



BIOLOGY CLASS

✓ CCU Taiwan iGEM Team

✓ 2020/07/18

H₂O



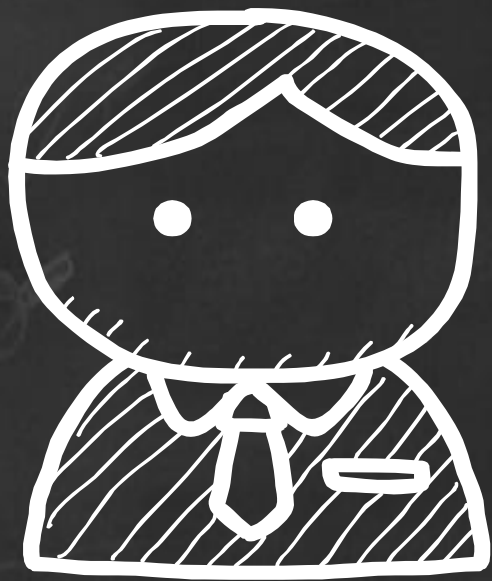
Lesson one



$$\frac{\sqrt{AB+CD}}{2} = H^2$$

A³





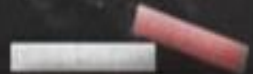
Guess Who I Am





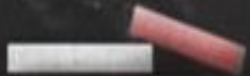
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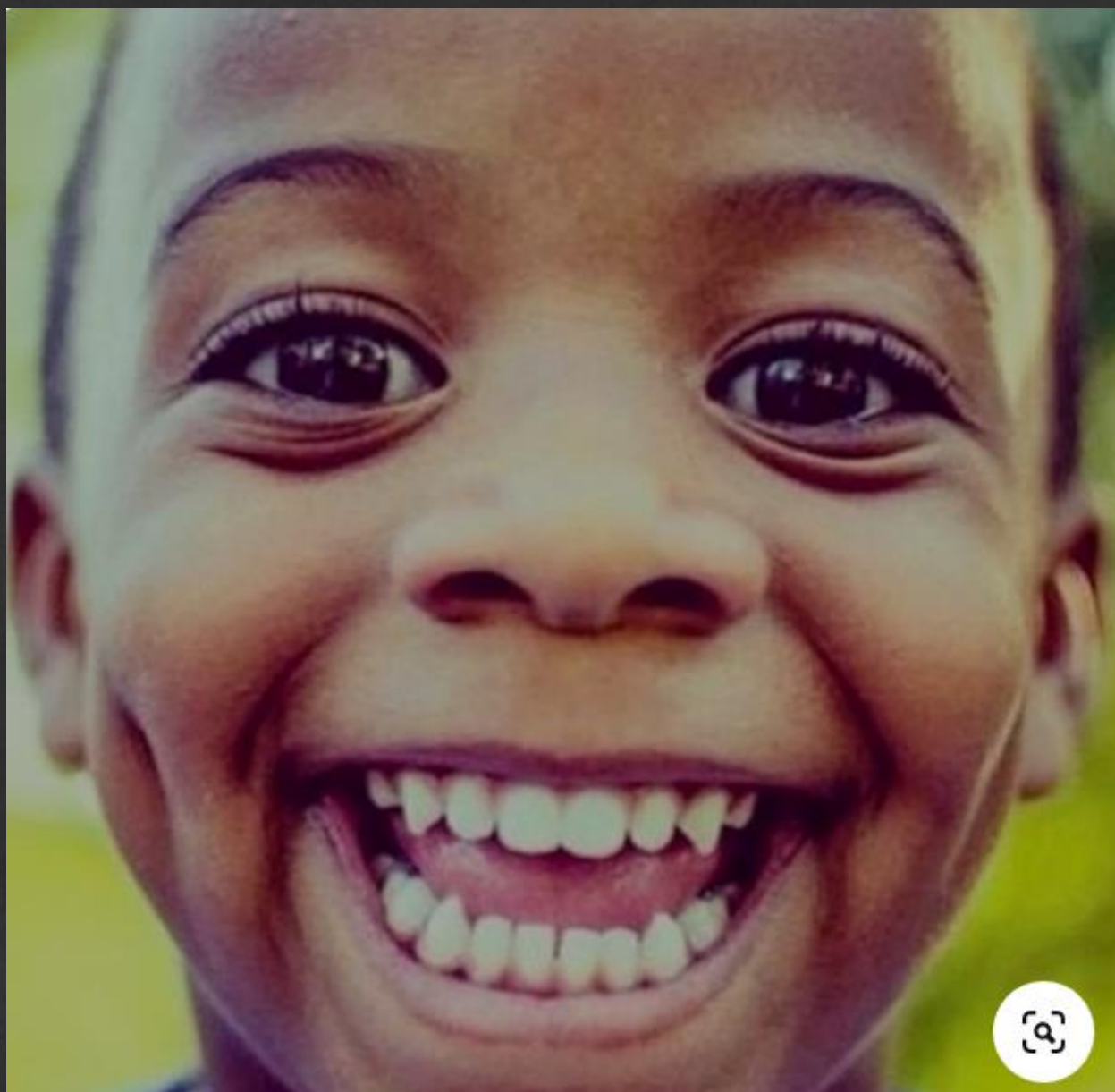


Arct
px
 $0 \leq q < 1$
Sovly
n-kin-
and





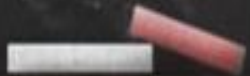




Nose



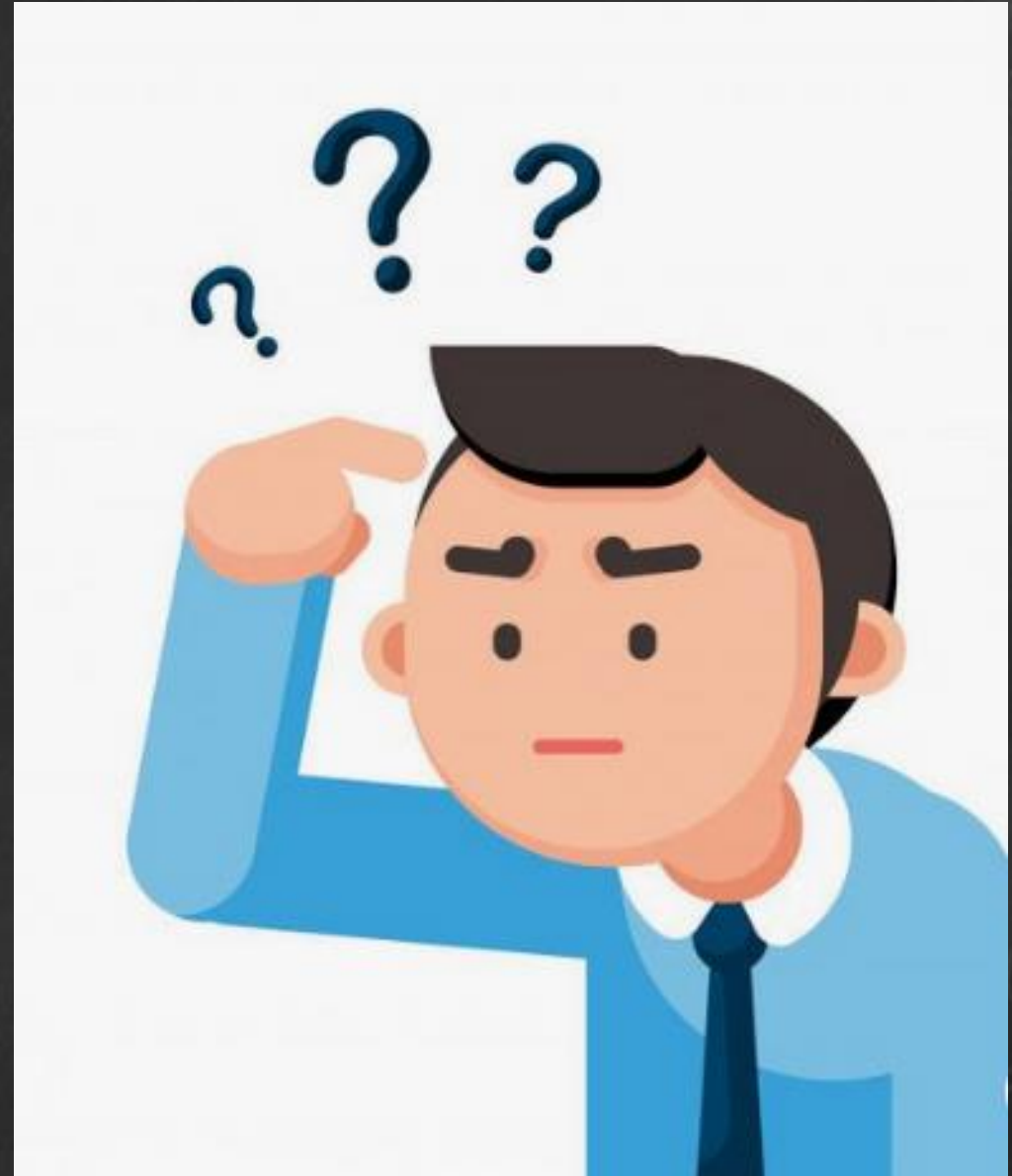
Ears



Mouth



Why
We Are
Different?



