are currently prohibited? a) Household products testing ❑ b) Biological weapons testing ❑ c) Testing of illegal addictive drugs ❑ d) None of the above ❑	2
	Total Score out of 30:	

What Do You Think?

The workshop involves students studying and discussing a series of statements about animal experiments and/or animal rights.

It is an ideal follow-up to the DVD and is a stimulus for class discussion. It aims to promote thought and discussion by showing that there is a wide range of opinions relating to this contentious issue. It encourages students to think about their own views and perspectives.

Method

There are two student worksheets: one entitled *What do you think about animal experiments?* and a second animal *What do you think about animals?* There are various ways of running this activity. Here are two suggestions.

Hand out copies of the worksheets to individuals or pairs of students. Ask them to read through the statements and then:

Option 1 *Photocopiable worksheets 1 and 2*

- Ask students to tick those boxes on the right to indicate which statements they agree with and which they disagree with.

  Ask them to circle the statement they feel most strongly about (either agree or disagree with). *10 min*

- Collect feedback from students and carry out class discussion. *10 min +*

Total time: 20 min +

Option 2 *Photocopiable worksheets 1 and 2*

- Cut up the labels on the worksheets and ask pairs or groups of students to arrange them in order, with those they agree with most at the top and those they disagree with most at the bottom. *10 min*

- Collect feedback from students and carry out class discussion. *10 min +*

Total time: 20 min +

What do you think about animal experiments?

		Agree	Not sure	Disagree
1	We don't have the right to use animals as laboratory tools	☐	☐	☐
2	We have the right to experiment on lesser species for our own benefit	☐	☐	☐
3	We need to experiment on animals to find cures for diseases such as cancer and AIDS	☐	☐	☐
4	The results from animal experiments are misleading because animals are biologically very different from people	☐	☐	☐
5	Animal testing is necessary to ensure that cosmetics and household cleaning products are safe for people to use	☐	☐	☐
6	It is wrong to use animals in experiments to test non-essential products such as cosmetics and household cleaning products	☐	☐	☐
7	Laboratory animals don't suffer - there are laws to ensure that they are properly cared for	☐	☐	☐
8	It's wrong to use genetic engineering to create new animals for research	☐	☐	☐
9	Experiments on farm animals are justified because they enable farmers to create more productive livestock	☐	☐	☐
10	It's all right to test on rats and mice, but not on cats, dogs or monkeys	☐	☐	☐
11	Animal laboratories need to keep what they do secret to protect the scientists	☐	☐	☐
12	The public should have the right to know what goes on inside animal laboratories	☐	☐	☐
13	Animal experiments should be replaced by modern humane alternatives such as the use of human tissue and computer models	☐	☐	☐

What do you think about animals?

		Agree	Not sure	Disagree
1	Animals have feelings and emotions	☐	☐	☐
2	People are more important than animals because they have greater intelligence	☐	☐	☐
3	We should treat all animals with compassion and respect	☐	☐	☐
4	We are superior, so we have the right to use other animals in any way we like	☐	☐	☐
5	If you like animals, you shouldn't eat them	☐	☐	☐
6	We have to eat meat and fish to remain healthy	☐	☐	☐
7	Factory farms are cruel and unnecessary	☐	☐	☐
8	Wild animals don't mind being caged in zoos	☐	☐	☐
9	It is totally wrong to experiment on animals	☐	☐	☐
10	Animal experiments are necessary to find cures for human disease	☐	☐	☐
11	It's all right to test on rats and mice, but not on cats, dogs or monkeys	☐	☐	☐
12	It is wrong to breed animals so that they can be sold in pet shops	☐	☐	☐
13	People should have the freedom to hunt animals for sport if they wish	☐	☐	☐
14	Fishing is cruel	☐	☐	☐

Where Do You Draw the Line?

This is an ideal exercise to generate discussion about various types of animal experiments. It encourages students to appreciate the different ways in which our society uses animals for scientific research and asks them to make value judgements about whether or not they are justified or acceptable.

Method *Photocopiable worksheets 1 to 3*

- Preparation: Photocopy worksheet 1 and cut out labels.

  Photocopy worksheets 2 and 3 and stick them together end to end to make one 'Where do you draw the line?' chart.

  You will need one set of labels and one chart for each pair or group of students.

- Form students into pairs or small groups and provide each with a set of labels and a chart.

- Ask groups to spread the labels out on the table and study them. At this point, you could have a brief discussion about what the different types of animal experiments involve, and ask students to identify any they are not clear about. *10 min*

- Then ask them to arrange the labels on the chart in order, with the ones they disagree with most on the extreme right, and the ones they agree with most on the extreme left. *15 min*

- Ask students to draw a vertical line on the chart indicating where they would draw the line separating those experiments which they feel are acceptable, from those that are unacceptable. Which of them, if any, do they feel should be banned? What factors do students feel are important in deciding whether experiments are acceptable or not - e.g. species of animals used, perceived benefits of experiments, likely suffering caused to animals?

