

Aim

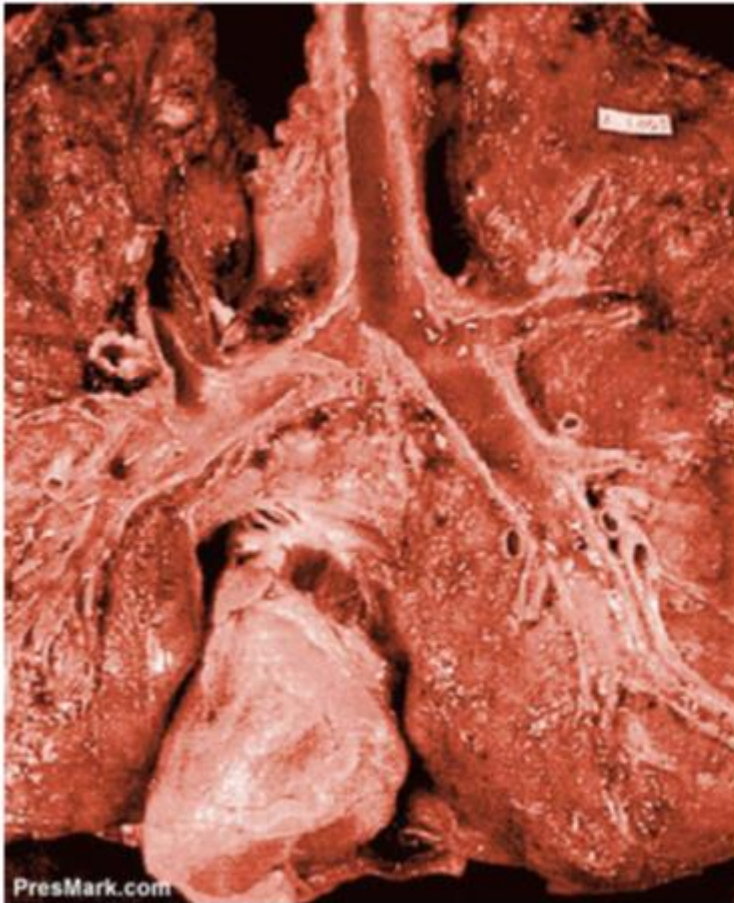


- I can explain the impact of smoking on the body.
- I can describe how scientific evidence highlighted the dangers of smoking.

Success Criteria

- I can describe the parts of the body affected by smoking.
- I can explain how scientific evidence can change ideas.

Which set of lungs do you prefer? Why?
Which do you think is healthy? How do you know?



Copy and complete the table below in your books.

Key Term	Match Up	Definition	Use in a sentence
carcinogen		An addictive substance found in cigarettes	
nicotine		Inhaling the smoke of someone else's cigarette, cigar or pipe	
passive smoking		Poisonous	
toxic		A drug which increases activity in the brain	
stimulant		Dried leaves of a particular plant which have been fermented for the purposes of smoking	
addicted		A very serious disease where cells in the body can't stop dividing	
cancer		Something which causes cancer	
tobacco		Dependent on something both physically and mentally; unable to stop using it	

Why do young people smoke?

Curiosity

Stress

Part of a
gang

Keeping
Slim

Loneliness

Looks
cool

Peer
Pressure

Rebellion

Boredom

Parents
Smoke

Role Models in
media/films

Experiment

 SMOKEFREE



Chemicals in a cigarette



SMOKEFREE

Effects of chemicals in cigarettes

Tar

- Causes cancer as well as damaging the lungs
- 70% of inhaled tar is retained in the lungs
- Responsible for staining smokers fingers and teeth a yellow-brown
- Low tar cigarettes are no safer than higher tar cigarettes
- Used to surface roads



Nicotine

- Extremely addictive chemical
- Absorbed into the body very quickly and gets to the brain in 7 seconds
- Effects of nicotine:
 - Increases heart rate and blood pressure
 - Decreases circulation in hands and feet
 - Increases tremor

No evidence that it reduces stress



Carbon Monoxide

- Clear, odourless, tasteless gas
- Poisonous gas that stops your body getting the oxygen it needs
- Rubs away at the lining of the artery walls and makes them sticky.
- Cholesterol then sticks to the walls and blocks the arteries
- This causes heart attacks and strokes.
- The amount of Carbon Monoxide in your body can be measured using a CO Monitor



Booklets

3.1 Name ONE main harmful substance in Tobacco:

Describe how this affects the body:

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The Damage Smoking Causes

Smoking harms nearly every organ in the body

Lungs

- Coughs, colds, wheezing, asthma
- Pneumonia, emphysema, severe chest infection
- Lung cancer



Image courtesy of www.asb.org.uk



Image courtesy of www.asb.org.uk

Mouth & Throat

- Bad breath
- Stained teeth
- Gum disease
- Reduced sense of taste & smell
- Cancer of lips, tongue, throat, voice box