Because

We have different genes.



What is a gene?



DNA



chromosome



Gene

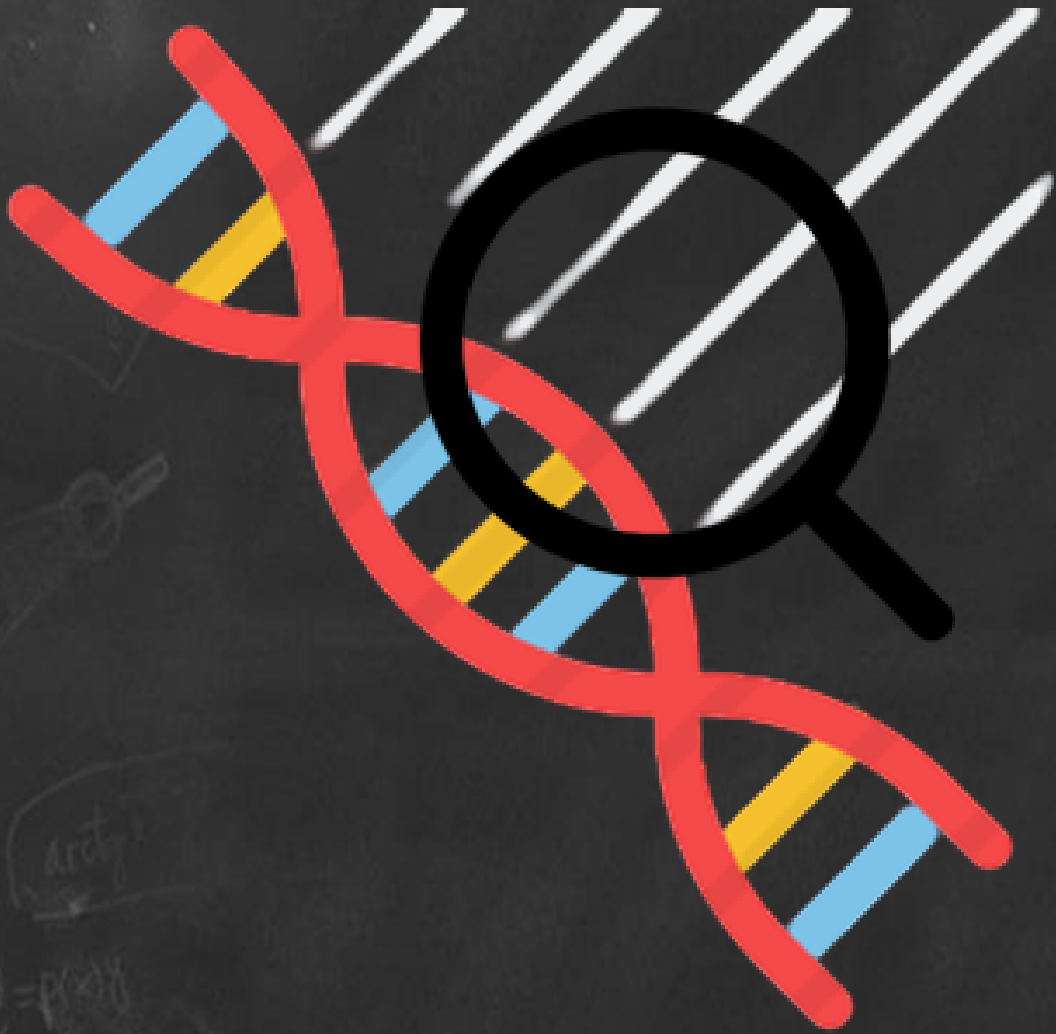


Genetic factors



Find the answer from
the clues of genes





Big Mouth



Sharp teeth