- Hold a class discussion.

  - Did individuals within the groups agree about where the labels went?

  - Ask them to say which types of animal experiments, if any, were more or less acceptable/unacceptable, justified/unjustified and why? *15 min +*

Total time: 40 min

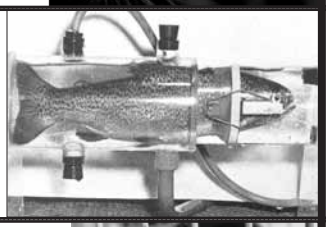
Draize test (eye irritancy test) on rabbits to test a new shampoo

Skin irritancy test on guinea pigs for a new agricultural pesticide

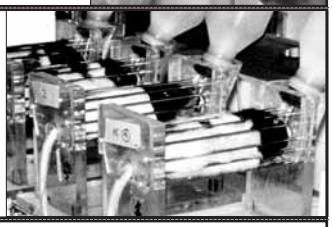
Toxicity testing on rats for new washing-up liquid

Toxicity test on mice for new food flavour enhancer for crisps

Experiments on fish to test environmental pollution hazards of new industrial chemicals



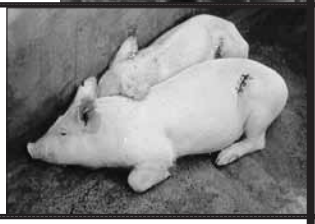
Use of mice in experiments to test new riot control gas



Use of monkeys in drug experiments to develop a vaccine against heroin addiction

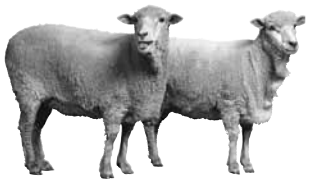
Use of rats in psychology experiments to study aggression in people

Xenotransplant experiments on pigs for 'spare part' surgery



Experiments on chickens to develop new veterinary products for use on factory farms

Genetically engineered sheep to produce medicines in their milk



Use of genetically engineered mice to study cystic fibrosis

The injection of substances into mice to see if they cause cancer

The use of dogs in heart disease research

Experiments on cats to test effectiveness and safety of new Viagra pill

Use of hamsters for research into obesity

Use of frogs for dissection in schools

Use of rats in experiments to test new AIDS drug

Animal Experiments

I agree with

Where Do You Draw the Line?

I disagree with

Role-Play

Government Enquiry into Animal Experiments

This role-play involves students acting out an imaginary meeting at which a Government Enquiry Committee listens to evidence submitted by various interest groups, to enable it to make recommendations to Government about future policy. A new Bill is to be submitted to Parliament which proposes to update legislation on animal experiments.

There are two options for running the role-play i.e. over one 60 minute lesson, or two 45 minute lessons.

Role-play groups:

- Government Enquiry Committee (Four members including chairperson)
- Animal Aid (Anti-vivisection pressure group)
- Doctors for Progressive Medicine (Professional group opposed to vivisection)
- Society for the Protection of Animals (Animal welfare charity)
- Trust for Humane Research (Charity funds research into humane alternatives)
- Greenfields Laboratory (Commercial testing laboratory)
- Research Defence Association (Pro-animal experiments pressure group)

Method

Part 1: Preparation

	Lesson time	
	60 min	2 x 45 min
• Explain to the class what the role-play will involve.		
• Organise students into between four and seven small groups - Government Enquiry Committee plus between three and six lobby/interest groups.	*5 min*	*5 min*
• Provide groups with briefing sheets plus information leaflets from relevant national lobby groups if available.		
• Ask lobby groups to study the information provided, and to prepare their presentations to the Government enquiry. While they are doing this, ask the Government Enquiry Committee to decide what legislative changes they are going to consider and what information they will require from the lobby groups.	*10 min*	*15 min*

	Lesson time	
	60 min	*2 x 45 min*
Part 2: The Meeting		
● Government Enquiry Committee to chair the meeting.		
● Each lobby group has 3 minutes (60 minute role-play), or 5 minutes (1 hr 30 minute role-play), to present its case/evidence to the meeting.	*20 min*	*30 min*
● Government Enquiry Committee to cross-examine each of the lobby groups and allow time for groups to comment on each other's evidence and ask questions.	*10 min*	*20 min*
Part 3: Recess		
● Government Enquiry Committee to retire to decide what recommendations (regarding legislative changes concerning animal experiments) they will submit to the Government. If possible, move them into another room, e.g. the library. While the Government Enquiry Committee is busy doing this, the other students should regroup as a class out of the lobby groups to discuss how they will vote on the Government Enquiry Committee's recommendations when they return. • What do they think the 'real' Government in power should do? • What does the Government have to consider (public opinion, pressure groups, industry interest groups, scientists, re-election prospects, etc.)? • Which interest groups do you think the Government would take most notice of? Why?	*10 min*	*10 min*
Part 4: The Vote		
● The Government Enquiry Committee returns and presents its recommendations to the assembled audience.		
● Everyone votes on whether to accept or reject the recommendations.	*5 min*	*10 min*
Total time	*60 min*	*1hr 30 min*

Government Enquiry Committee

Your group represents a committee conducting an enquiry on behalf of the Government into animal experiments.