Bones

- Weak and brittle



The Damage Smoking Causes

Skin

- Reduce amount of oxygen to skin
- Skin ages more quickly and looks grey and dull
- Toxins can cause cellulite

Stomach

- Risk of stomach cancer and ulcers
- Risk of developing cancer in kidneys, pancreas and bladder



Reproduction and fertility

Men:

- Risk of impotence
- Damage to sperm, reduce sperm count and testicular cancer

Women:

- Less fertile
- Increase risk of having a miscarriage
- Low birth rate, cot death
- Cancer of cervix

The Damage Smoking Causes

Circulation

- Veins and arteries get narrower, harder and coated with fatty deposits. This will cause:
 - Low fitness, cold skin, hands and feet, and ulcers
 - Gangrene – 2000 amputations
 - Cramps, pains, blockages in your veins can cause strokes or heart attacks



Image courtesy of www.nsb.org.uk



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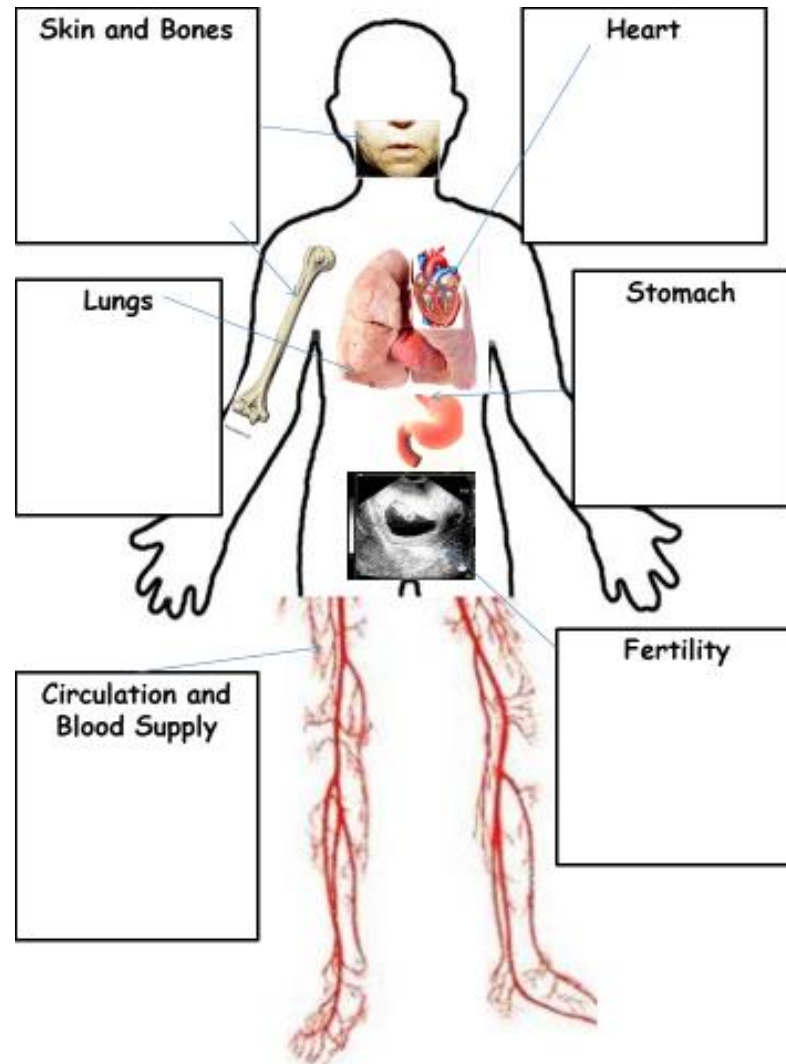


Image courtesy of www.nsb.org.uk

Benefits of Stopping

Time since quitting	Beneficial health changes that take place
8 hours	Carbon Monoxide levels in blood reduce by half, oxygen levels return to normal. Circulation improves.
24 hours	Carbon monoxide and nicotine eliminated from the body.
48 hours	The ability to taste and smell improves
72 hours	Nicotine eliminated from the body
1 month	Appearance improves - skin loses its greyish pallor and becomes less wrinkled
3 - 9 months	Coughing and wheezing declines
1 year	Risk of a heart attack reduces by half compared to that of a smoker
10 years	Risk of lung cancer falls to about half that of a smoker
15 years	Risk of heart attack falls to the same as someone who has never smoked

Task – Draw an outline of the body and show the effects of smoking on parts of the body shown on the diagram below.



Short History of Smoking 1

Unlike alcohol, there are no benefits to smoking. So it is understandable if you are wondering why people are allowed to buy tobacco and smoke it when it only causes the body harm.