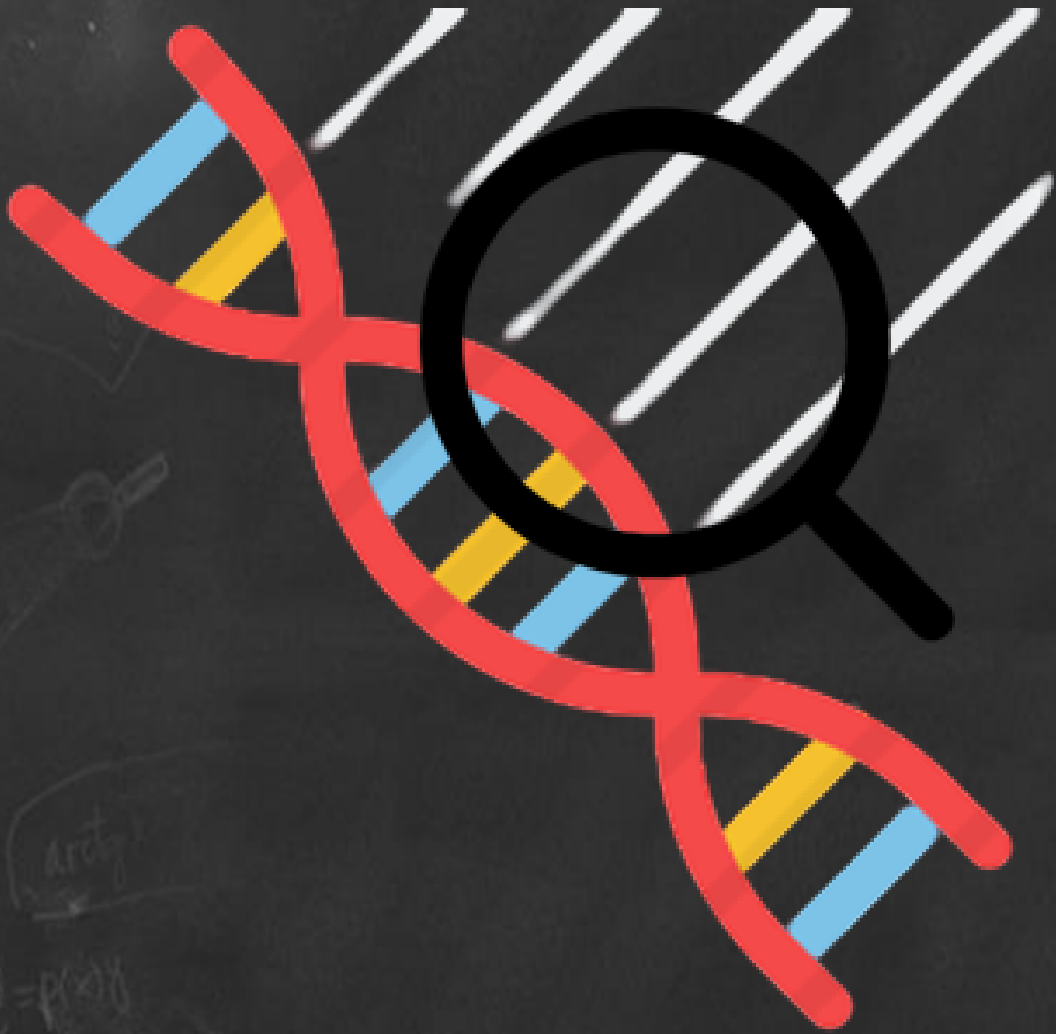
Long tail



Green body



crocodile



hairy



Round ears



Small body



Hide the food
in the mouth



Hamster



Short nose



Short feet



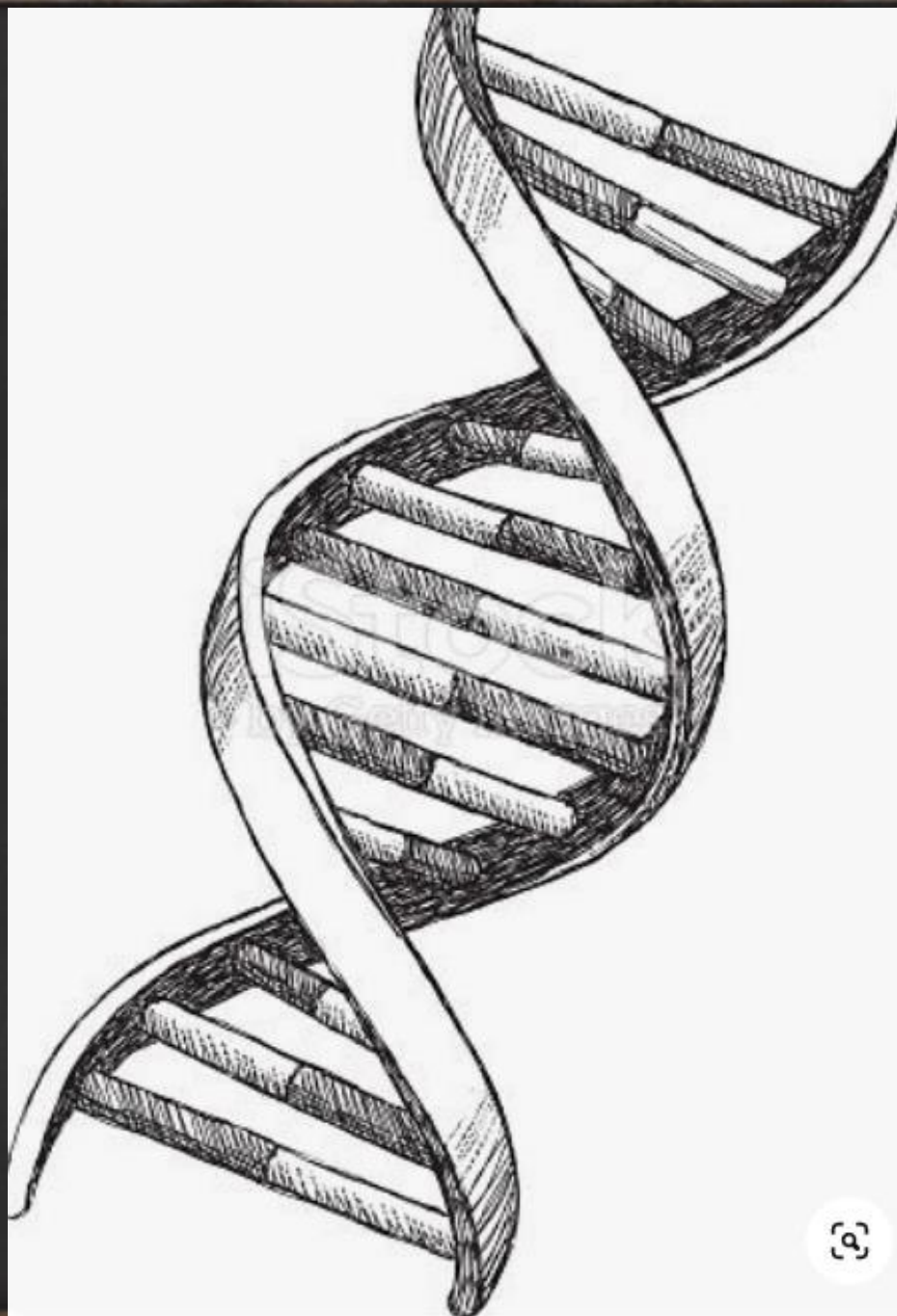