You have been asked by the Government to review the present situation and to decide whether legislation needs to be revised.

Your job will be to gather evidence from the interest groups present at the meeting, and to decide what, if any, new legislation needs to be recommended to the Government.

The Committee may wish to consider the use of animals in the following areas:

- medical research
- genetic engineering
- testing of cosmetics and household products (such as washing-up liquid)
- testing of industrial and agricultural chemicals (such as pesticides)
- research into the effects of addictive drugs
- warfare experiments to develop new weapons
- psychology experiments
- experiments to develop 'more productive' farm animals
- the use of animals in education (e.g. dissection at school & university)

Possible options to consider:

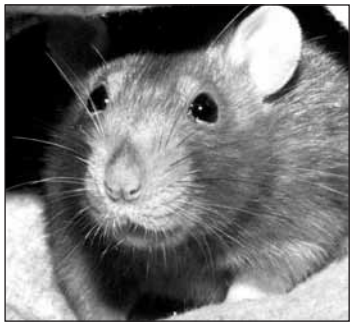
- tighter regulation of experiments
- an immediate ban on some, or all, animal experiments
- phasing out over time all or some, animal research
- increased funding into non-animal research methods
- leaving things as they are

Part 1 - Preparation

Before the meeting you need to decide what policy options are available to you, what legislative changes you are going to consider and what information you require from the interest groups at the meeting.

Part 2 - The Meeting

Your job is to chair the meeting. Listen to the evidence from the various interest groups. Allow each approximately 3 - 4 minutes to make their presentation. After the presentations, question each group to ensure you have all the information you need. Invite the groups to ask each other questions and allow some time for discussion of the key issues.



Part 3 - Recess

Retire to decide what recommendations (regarding legislative changes concerning animal experiments) you will submit to the Government. If possible, move into another room, e.g. the library.

Part 4 - The Vote

Present your proposed policy recommendations to the meeting and invite the audience to take a vote. Are your recommendations accepted or not?

Animal Aid

You represent an animal rights organisation called Animal Aid which campaigns on a wide range of issues including animal experiments.

You have been invited to present evidence at a Government Enquiry into the issue of animal experiments.

Your task is to present evidence putting the case against animal experiments.

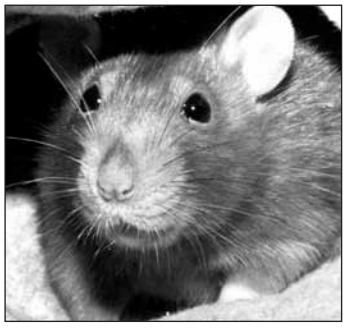
What Animal Aid says:

Every year nearly 3 million animals suffer and die in British laboratories. They are burnt, blinded, poisoned, irradiated and starved, given electric shocks and addicted to drugs. They are mutilated and kept in solitary confinement. Animals are used in toxicity experiments to test a wide variety of products from medicines to household goods, food additives, agricultural and industrial chemicals. They are used in genetic engineering experiments, weapons research, psychological and behavioural experiments, and for educational purposes.

We object to these experiments on both ethical and scientific grounds.

Animals are living, feeling creatures, not disposable research tools. Like us, they can suffer both emotional and physical pain. Their lives are important to them just as our lives are important to us. Of course there are differences between humans and animals - e.g. in strength, size, language, appearance and intelligence. But these differences do not justify inflicting pain on them for our own supposed benefit. In fact, the physical differences between humans and other animals provide the scientific objection to vivisection: the data obtained from animals cannot be reliably applied to people. The main reasons animals are used is that they cannot protest or fight back and they are a cheap option.

The existing legislation is totally inadequate. The Animals (Scientific Procedures) Act 1986 says that experiments can take place only if the expected benefits to humans outweigh the animals' suffering. In practice, it allows experiments for almost any reason, such as new household products, food additives and weapons. The Act's main purpose is to protect the experimenters rather than the animals - without it, researchers could be prosecuted for cruelty. The Act also encourages secrecy; it stops people knowing what is being done to animals. Someone working in a laboratory can be imprisoned for two years simply for exposing what takes place there. Undercover investigations have shown that the codes of practice that do exist are regularly ignored. Despite so much evidence of malpractice, no researcher has ever been convicted of cruelty to laboratory animals under the Act.



