

# Virus Sort

Likely to die off or likely  
to multiply?  
You decide!

These viruses  
are likely to  
succeed in getting  
replicated.

These viruses are  
likely to fail to  
get replicated.

We don't have  
enough information  
to decide what is  
going to happen to  
these viruses

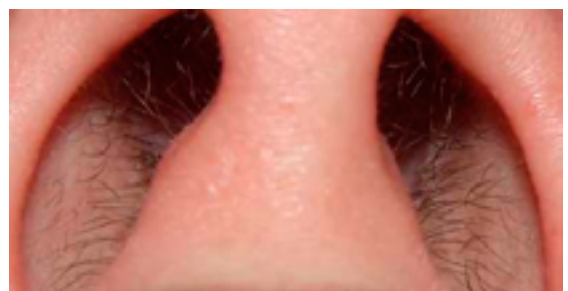
These cards are  
different and  
provide information  
about viruses

## Finger and Mouth



I waited on this finger for  
only ten minutes before I  
was able to move to near  
the mouth. Now I hope a  
tongue can reach me.

## Nostrils



We are sitting at the entrance  
of these giant caves. Some of  
us have just been swept in by a  
rush of air. I nearly got swept  
off just now. This area is very  
popular. There are millions of  
us here.

# Virus Sort

Many thanks for the positive feedback. We hope you can continue to help us develop and disseminate this activity by suggesting additions, correcting and/or refining facts and sharing with others.

We would also welcome drawings and pictures.

In the same way as we think children talking and working together are more creative, we have also always believed that two or more teachers working collaboratively are more than twice as good as two working separately. The strength and longevity of our resources endorses this.

# Virus Sort Introduction

We were at first a little concerned that, like Tristram Shandy's hypothetical father\*, that we would have this activity ready at a point where it was too late for it to be any use. However many of you have found it a fun way to embed more understanding of the workings of the virus. We will continue to work with colleagues to make sure our information is accurate, up to date and regularly revised. Our information cards have been checked and more will appear later. Feedback from you remains vital.

We would also welcome your views, because this is a tricky area, where maybe we won't be welcome. Rupert Beale quotes the US health secretary Michael Leavitt in "Wash Your Hands":

"Anything we say in advance of a pandemic happening is alarmist; anything we say afterwards is inadequate."

This activity is designed to make children aware of how a virus moves from host to host and also provide drip, drip information about viruses in general. We also wanted to point out that there is a lot we don't know at the moment that we wished we did know.

A virus is not a living thing, but Beale and others write about it being cunning, devious, single minded etc. because it seems be like an enemy. We have gone one step further. We often animate objects in our activities to stimulate role play. We have made many activities where children become rainforest animals or parts of a barn. In this case we have given the virus a voice. Each virus explains where it is and what it is hoping to do so that children can decide whether its presence constitutes a threat or that it is no danger to us. They can also decide whether they do not have enough information to decide. The activity is a catalyst for discussion, searching for information and reading. And asking questions. If used at home it may also inform parents and carers. The information cards will provide some information, which we hope will stimulate questioning and surmise especially since there are big gaps in our knowledge and lots of fake information around.

\*From "Tristram Shandy" by Laurence Sterne: T's father was writing a book on how to bring up Tristram, but never caught up with his development and was always too busy writing to ever look after him - a good example of benign neglect which Dickens borrowed in Bleak House when he created Mrs Pardiggle.

The webaddress for this activity is:  
<http://www.collaborativelearning.org/virusort.pdf>  
This activity was last updated 8th September 2020

## COLLABORATIVE LEARNING PROJECT

Project Director: Stuart Scott

We support a network of teaching professionals to develop and disseminate accessible talk-for-learning activities in all subject areas and for all ages.  
17, Barford Street, Islington, London N1 0QB UK Phone: 0044 (0)20 7226 8885

Website: <http://www.collaborativelearning.org>

Collaborative Learning = Oracy in Curriculum Contexts

**makes challenging curriculum accessible.**  
**improves social relations in the classroom.**  
**provides scaffolding for exploratory talk.**

**If you don't get the chance to talk a topic through with others, you will not be able to write about it confidently!**

<http://www.collaborativelearning.org/virusort.pdf>

# Virus Sort: Progress so Far - Notes for teachers

When you make up this activity you may want to enlarge the sorting board to A3.

We are continuing to add to the situation cards (a blank template is included for your contribution) and have a set of information cards which we will tweak and/or add to. Our aim is to have as many positive (for the virus!) situation cards as negative, so please keep sending us your suggestions.