Short tail

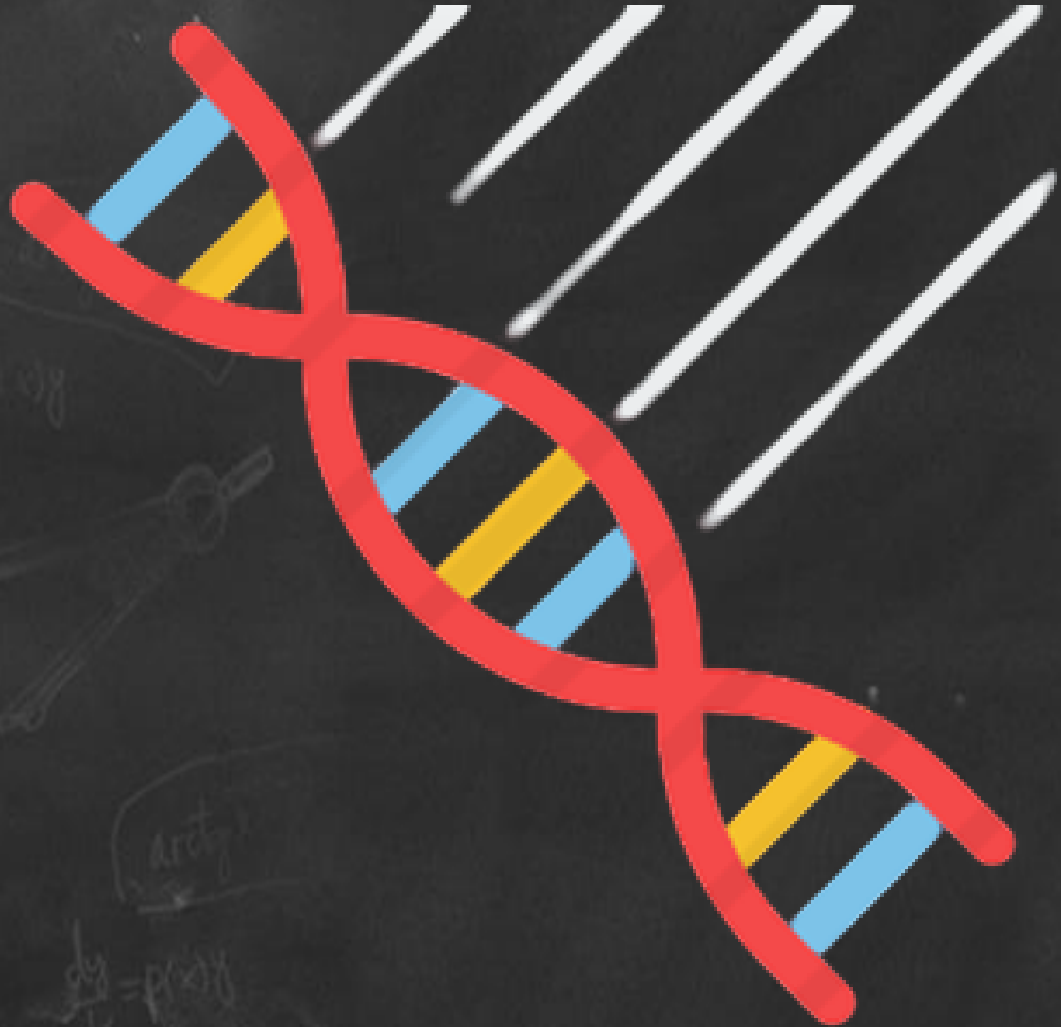


Pink

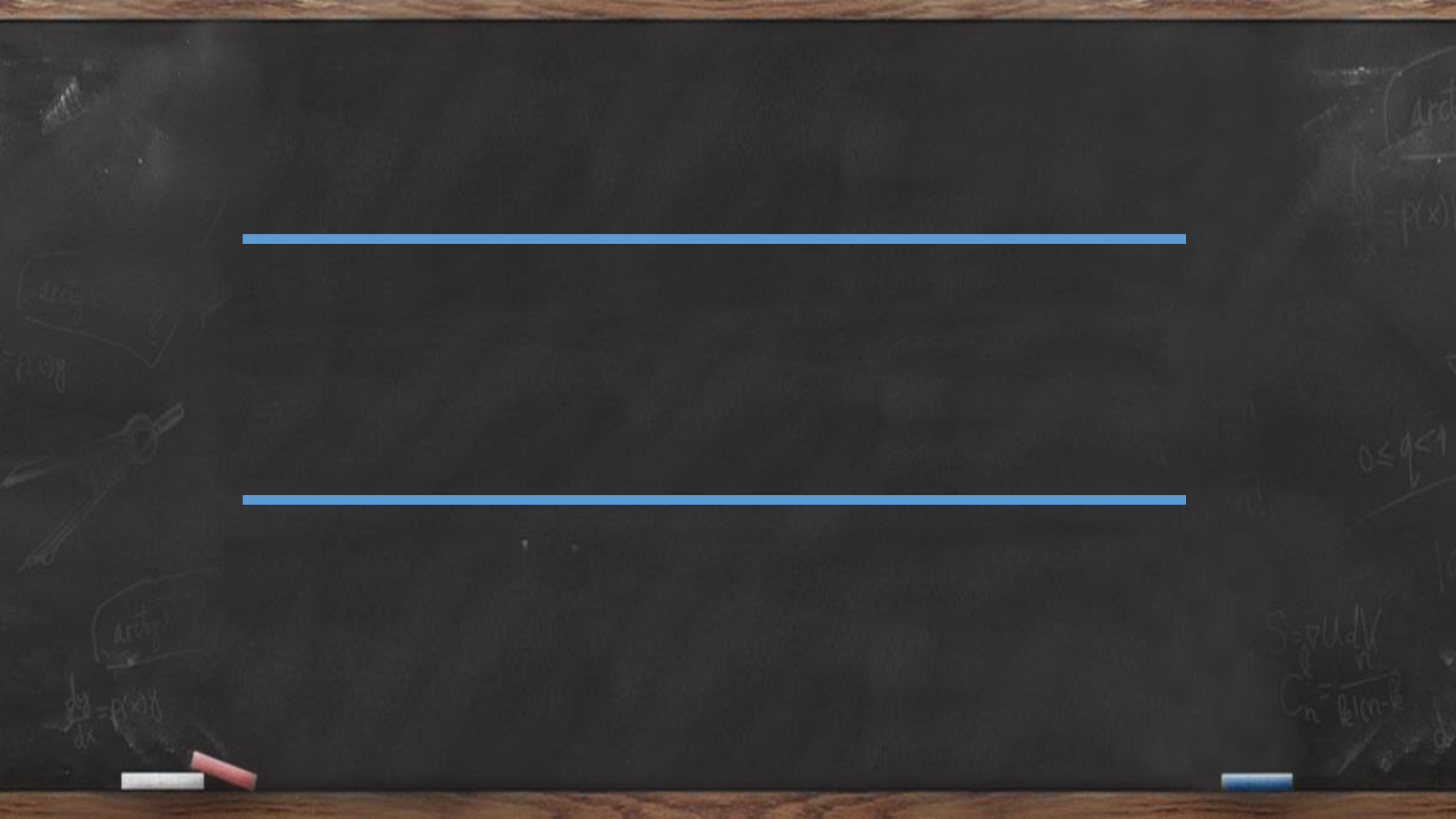


Pig



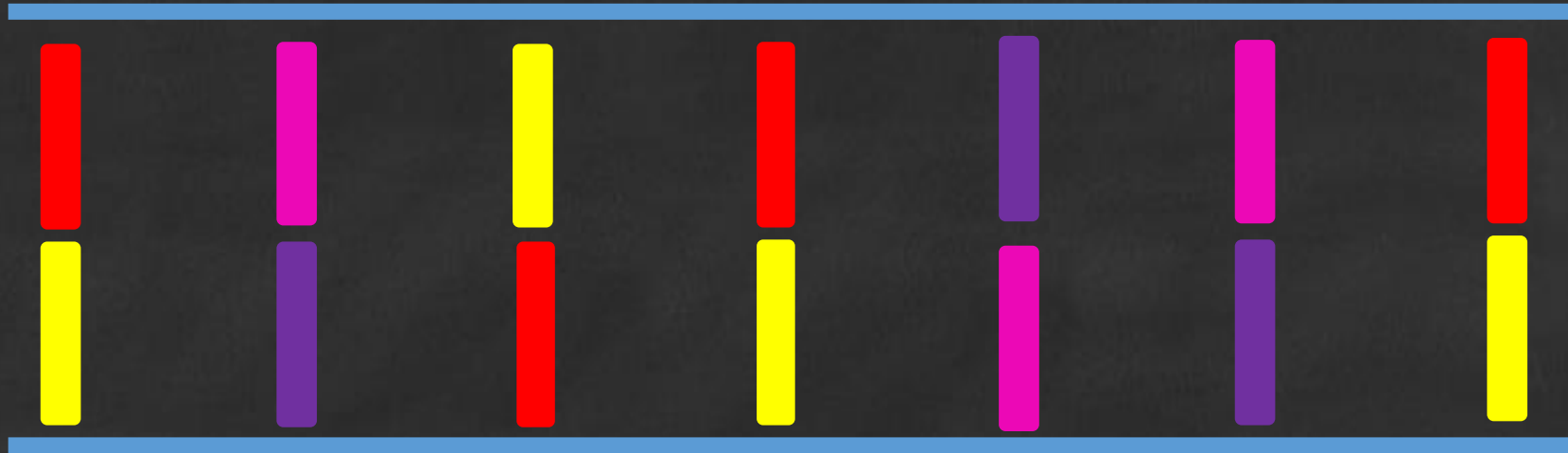


Double helix



ARTICIG

IT A TIC

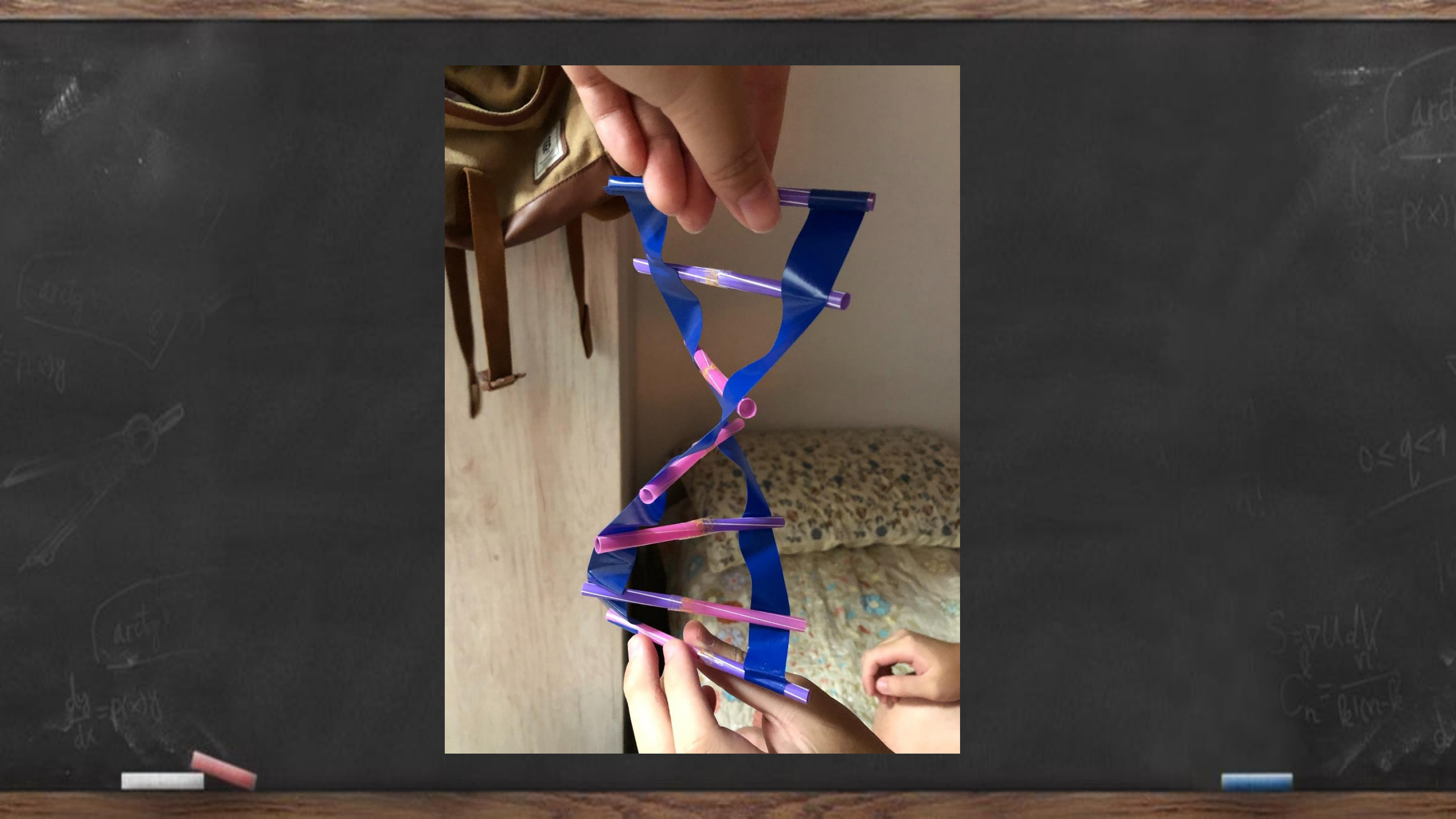