There are also sound scientific arguments against animal experiments. Scientists don't have to experiment on animals. There are many modern methods of carrying out research and safety testing that do not involve using animals. If more energy and resources were put into humane alternatives and into prevention of illness and disease, then society would be healthier. We are not against medical progress, we are for better medical progress.

Summary

For both ethical and scientific reasons, we call upon the Government to ban all animal experiments.

Doctors for Progressive Medicine

You represent an organisation called Doctors for Progressive Medicine which is made up of doctors and other scientists opposed to animal experiments.

You have been invited to present evidence at a Government Enquiry into the issue of animal experiments.

What Doctors for Progressive Medicine says:

We represent a group of doctors, scientists and other health practitioners who want to see a more enlightened approach to health care. We feel there is sound medical and scientific evidence showing that animal experimentation is not the best way forward and is, in fact, a danger to human health.

We feel that the benefits attributed to animal experiments are false. The main health gains of the last century were largely the result of improvements in public health (better diet, clean water, improved sanitation) which came about by studying people. The major medical breakthroughs have also been the result of studying people and not animals. In fact, animal experiments have often held back medical advances.

The results from animal experiments are very misleading, because animals are different from us - and from each other - in the way their bodies work and in their reactions to drugs. A good example of how different species react to a chemical or medicine is penicillin, which is a commonly used antibiotic. Penicillin kills guinea pigs, yet it cures humans. Products such as aspirin and paracetamol, commonly used to treat people, are highly poisonous to cats.

Studies show that in only 5 - 25% of cases are the harmful side effects of medicines correctly predicted by animal experiments. Therefore, to rely on animal tests as a guide to safety can be dangerously misleading. Other studies have shown that 7 out of 10 drugs considered safe and effective on the basis of animal tests, proved harmful when they were given to people. Many drugs, which were passed as safe in animal tests, have caused serious side effects, and even deaths, in people.

In an opinion poll in 2004, 82% of GPs said they were concerned that animal experiments produce results that can be misleading when applied to people.

More resources need to be put into human-based research. One example is epidemiology, which is the study of different groups and populations of people to link disease trends with lifestyle and environmental factors. This is how many of the causes of cancer and heart disease were discovered. More emphasis should be paid to clinical studies - the observation of patients - which is also vitally important. Despite the huge increase in animal experiments since 1950, the incidences of chronic illness, hospital admissions and prescriptions have soared.

The main aims of medicine should be the prevention and healing of disease. The way forward is to put greater emphasis on studying the causes of disease and doing everything possible to protect people's health; provide better health care for patients; and use humane and scientifically valid methods of research, without animals, which are relevant to people.

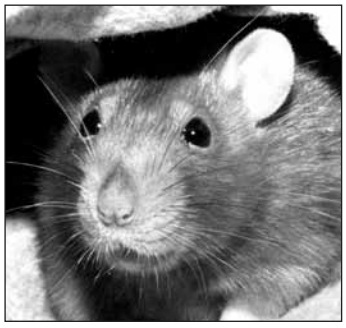
Summary

Rather than concentrating on misleading animal experiments, funding should be diverted to health promotion and disease prevention and more human-based medical research.

Society for the Protection of Animals (SPA)

You represent an animal welfare organisation called the Society for the Protection of Animals which occupies the middle ground in the vivisection debate.

You have been invited to present evidence at a Government Enquiry into the issue of animal experiments.



What the SPA says:

The SPA is a well established and respected animal welfare organisation. Unlike the animal rights groups which call for an immediate ban on all animal experiments, we take a sensible and responsible approach.

We believe in the three Rs of reduction, refinement and replacement wherever it is possible.

Although we want to see an end to all unnecessary suffering of laboratory animals, we recognise that animals have been used for a very long time and that such experiments are not going to end overnight. Using animals has helped in the development of many medical drugs, vaccines and surgical skills. It has to be said that in many cases non-animal alternative methods of doing this vital research simply do not exist yet. We have to be realistic and set our sights on reforms that are attainable.

Replacement: There are now a whole range of alternative non-animal methods available. More use should be made of these. Cell and tissue cultures can be used in toxicity testing, and computers can be used to help develop new medicines. The government should increase the funding into alternatives to replace animal experiments.

Refinement: Because there are not yet enough alternatives to replace all animal experiments, new stricter regulations should be introduced to minimise the suffering of animals used in experiments. Scientists should be required to refine their experiments to reduce the suffering of the animals. This means, for example, better training in animal care, use of anaesthetics and painkillers and putting down animals humanely and as soon as possible after the experiment is completed.

Reduction: Much more could and should be done to reduce both the number of experiments and the number of animals used in each experiment. Many animal experiments are repeated or duplicated by different scientists. Often, several companies will do the same animal experiments on the same or similar products and keep the results to themselves for commercial reasons. Such secrecy should not be allowed to continue. Many experiments are totally unnecessary. Thousands of animals are used in 'trivial' experiments to test things like household products and food additives simply for profit. These should be banned.