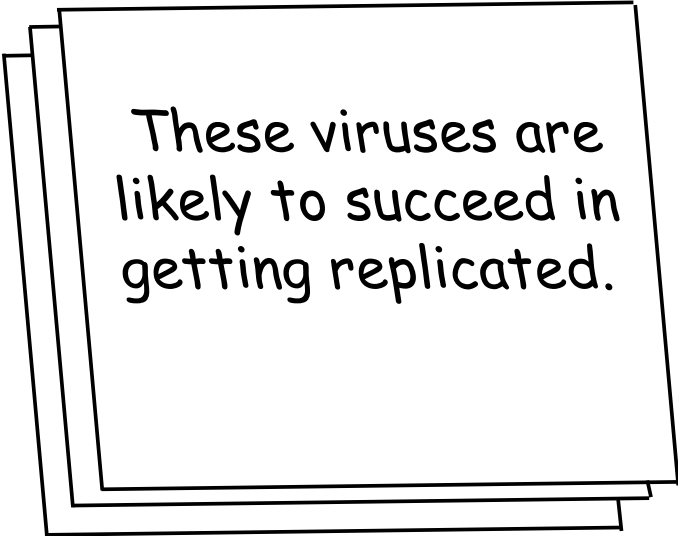
# Virus Sorting Board

Likely to die off or likely to multiply?

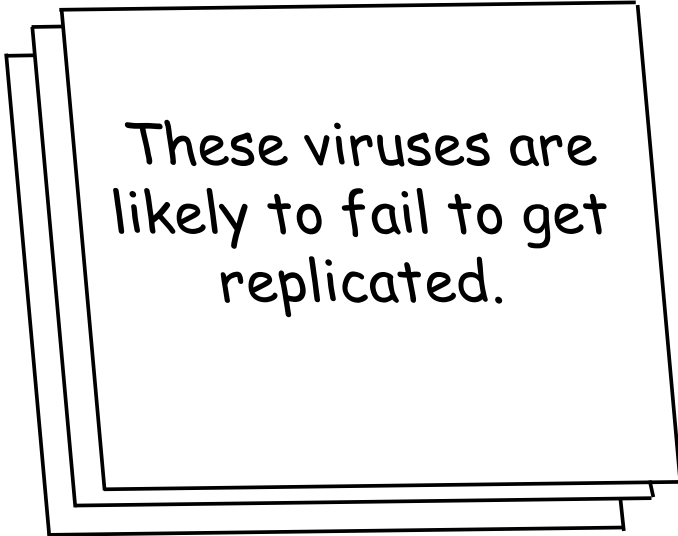
You decide!

Shuffle the cards and place the face down. Take turns to pick a card. The virus will tell you where it is and what is happening.

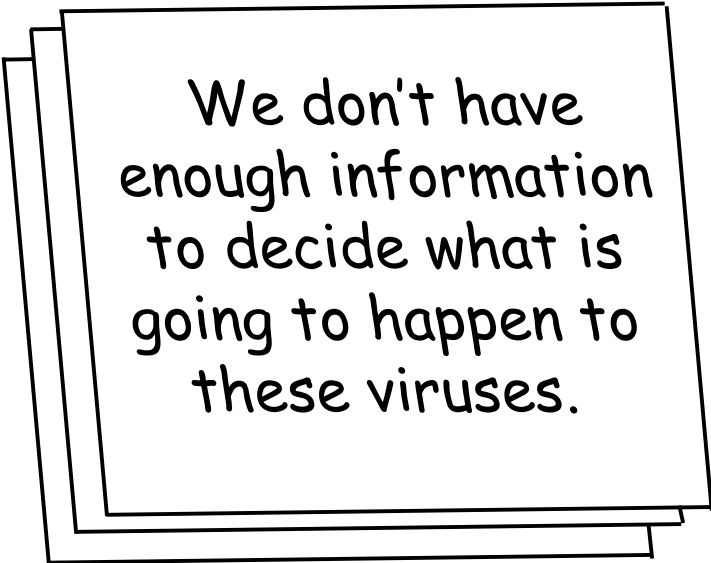
Work together to decide where the card should go on the sorting board.