In order to understand why, it is necessary to understand how scientific evidence has contributed to changing attitudes towards smoking.

1000 BC

Earliest record of sites cultivating tobacco in what is now Mexico.



In the Americas many cultures, including the Mayans, smoked tobacco as part of religious rituals. It is thought it started off as a type of incense burning and turned into a social practice.



1600 AD

Perhaps the most well-known use of tobacco was among the North American tribes. The 'Peace Pipe' was smoked before saying prayers or to seal negotiations with other tribes. They believed tobacco was a gift from their creator and when they smoked their thoughts and prayers went to their creator.

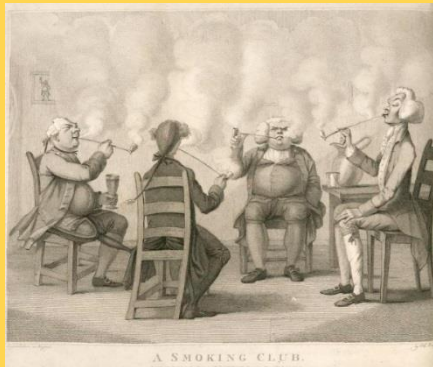
Short History of Smoking 2

1600 AD



Europeans (The Spanish and Portuguese initially) explored and then started to rule over parts of the Americas. Tobacco started to be traded and was introduced to other parts of the world.

1700 AD



Chewing and smoking tobacco was normalised into society in European countries and their colonies during this period. At this point it was not known that tobacco could have harmful effects.

1800 AD



In the late 19th Century cigarettes became popular and John Bonsack created an automatic cigarette rolling machine. This was the start of the 'tobacco' industry that exists today.

1900 AD

1920's

Smoking was seen as normal in the early 20th century. In the UK, the majority of men and about 40% of women regularly smoked – the majority smoking cigarettes. There were adverts and posters telling people how smoking was good for them and healthy!

Fritz Lickint, a German doctor, was the first doctor to publish a study linking smoking and lung cancer. He also coined the term 'passive smoking'.

1950s -1960s

Most people just didn't believe that smoking could be unhealthy until the 1950s.

In 1956, The British Doctors Study published the first paper to argue and provide strong evidence which showed that smoking cigarettes increased the chances of getting lung cancer.

In 1964, The Surgeon General's report in the USA also showed a link between smoking and cancer.

In 1965, cigarette companies were no longer allowed to advertise on television.

1970s - 1990s

As late as 1994, big tobacco companies claimed they were not aware of the problems of smoking.

It has subsequently been shown that tobacco companies **knew** that cigarettes caused health problems including heart disease, cancers and emphysema.

They also knew that they were addictive. Some companies deliberately added more nicotine to their cigarettes so that people would get addicted.

They also deliberately targeted underage smokers, paying for actors to smoke in films and on TV so it would be seen as 'cool'.

In the UK, since 1997 most forms of tobacco advertisement were been banned.

Warnings were first added to tobacco products in 1971 but this was extended so that it would cover a third of the packet. Subsequently pictures were also added as an extra deterrent.

2000 - Now

In the UK, the number of men and women who smoke is now a minority (about 21% of adults smoke).

In 2007, the government banned smoking inside all public buildings to further discourage smoking and to reduce the harm of passive smoking.

E-cigarettes:

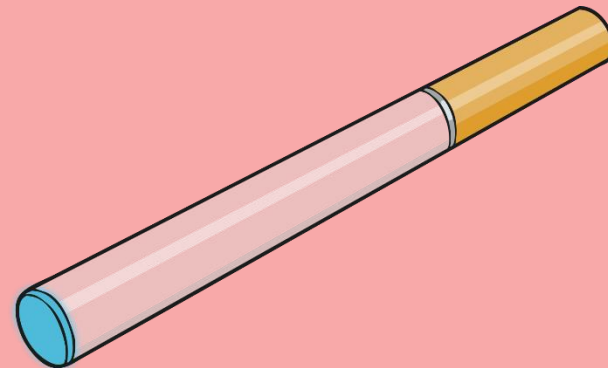
These are electronic cigarettes through which smokers inhale nicotine alone.

They are controversial. No one knows the health risks, they still contain nicotine which is addictive and some people believe they may glamourise smoking again.

Smoking Tobacco

What about e-cigarettes?

In theory, e-cigarettes are less harmful than normal cigarettes as they don't contain tar or carbon monoxide. However, people who smoke them are still inhaling nicotine so they would still suffer the health problems associated with this. Also the effects of smoking nicotine (or 'vaping' as it is sometimes called) in this way are not yet known, so it may not be less damaging to the body after all.



Task

- Create a leaflet explaining the dangers of smoking to teenagers. Include information:
- What is smoking?
- What a cigarette contains
- Effects of smoking on different parts of the body
- Passive smoking
- How to say 'No!'