Summary

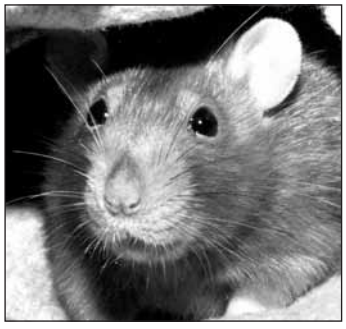
We call on the Government to adopt the three Rs approach and increase funding into the development of humane alternative methods.

The Government should ban the use of animals for testing non-essential things like household products and food additives. There is a need for more inspectors to monitor research establishments and make sure animals are not mistreated.

Trust for Humane Scientific Research

You represent a charity called the Trust for Humane Scientific Research which funds and promotes methods of research that do not use animals.

You have been invited to present evidence at a Government Enquiry into the issue of animal experiments.



What the Trust for Humane Scientific Research says:

The Trust for Humane Scientific Research believes that animal experiments are an outdated way of conducting scientific research. Public concern over cruelty, together with doubts about reliability, means that today there is a demand for scientific research that doesn't involve the use of animals.

We actively promote alternatives by providing information to researchers, students and the public. The message is simple - animal experiments are not necessary for effective medical research. Animal experiments are not the only way of carrying out medical research or doing toxicity testing and they're not the best way. In fact the results from animal experiments cannot reliably be applied to humans. This is because animals' bodies are different from ours. They don't get the same diseases that we do and they often have very different reactions to drugs and chemicals.

Many drugs, which were passed as safe in animal tests, have caused serious side effects, and even deaths, in people. In fact, 18,000 people die every year in the UK from the harmful side effects of prescription drugs. There must be a better way.

We provide grants to scientists who are working on the development of modern alternatives. In recent years, there has been great progress in this field.

Powerful new computers are now being developed to help predict the effects of new drugs. UK scientists, for example, are developing a computer model of the human heart based on a mathematical interpretation of a single beating heart cell. Quantum pharmacology uses computers to analyse the molecular structure of drugs and their receptors and thus accurately predict the effect of the drugs on any given target organ.

Human cells, tissues and organ cultures have been invaluable in testing potential new drugs in much cancer and other medical research. Such methods give results that apply to people, unlike animal tests.

In February 2008, key US government agencies announced that over a five-year period they will start replacing animal experiments with non-animal methods such as the use of cells and computer models to test chemicals and drugs for safety. The goal of the National Institute of Health (NIH) and the Environmental Protection Agency (EPA) is to phase out the use of animal experiments in toxicity testing within ten years.

Summary

We call on the Government to establish a centre of excellence for research into the development and verification of humane alternative methods of research.

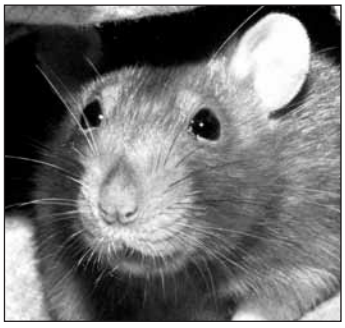
We want the government to set a timetable for phasing out animal experiments and replacing them with modern alternatives.

Greenfields Laboratories Ltd

You represent Greenfields Laboratories Ltd which is a large company with several laboratories in the UK.

Your company motto is:

'Our animals are happy animals, because they know they are helping to make the world a safer place.'



What Greenfields Laboratories Ltd says:

Greenfields Laboratories is paid by other companies to carry out animal experiments on its behalf. We are contracted by pharmaceutical companies to test new medical drugs to find out whether they work and whether they cause side effects in animals. We are also contracted by commercial companies to test a variety of other products such as household cleaning products, food additives, weedkillers and industrial chemicals to ensure that they are safe for people to use. We also sometimes test new veterinary products.

We have mice, rats, rabbits, birds, dogs, cats, guinea pigs, fish and a few monkeys. They are all well looked after and kept in good conditions. Technicians and staff are trained in animal care and vets are employed to ensure the health of our charges. There are strict laws laid down in the Animals (Scientific Procedures) Act that say what we can and cannot do.

Our job is to carry out the testing we are contracted to do to the best of our ability. By doing so we are providing a valuable public service, enabling new drugs and products to be brought onto the market to improve the quality of life for people. Without us, there would be fewer drugs, household products and other useful chemicals. Industry always needs new chemicals. If it weren't for the development of new pesticides and herbicides, farmers wouldn't be able grow so much food. All these products need to be tested on animals to make sure they are safe for people to use. We also conduct tests to make sure these new products won't poison or pollute the environment. The animal tests we carry out are essential to make the world a safer and healthier place.