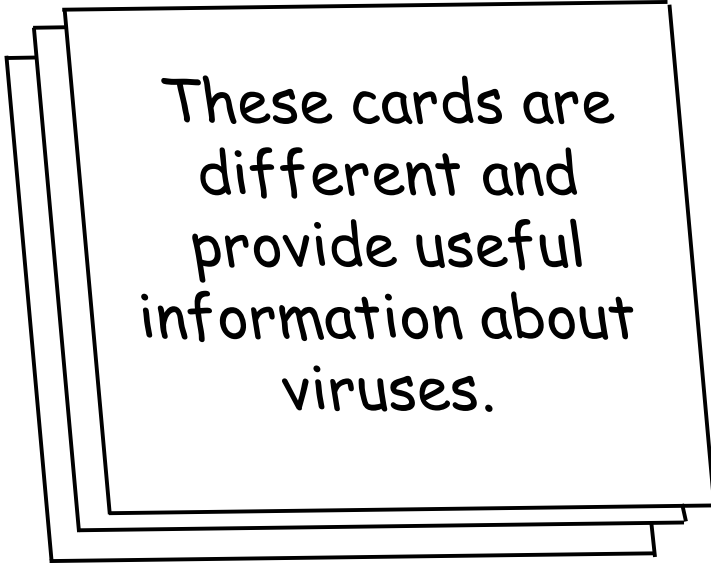
These viruses are likely to succeed in getting replicated.



These viruses are likely to fail to get replicated.



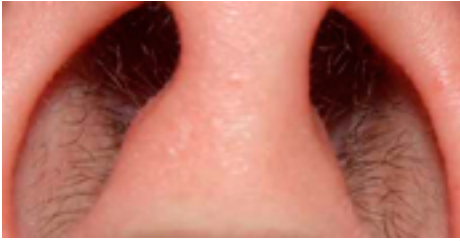
We don't have enough information to decide what is going to happen to these viruses.



These cards are different and provide useful information about viruses.

Now take some blank cards and either write a question or add some more information about viruses that you know.

## Nostrils



We are sitting at the entrance of these giant caves. Some of us have just been swept in by a rush of air. I nearly got swept off just now. This area is very popular. There are millions of us here.

## Door Handle



We have been here for two days and no possible host has come by. Now we can see a white cloth coming closer. It smells of alcohol! Help! Our shells will be dissolved.

## Finger Nails



I am in the fingernail nearest to the top. There are thousands of us in the crevices of the host's hand. I hope this finger goes into the nose or mouth soon.

## Door Knob



I have had to wait three days for this hand to come to open the door. I think this is the hand I came from in the first place.

## Ear



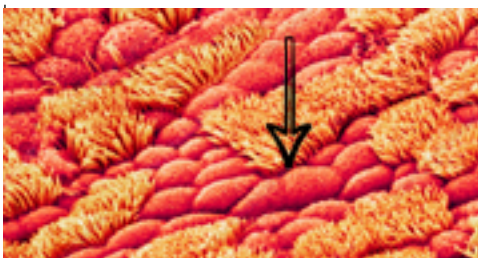
I was on a finger and now I am, I hope, in front of a promising way into this host.

## Lips



I arrived here because the host where I started off kissed this person. .

## Inside the Nose



I am sitting here waiting with my friends hoping for the next breath to take me down to the lungs.

## Finger and Mouth



I waited on this finger for only ten minutes before I was able to move to near the mouth. Now I hope a tongue can reach me.

## A Sneeze.



I am now in a drop of water flying in the air. I am near enough to the other person to get breathed into them.



### Face



This must be the busiest place for us viruses. Plenty of bacteria here too. We'll have to watch out for soap and water and find crevices to hide us until we can get inside.

### Back of Hand



I am quite close to my host's wrist. The good news is that I have survived two handwashes. When my host puts one hand on the other I plan to move to the palm.

### Kitchen Surface



I am waiting on this worktop for some work to take place. My future host prefers take-aways, so I may have to be patient. I may not survive on this wood. It's a pity it's not metal.

### Handle of Fridge



This is a good place to find a host. It is tucked away and not cleaned very often. All the members of this family open the door very often to get milk or snacks.

### Wooden Cupboard Door



I am on the edge of the door by the knob. When people open the door they usually touch the edge as well as the knob so I'm optimistic that I'll be moving soon.

### Top Deck of Bus



I am on the nearest yellow post but this bus is now in the garage and won't be going out again until five o'clock tomorrow morning. Will they clean me off?

### Car Door Handle



I am on the handle at the front and on the passenger side. However, I have been here for three days without a host's hand opening this door.

### Top of Head



I am right in the middle here, but too far away from the eyes, nose or mouth. Maybe my host will scratch his head and I can move to his hand.

### Handshake



Well that was easy! I was on the hand on the right and now I am on the hand on the left. Several hundred of us came with me.