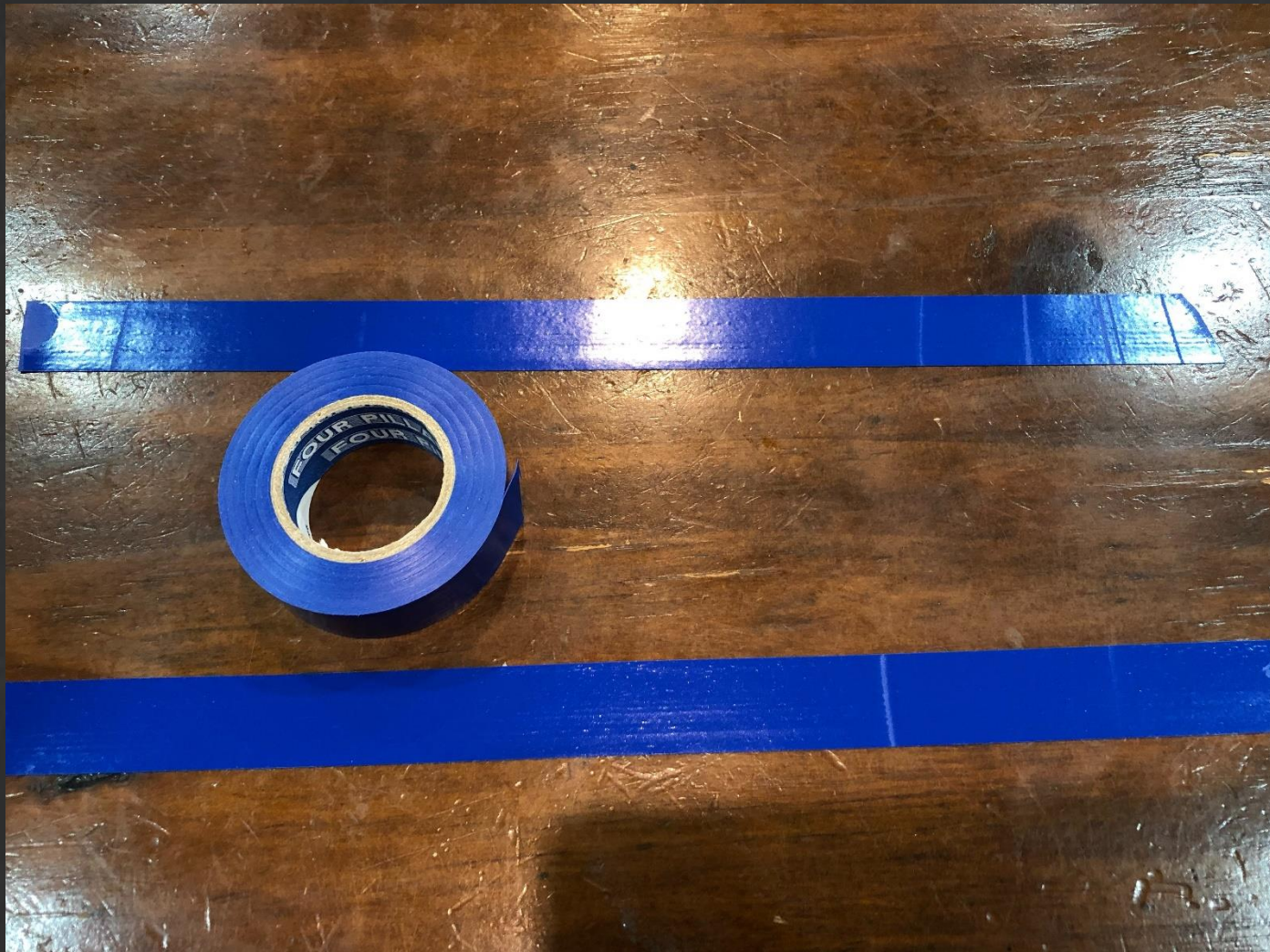
game time

HANDS-ON GENES



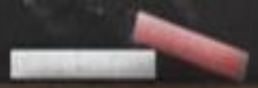






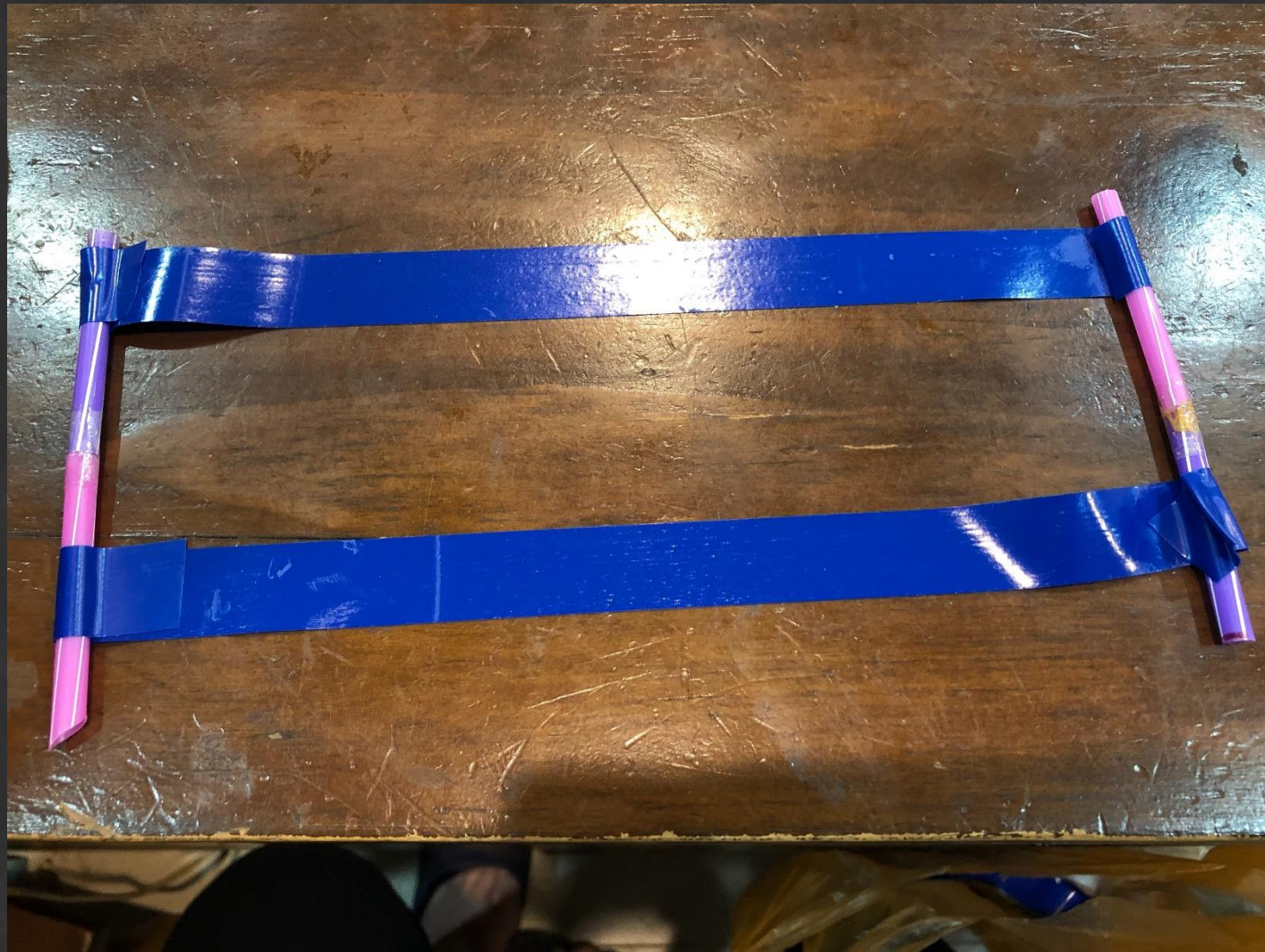


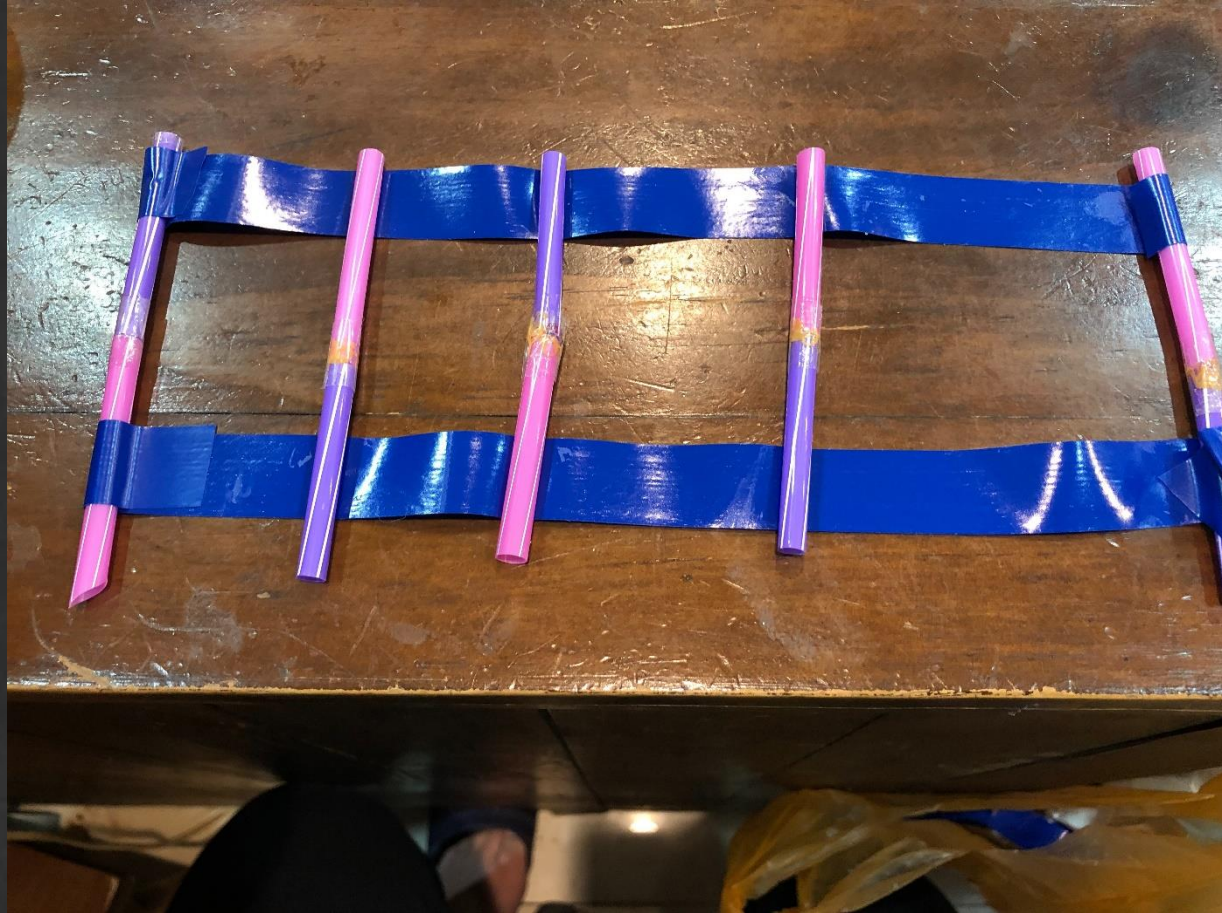