We do use alternatives such as cell cultures, computer models and other methods whenever we can, but they can never replace animal experiments completely. We need to find out how substances affect the whole body and not just isolated cells in a test tube.

Greenfields Laboratories Ltd employs hundreds of people all over the country. These people would lose their jobs if animal experiments were banned.

More legislation needs to be introduced to safeguard animal laboratories from the activities of animal rights demonstrators, who try to stop us going about our legal business.

Summary

We do not believe that the Government should introduce new legislation that would make our job more difficult.

The UK already has the toughest animal protection laws in the world. If they were made more restrictive, we would be put at a disadvantage against our foreign competitors. If any areas of animal experimentation were banned in the UK, the testing would just go abroad where the animal protection laws are not as strict.

The present system is working perfectly well, striking a balance between the needs of scientific research and industry, and the welfare of animals.

Research Defence Association

You represent a pressure group called the Research Defence Association, an organisation which defends and promotes the use of animals in scientific research.

What the Research Defence Association says:

The Association was established to counter the propaganda of animal rights groups who campaign for an end to animal experiments. We believe that animal experiments have been responsible for many benefits in the past and are essential for continued medical progress - the development of new medical drugs and vaccines. Cures for diseases such as cancer, heart disease, arthritis and AIDS depend on animal research. Such animal tests are also essential to ensure the safety of all sorts of new products.

Scientists don't wish to cause animals unnecessary pain and misery. We use alternatives wherever possible and always keep the number of animals used to a minimum. Most of the experiments are only minor, involving small changes to the animals' diet or lifestyle, or taking small blood samples. Where the experiment does cause pain, anaesthetics and pain killers are used whenever possible.

Britain has the strictest legislation in the world to control what can be done to animals in the laboratory. The Animals (Scientific Procedures) Act states that only competent people can conduct the research - they have to obtain a Home Office licence. The Act ensures that the animals have to be looked after properly and that the experiments may only be conducted if the likely benefits of the research to people outweigh any possible distress to the animals. Home Office inspectors regularly visit the laboratories to ensure that the laws are enforced.

Most of the animals used are mice and rats. They are specially bred for use in research. Only a very small number of dogs, cats, monkeys and other animals are experimented upon. In fact, far fewer animals are killed in laboratories (less than 3 million) than are slaughtered for food in this country (over 800 million).

Many people accept that human beings are more important than animals and that it is morally right to use a rat or a dog in an experiment, if it will help save the life of a child. Animals do not have rights like people (otherwise we wouldn't eat them). It is necessary to sacrifice a few animals' lives so that we can save millions of humans from disease and death.

Scientists know what they are doing and they should be left to get on with it. If the Government puts restrictions on the use of animals in experiments, it will hamper medical progress and hold back scientific research in this country. At the moment this country is a leader in genetic engineering. Much of this research depends on animal experiments.

Summary

The Government's first responsibility is to safeguard the health and safety of the public.

We believe The Animals (Scientific Procedures) Act is quite adequate - there is no need to introduce new legislation. Such a move would hamper scientific progress.

Moral Dilemmas

A series of situations or scenarios suitable for:

- **Drama/Role-Play**
- **Creative Writing**
- **Discussion /Debate**

Drama / Role-Play

Photocopiable worksheets 1 and 2

Method

- Cut out the situation cards from copies of worksheets 1 and 2.
- Form students into groups of 3 or 4 and provide each with a situation card.
- Ask them to study the situation outlined on the card. Then prepare a drama where they first interpret the given situation and then play out the scenario to a conclusion. *10 - 15 min*
- Ask each group in turn to act out their drama in a small area of the classroom.

  Following each drama, allow the class to discuss how the group interpreted the situation. *5 - 10 min each*

> *Total time depends on number of groups/dramas and discussion time but activity can easily fill one hour or more.*

Moral Dilemmas

Jane is shocked after watching a TV documentary on Channel 4 about animal testing. On the way to school next morning, she goes on at her boyfriend Leroy about it and says how they should change their lifestyle and stop buying any products tested on animals. He gets the hump because she's not at all interested in the football he watched last night. She says: "Don't you care?" He says "For God's sake, don't impose your cranky views on me! The trouble with people like you is you care more about animals than you do about people!" When they get to school, Jane meets her friend Sue, and Leroy goes off in a huff with his friend Patrick.

How is Jane going to resolve the situation with Leroy? Can she make him understand? Should she dump him? Is she right to be concerned about what she saw? Is he justified in getting the hump?

After listening to a visiting speaker from an animal welfare group, Ali tells his best friend Nigel at great length over lunch about how he found it very upsetting. The day before, Nigel's English class had had a speaker from a drugs company. Fed up, Nigel manages to blurt out in between bites on a decidedly non-veggie burger, "You eat meat, don't you? So why are you worried about a few rats and mice being used in experiments that might actually help people? Are you going to finish your burger or can I have it?"