## Toilet Lock



This is a very busy spot with a different set of fingers arriving very often. None of us stay here very long.

## Telephone



I thought I was on a telephone which is a good place to meet new hosts. This phone box has become a library so I am sitting on a very popular story book.

## Computer Keyboard



I arrived here about a day ago but as far as I can see I am sitting on the least used key and only one person seems to use this computer.

## Supermarket Keypad



I am not doing very well here. I am on number 5 waiting for a finger, but everyone is using contactless to pay for their groceries.

## Petrol Pump



I am in a good position but so far everyone has worn gloves. However, the weather is warming up so maybe a some nice fingers will come along

## Overshoes



I have been sitting on this overshoe while my host walks around the hospital, but can't work out where I may go from here.

## Crook of Elbow



I arrived in the crook of an elbow when my host sneezed, but most of the viruses resting here have been waiting a long time for somewhere else to go.

## Toes



My host can wiggle her little toe without moving the others. That does not help me. I'm tucked between the big and second toe. Maybe she can put her toes in her mouth?

## Facemask



My new host had bought a facemask but got close to my old host. Since I am very small it looked a bit like a big climbing net to me, so I can easily got breathed in through the spaces.



## Behind the Face Mask



My host sneezed and I was rushed out of the throat in a water droplet and am now on the inside of the face mask. Other viruses are coming in but going out is harder.

## Swab



My host has just gone for a test and I am now on the swab. I got replicated in a throat cell and only burst out of the cell a short time ago, but there are lots of us here not going down to the lungs.

## Near the wrist



I arrived here a day ago and have survived on the back of this hand. My host has washed her hands several times but always just misses me. She touches her face a lot so I will just wait.

## Parcel



I have just moved from the hand of this delivery driver to this parcel. I hope I will be able to reach another host when the door of this house opens.

## Handshake



I moved to the other hand very easily, but now I think my new host is moving towards a sink with a bar of soap on it.

## Beach



My host drove to this beach to meet friends for a picnic. They are all sitting on the sand quite close together. However there is a strong wind.

## Garden Centre



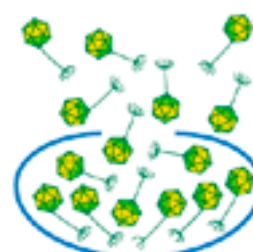
My host has just opened his garden centre. He has put tape down to show two metre distancing, but there are lots of people coming here today.

## City Park



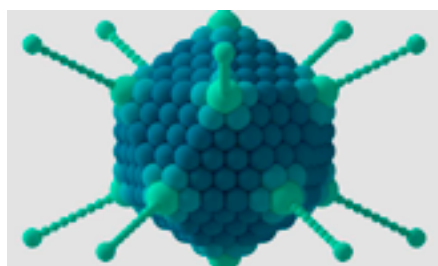
My host is meeting friends at the city park. He is told by the government to stay two metres away from everyone. The weather is hot and the park will get busy so I am optimistic.

## Cell Burst

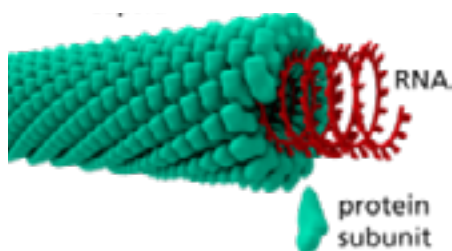
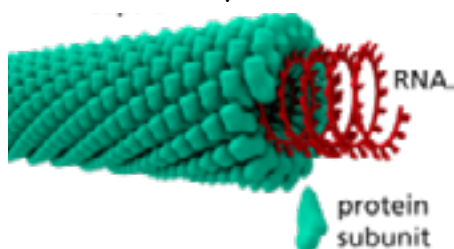


I am free! We all need to find another cell. I can either stay here in this throat or try to find another host. I think my host is going to cough in a minute and he is not wearing a face mask.

# Virus Sort Cards information cards

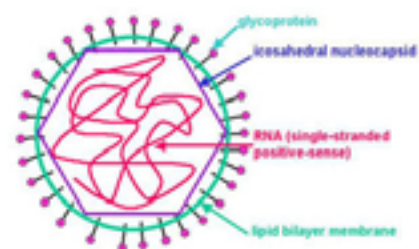


Viruses have two main shapes. They can be spiral or an icosahedron with twenty sides

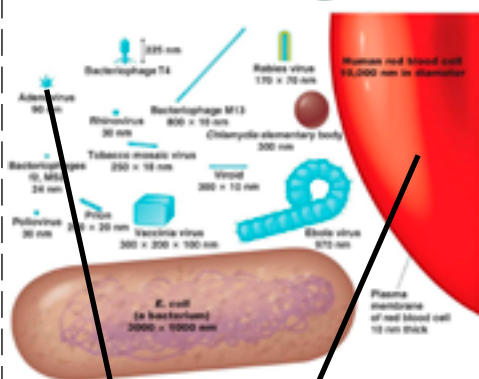


The weakest point of a virus is its skin, shell or capsid. It quickly dissolves in soap and then the virus falls apart.