H₂O



Lesson two



$$\frac{\sqrt{AB+CD}}{2} = H^2$$

A³



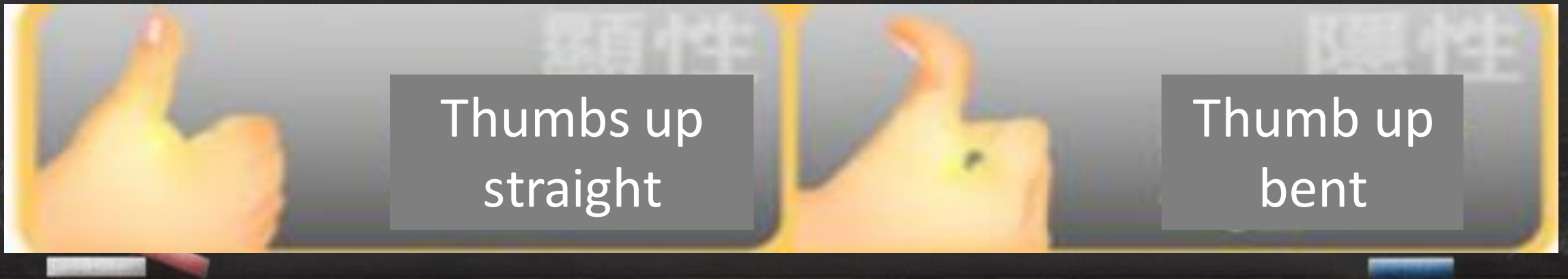
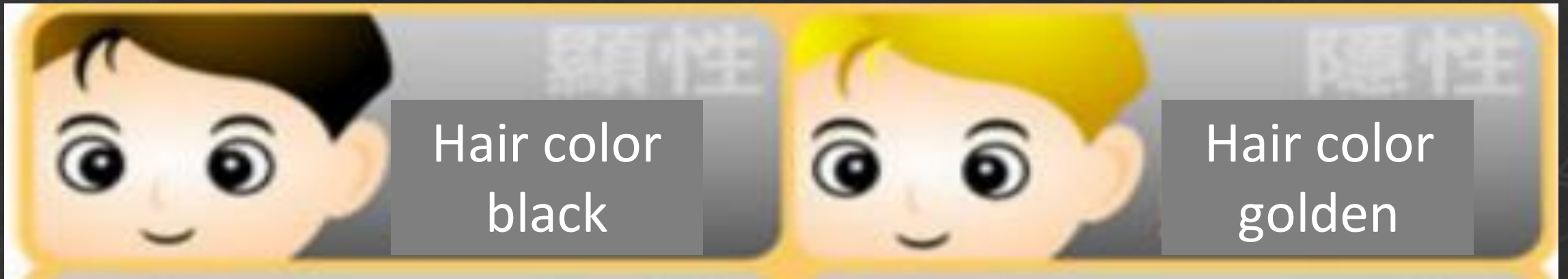
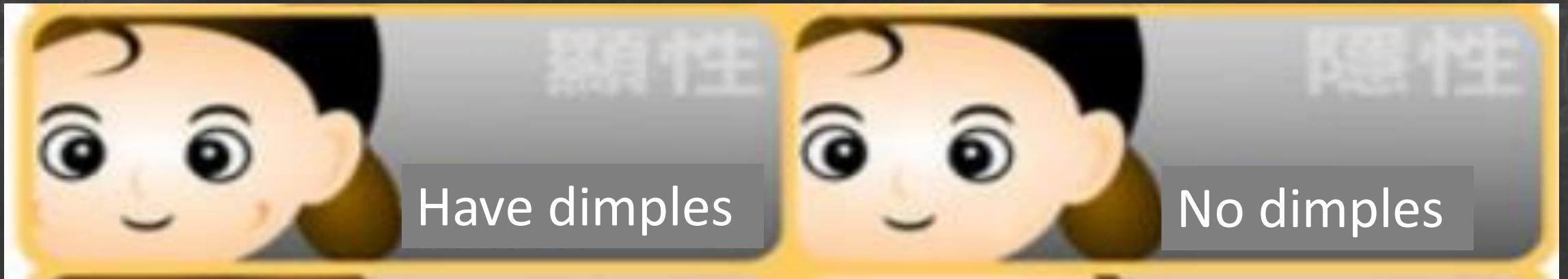
Observe
the person
next you