Does Ali have to give up his burger and go veggie? Ali's friend Sarah who is also at the table is interested and wants to know more. She thinks Nigel, whom she never really liked anyway, is being macho and stupid. Is he?

Sonia cares passionately about animals and is a member of an animal rights group. She only buys cruelty-free cosmetics and is a vegetarian. She becomes ill and the only treatment is a medicine that has been tested on animals. The subject comes up over the breakfast table. Mum is sympathetic to her views but is worried. Dad is angry and thinks it's all gone too far. Her brother Peter thinks she's potty.

How can Sonia resolve the dilemma? Can sensible, sensitive Mum help? Does Dad losing his temper help? Can they keep Peter from upsetting the situation? Where can Sonia go to get some sensible advice?

Elaine is doing work experience at an animal research lab, where she hopes to get a job. She really fancies the boy next door. The trouble is Kamal (the boy next door) loves animals and is a keen activist in a local animal rights group. They meet one evening at the youth club and she has to decide what to say - if anything. Both their mates are there too.

How does Kamal deal with the situation? Does it all end in tears for Elaine? Can their mates sort them out?

Moral Dilemmas

One morning Mia's class are set a rat dissection practical in science. Mia, who is a vegetarian, hates the idea of taking part. She mentions this to her teacher, who says "well, it's part of your biology course work continuous assessment, so you'll lose marks if you don't do it". Her friend Karen also doesn't want to do the dissection, but refuses to speak out because she's worried that some of the boys will take the micky. As if to confirm her worst fears, Simon calls out "Typical girls! It's only a rat; you sqeamish or something?" "Just let me have a go - I'll show you what to do".

How does Mia deal with the situation? Should she stand up for her principles? Is Karen being spineless or sensible? How do the boys react? How does the teacher resolve things?

Josh has a dream where he meets some hyper-intelligent superbeings (called Zogs) who are visiting earth. They brag about how they are hyper-intelligent and live for thousands of years. They point out to him that it strikes them as rather peculiar that humans who think of themselves as intelligent, civilised and humane, use their fellow carbon-based mammalian life forms (who they regard as inferior) as experimental tools. They ask him if it would be morally OK to take a few humans back to their planet to experiment on - after all, Zogs are far more intelligent than humans who are inferior beings who don't live very long anyway.

Josh wakes up very disturbed and decides to talk it over with his mates at school, to try and sort it out. Do the aliens in his dream have a point? Can his mates help him or does he need to see a dream counsellor?

Kate's science class has been told they are going to visit a local pharmaceutical company. They have an animal testing lab. Kate is opposed to animal experiments and doesn't want to go. The company has offered to donate money to the school for new science equipment (hence the visit). Kate thinks this is wrong and is considering writing to the local newspaper to expose the fact that the school is taking money from 'animal abusers'. When she tells her science teacher, Mr Newton, he gets very agitated - he doesn't want to lose the money. He arranges a meeting with the Head and invites her to bring her friend Debra. The Head doesn't want any bad PR for the school.

Can the Head resolve the situation? Must the science teacher lose his money? Should Kate back down or stand up for her principles?

Curriculum Coverage - KS4 Programmes of Study

English

Key processes

2:1 Speaking and listening

Students should be able to:

a) speak fluently, adapting talk to a wide range of familiar and unfamiliar contexts and purposes, including those requiring confident and fluent use of standard English

b) present information clearly and persuasively to others, selecting the most appropriate way to structure and organise their speech for clarity and effect

e) listen to complex information and respond critically, constructively and cogently in order to clarify points and challenge ideas

f) synthesise what they hear, separating key ideas from detail and illustration

g) judge the intentions and standpoint of a speaker

h) listen with sensitivity, judging when intervention is appropriate

i) take different roles in organising, planning and sustaining discussion in a range of formal and informal contexts

j) work purposefully in groups, negotiating and building on the contributions of others to complete tasks or reach consensus

k) use a range of dramatic approaches to explore complex ideas, texts and issues in scripted and improvised work

m) evaluate drama performances that they have watched or taken part in.

2:2 Reading

Students should be able to:

a) analyse and evaluate information, events and ideas from texts

d) develop and sustain independent interpretations of what they read, supporting them with detailed textual reference

e) select, compare, summarise and synthesise information from different texts and use it to form their own ideas, arguments and opinions

f) reflect on the origin and purpose of texts and assess their usefulness, recognising bias, opinion, implicit meaning and abuse of evidence

h) recognise and evaluate the ways in which texts may be interpreted differently according to the perspective of the reader

i) analyse and evaluate the impact of combining words, images and sounds in media, moving-image and multimodal texts.