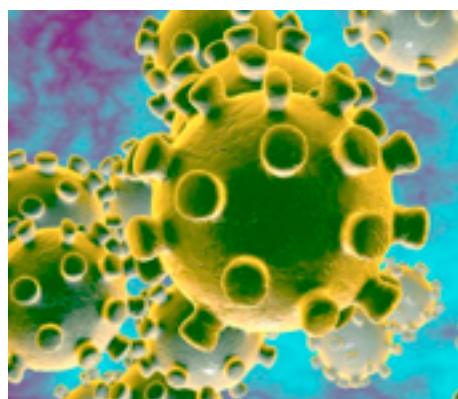
## RUBELLA VIRUS



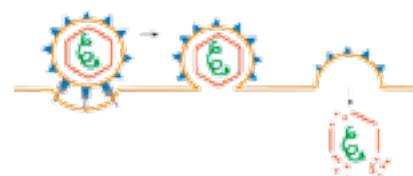
Viruses cannot reproduce on their own. They have to find a host cell to make new viruses.



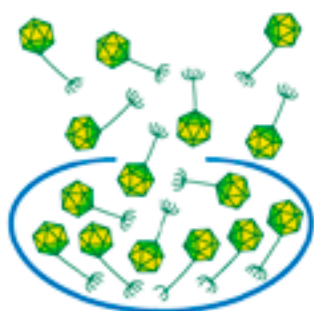
Viruses are very small. They are much smaller than a red blood cell.



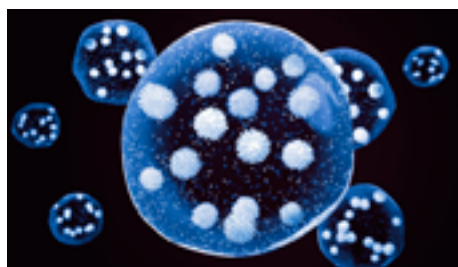
A coronavirus is about 120 nanometres wide. A nanometre is one billionth or a thousand millionth of a metre.



A virus finds a cell that it likes, attaches itself and then its outside dissolves into the cell. The viral DNA enters the cell. It is translated into many new viruses by the cell's own machinery.



When the virus has been copied many times inside a cell, the cell bursts and lots of viruses escape to travel to find another host cell.



When you sneeze or cough water drops with viruses in them can travel through the air.



A coronavirus can stay active for up to seven days on a cold metal handle and two to three days on plastic or other hard surfaces.

## Virus Sort Cards information cards



A virus can travel a long way in the water droplets produced by a sneeze. The larger droplets can travel two metres and the tiny ones even further. Indoors it may get into ventilation systems.



A COVID-19 virus may be able to stay active on cardboard for up to twenty four hours. We do not know exactly how long the virus remains able to infect us.



We touch some surfaces many times so cleaning surfaces in public places is a good way to prevent the virus moving from hand to hand.



Soap is probably the easiest and cheapest way to clean surfaces and hands. The fat in soap dissolves the virus so you must get a good lather with warm water.



Face masks are good at stopping large water droplets which may contain viruses from escaping into the air. Viruses are so small they can easily pass through the mesh so it is still important to stay two metres apart.



The tiny water droplets from a sneeze can travel at over a hundred miles an hour. If you don't have a tissue it's a good idea to sneeze into your armpit.

Always use clean, running water hot or cold. Wet your hands first, then turn the water off, and lather your hands with soap. Rub your hands together with the soap for at least 20 seconds. Make sure to scrub the back of your hands, between your fingers and under your nails. Turn the water on and rinse your hands. Use a clean towel or air dry.



The COVID-19 virus can stay active on stainless steel or plastic for up to two to three days. It is important to clean surfaces you touch often, wash your hand frequently and avoid touching your face.



Anti bacterial cleaners and hand sanitisers contain 60% alcohol to kill most germs. They are useful when soap and water are not available,



Blank Virus Sort Cards Template for your ideas.