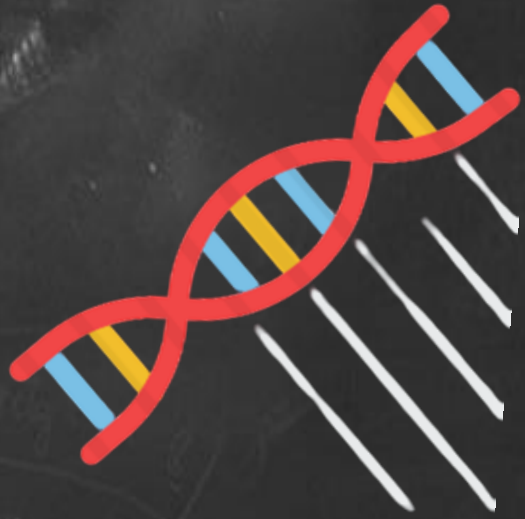


We are not the same.



Because our genes have
dominant and recessive



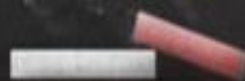
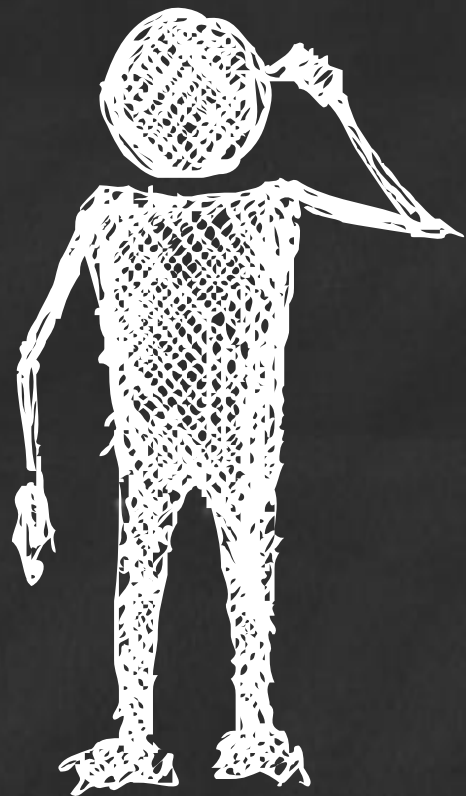


Where do genes
come from?



