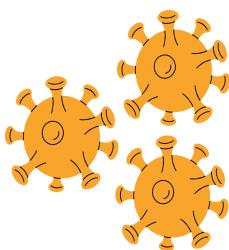


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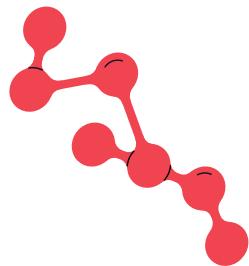
# ESCAPE LAB

A JOURNEY INTO DRUG  
DISCOVERY



Viruses are pathogens that infect our cells and can make us feel unwell.

In our lab, we work on drugs called antiviral compounds to stop infections.



We need your help to find a new antiviral compound to fight the virus!

# Screening Compounds 1 - 12

Aim: To test the antiviral activity of the twelve compounds.

Method:

1. 24 hours prior, transfer cells and virus to a plate and leave in the incubator.
2. On the day of testing, take one plate out of the incubator.
3. Add one drop of each compound to all wells in the corresponding column in the plate.
4. Check for colour change to **blue**.
5. Record the results below.

If the colour changes to **BLUE**, the compound has worked!

	1	2	3	4	5	6	7	8	9	10	11	12
A	<input type="radio"/>											
B	<input type="radio"/>											
C	<input type="radio"/>											
D	<input type="radio"/>											
E	<input type="radio"/>											
F	<input type="radio"/>											
G	<input type="radio"/>											
H	<input type="radio"/>											

Are there any letter and number clues you can write here?

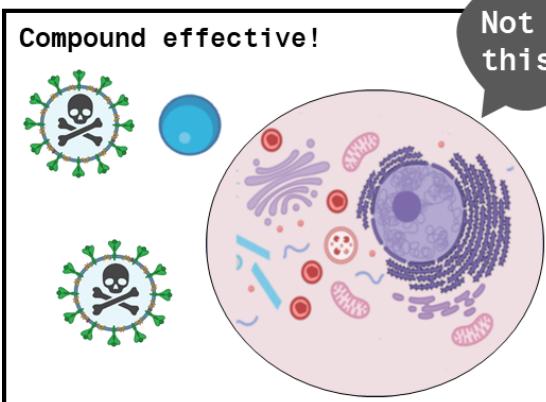
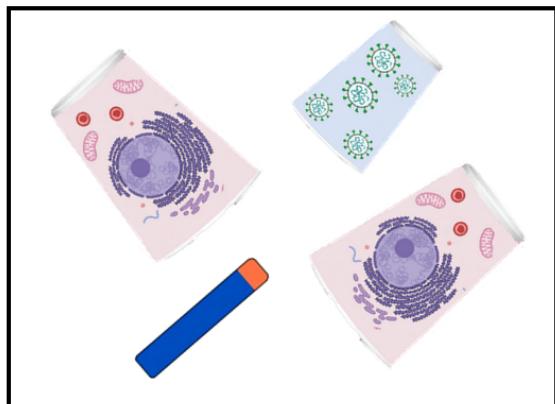
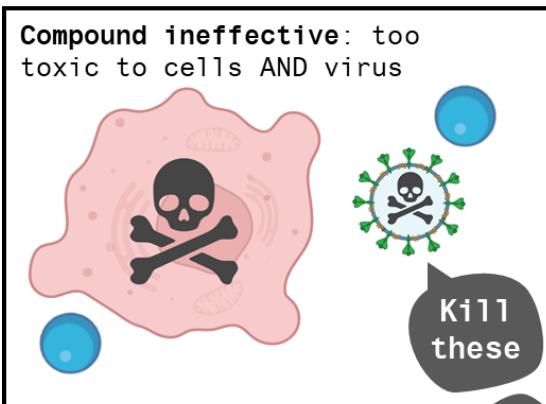
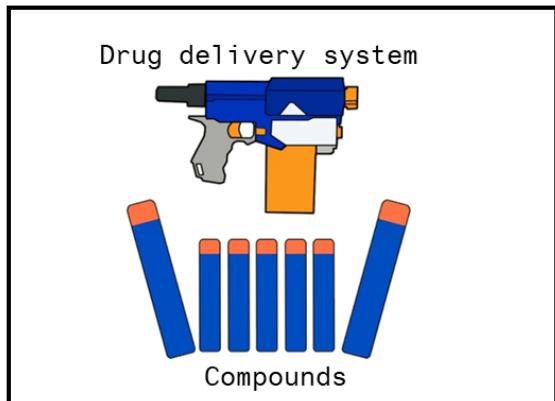
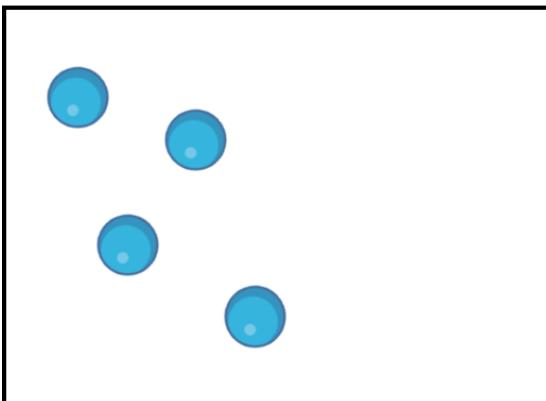
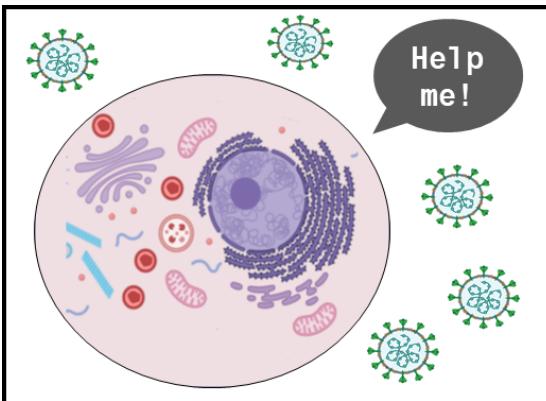
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# Testing cytotoxicity

Aim: To test the toxicity of the compounds.



# Modifying the compound

Aim: To test which side group reduces the antiviral activity the most.

## Experiment 1

Aim: To test antiviral activity of Compound + Side Group 1

Result:

20% reduction in infection.

## Experiment 2

Aim: To test antiviral activity of Compound + Side Group 2

Result:

60% reduction in infection.

Compound is more soluble than Side Group 1

## Experiment 3

Aim: To test antiviral activity of Compound + Side Group 3

Result:

20% reduction in infection.

Compound changed colour and has a yellowish tinge.

## Experiment 4

Aim: To test antiviral activity of Compound + Side Group 4

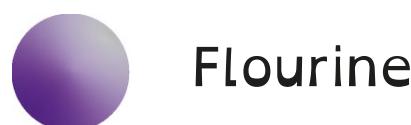
Result:

35% reduction in infection.

Compound is much more soluble than all others tested.

# Building the compound

Aim: To build the structure of the compound!



Present your results on the poster  
and collect your prize!