Range and content

3:1 Speaking and listening

The range of speaking and listening activities should include:

a) prepared, formal presentations and debates in contexts where the audience and topic are unfamiliar

b) informal and formal group or pair discussions requiring students to take on a range of roles

c) individual and group improvisation and performance.

The range of purposes for speaking and listening should include:

d) describing, explaining, informing, persuading, entertaining, hypothesising; and exploring and expressing ideas, feelings and opinions. The stimulus for speaking and listening activities should include those drawn from work contexts and other real-life uses.

3:2 Reading

The range of non-fiction and non-literary texts studied should include:

j) forms such as journalism, travel writing, essays, reportage, literary non-fiction, print media and multimodal texts including film and television

k) purposes such as to instruct, inform, explain, describe, analyse, review, discuss and persuade.

Citizenship

Key processes

2:1 Critical thinking and enquiry

Students should be able to:

a) question and reflect on different ideas, opinions, assumptions, beliefs and values when exploring topical and controversial issues and problems

b) research, plan and undertake enquiries into issues and problems, using a range of information, sources and methods

c) interpret and analyse critically sources used, identifying different values, ideas and viewpoints and recognising bias

d) evaluate different viewpoints, exploring connections and relationships between viewpoints and actions in different contexts (from local to global).

2:2 Advocacy and representation

Students should be able to:

a) evaluate critically different ideas and viewpoints including those with which they do not necessarily agree

b) explain their viewpoint, drawing conclusions from what they have learnt through research, discussion and actions, including formal debates and votes

c) present a convincing argument that takes account of, and represents, different viewpoints, to try to persuade others to think again, change or support them.

Range and content

The study of citizenship should include:

a) actions citizens can take in democratic and electoral processes to influence decisions locally, nationally and beyond.

f) the development of, and struggle for, different kinds of rights and freedoms (speech, opinion, association and the vote) in the UK.

g) how information is used in public debate and policy formation, including information from the media and from pressure and interest groups.

h) the impact and consequences of individual and collective actions on communities, including the work of the voluntary sector.

PSHE

Personal wellbeing - key processes

2:1 Critical reflection

Students should be able to:

a) reflect critically on their own and others' values and change their behaviour accordingly.

Range and content - key processes

The study of personal wellbeing should include:

a) the effect of diverse and conflicting values on individuals, families and communities and ways of responding to them.

Science

1 How science works

1.4 Applications and implications of science

Pupils should be taught:

a) about the use of contemporary scientific and technological developments and their benefits, drawbacks and risks

b) to consider how and why decisions about science and technology are made, including those that raise ethical issues, and about the social, economic and environmental effects of such decisions.

2 Breadth of study

2.1 Organisms and health

In their study of science, the following should be covered:

e) human health is affected by a range of environmental and inherited factors, by the use and misuse of drugs and by medical treatments.

Free school speakers service

Animal Aid school speakers can offer talks on a wide range of topics including animal experiments, animal rights, vegetarianism, factory farming and the work of pressure groups.

For more information, or to book a talk, email schooltalks@animalaid.co.uk, call 01732 364546 ext 230, or visit our website www.animalaid.org.uk/education.

Free education resources

DVDs

Eat This!

Suitable for KS4
Duration: 20 minutes

The film follows four teenagers with very different views, as they ask hard-hitting questions about meat. Where does it come from? What is eating it doing to us, the animals and the environment? Suitable for English, citizenship, PSHE, RE, science and food technology.

From Farm to Fork

Suitable for KS3
Duration: 16 minutes

This thought-provoking film is ideal for promoting discussion and debate about the way we rear animals for food in Britain today. Covers aspects of the curriculum in English, citizenship, PSHE, RE and science.

Their Future in Your Hands

Suitable for KS3 and KS4
Duration: 11 minutes

This short introduction to the issue of animal rights covers a wide range of issues, but looks at animal experiments and factory farming in particular detail.

Student Activity Packs

Animal Writes

Suitable for Year 9

Written by Teachit for Animal Aid, this pack includes a resource booklet with nine balanced work units containing teachers' notes and photocopiable student worksheets, plus a DVD and a large colour poetry poster.

Eat This!

Suitable for KS4

Written to accompany the Eat This! DVD, this 72-page Student Activities book includes 11 balanced work units. Each lesson plan contains teachers' notes, and photocopiable worksheets.

IWB (SMART board) versions of some of the activities in the above resources are available on the Animal Aid website.

Student information booklets

Animals and Us

20 page, A5 booklet which puts the case for the humane treatment of animals. Covers a wide range of animal issues, but looks at animal experiments and factory farming in particular detail.

For orders and a complete list of education resources: call 01732 364546 ext 221, email: education@animalaid.co.uk or visit our website: www.animalaid.org.uk/education

'Animal experimentation will one day be judged a crime.'

Leonardo da Vinci

ANIMAL AID

tel: 01732 364546 education@animalaid.co.uk www.animalaid.org.uk