



### To vaccinate or not to vaccinate

Following the 2012-2013 Measles outbreak in England and Wales some ministers suggested vaccinations become mandatory.

Use the argument cards provided to construct an argument to advise the ministers.

One group should use the 'For' pack and the other group the 'Against' pack.

Debate the issue in class. You could use a talking stick to control the argument or separate pupils into smaller groups to debate the issue before bringing everyone back together to complete the diamond 9 activity.



# Biology

## To vaccinate debating cards



Vaccines are tested for safety for decades before use.

Vaccines are unnatural.

Children are exposed to more aluminium in breastmilk and instant formula than in vaccines.

Vaccines contain toxic chemicals that cause serious health problems like aluminium and formaldehyde.

The WHO (World Health Organisation) states vaccines are safe. They don't make any money from them.

The pharmaceutical companies which make sell the vaccines want you to think they are safe so that they continue to make money.

The most common side effects of vaccines are severe allergic reactions (anaphylaxis) This occurs 1 in a million vaccines given.

Some people have religious views which prevent vaccination.

You are 100 times more likely to be struck by lightning than to have a serious allergic reaction to a vaccine.

Natural infection causes a better immunity than vaccination.

In 2011 a committee was put together to "review adverse effects of vaccines".

Vaccines are made using chicken eggs or pig gelatin. This could be a problem for vegetarians, or cause religious objections.

Vaccines can save children's lives, they are 90-99% effective in preventing disease.

Vaccines are not always effective. You could have the vaccine but still get the disease. Why risk having the vaccine?



# Biology

## To vaccinate debating cards



Vaccines protect the herd. This means children and adults who cannot be vaccinated due to age or poor health are also protected as others are not spreading the disease.

Vaccines can cause serious allergic reactions; if everyone were forced to have a vaccination many would suffer these reactions. Is it right to force this on people?

Vaccines protect future generations i.e. Mothers unborn children from disease.

The diseases that the vaccines target have practically disappeared. Deaths from Diphtheria, Polio and Tetanus have not been heard of for years.

The only disease that has been eradicated by vaccines is smallpox. Other diseases still occur, but there are very few of them because of vaccines.

Scientists have published links between vaccines and conditions like autism.

Having single vaccines leaves children vulnerable to serious diseases for longer.

Single vaccines may be safe but it is unsafe to get too many at once like the combined MMR. It's safer to have the vaccines one by one with gaps between.

The scientist who published a link between autism and the MMR were proven to have falsified his data and was stripped of his medical licence.

There are many stories on the internet about people whose children were shown to have autism after having the MMR vaccination.

As scientists say "correlation does not prove causation" There is also a correlation between the rise in sales of organic food and autism. It doesn't mean one causes the other.

Vaccines are not tested properly.

Natural immunity might be more effective but some diseases are too dangerous to allow people to catch them in the hope they survive and become immune.

Improved living standards, not vaccination, have reduced infectious diseases.