



**Prize Winner**

# **Models & Inventions**

## **Year 3-4**

**Ilan Storer**

**St Andrew's School**

# Oliphant Science Awards Models and Inventions Report

By Ilan Storer  
ID: 0611-040

## COVID-19 Anatomy of a Killer Virus

### **The scientific principle demonstrated by your model or used in your invention**

I am showing you the anatomy of the COVID-19 virus and also the hotspots and impact around the world.

### **How the entry was made, including any adult help needed in its construction.**

- Step 1: To cut a wedge from the ball I asked my Mum for help because it had to be cut by a sharp knife.
- Step 2: I used scissors to cut out COVID-19 newspaper article clippings that I have collected since March for my COVID-19 time capsule.
- Step 3: Mum and I mixed special paper mache glue using powder and cold water.
- Step 4: I paper-mached the foam ball and the wedge using the newspaper articles. The first layer had to dry before I put on the second one. I sorted through the newspaper bits to make sure that any piece of paper that had COVID-19 written on it was in a separate pile to make sure you could see it on the top layer.
- Step 5: I drew the world on the ball and painted the countries.
- Step 6: I painted and labeled the anatomy of the virus inside the wedge and in the ball. I rolled the pipe cleaners around a texta to make it look like a loop. Dad squished the super glue on to the pipe cleaner (he still has glue on his hands).
- Step 7: I searched the hotspots of the virus around the world and put red tees in these top 10 places where there have been more than 19000 deaths so far.
- Step 8: I put orange tees to show where the top 11-30 COVID-19 death countries are , and the yellow tees show the top 31-50 countries where there have been 800-2800 deaths so far.
- Step 9: I used coloured pins to show the proteins.
- Step 10: we stuck a cake board down to put the model on, and glued everything down.

### **Any problems that occurred and how you overcame the problems.**

The newspaper wouldn't stick to the first foam ball so we changed the foam type.

### **How to operate your model or invention**

To make it interactive you can take out part of the ball to see what COVID-19 is made of. You can also spin the ball like a globe to see all of the countries.

## COVID-19 deaths worldwide as of August 14, 2020, by country

Published by John Elflein, Aug 14, 2020

As of August 14, 2020, the outbreak of the coronavirus disease (COVID-19) had spread to six continents, and approximately 757,471 people had died after contracting the respiratory virus. Over 35 thousand of these deaths occurred in Italy.

### Lockdowns are loosened but crisis is not over

Approximately 215 countries and territories worldwide have been affected by the COVID-19 disease. The risk of infection remains serious if you are in an area where there are confirmed

## Number of novel coronavirus (COVID-19) deaths worldwide as of August 14, 2020, by country



Red tees

Orange tees