Looking for
mom and dad

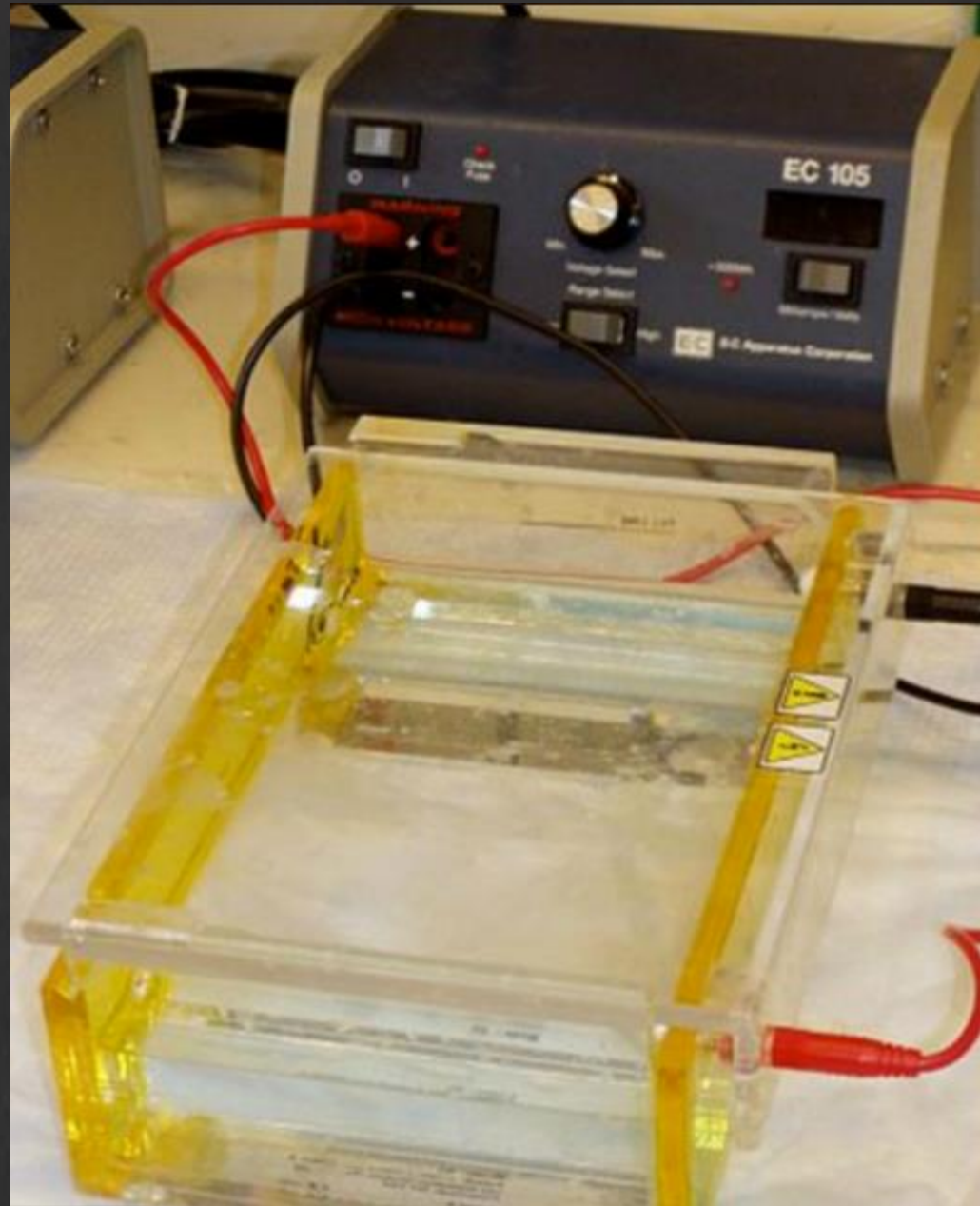




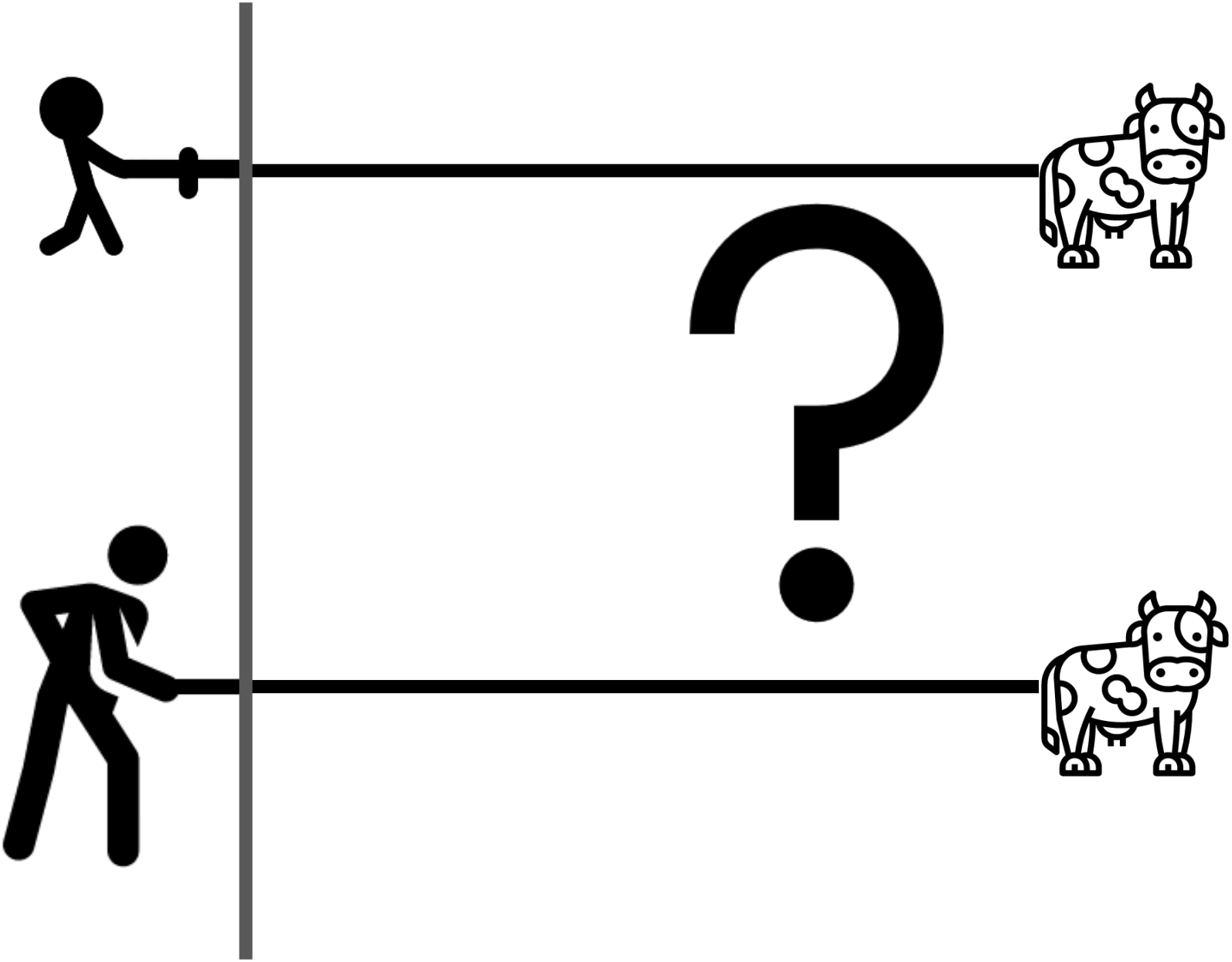
Alignment gene

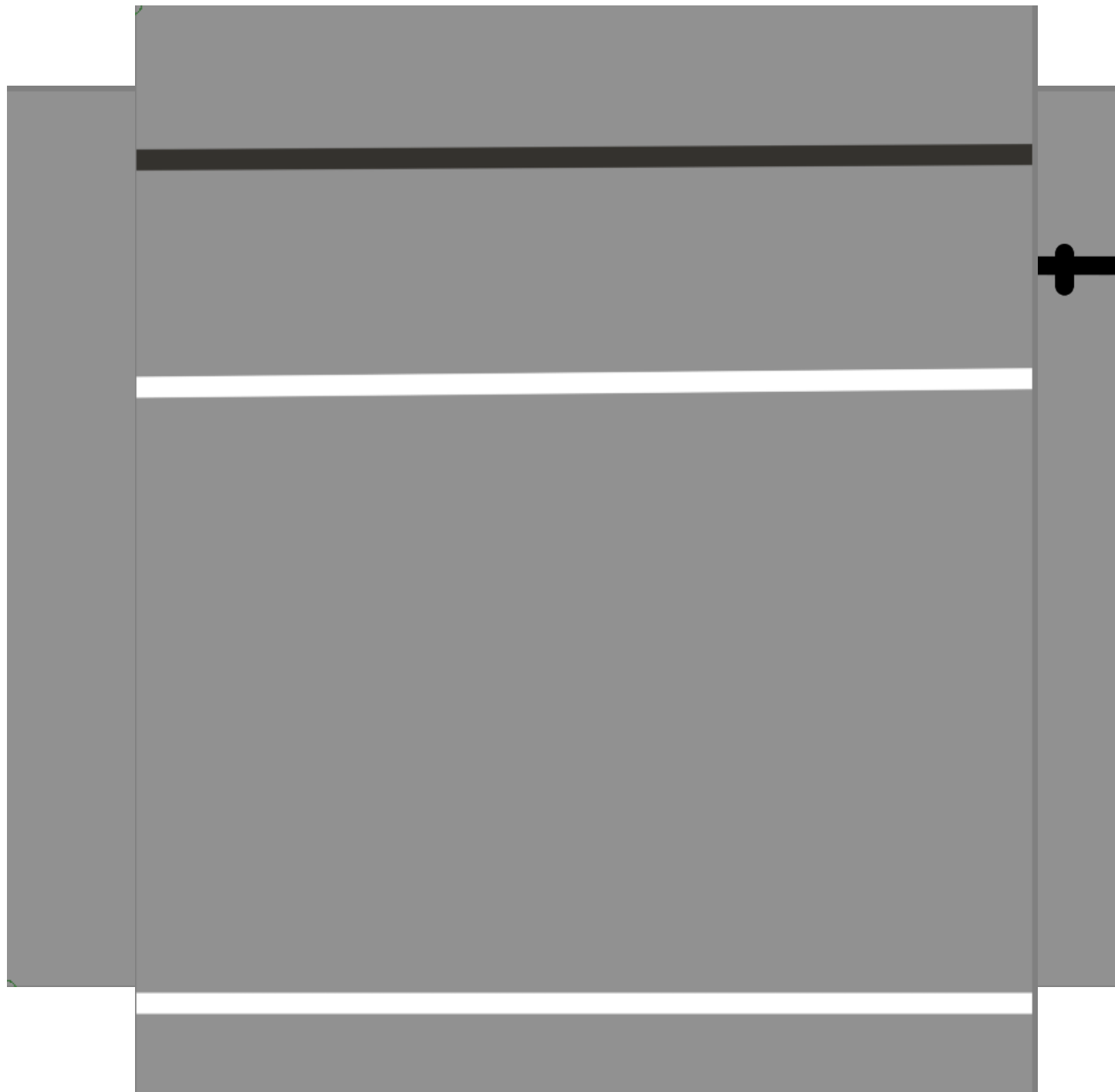


Electrophoresis tank





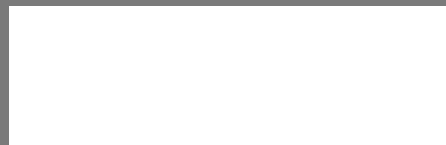
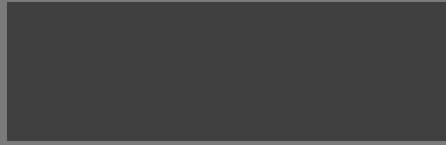


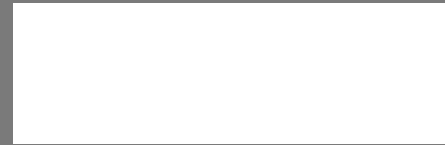
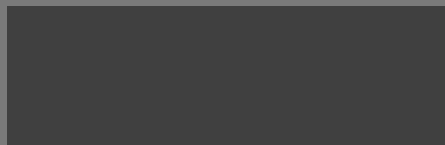
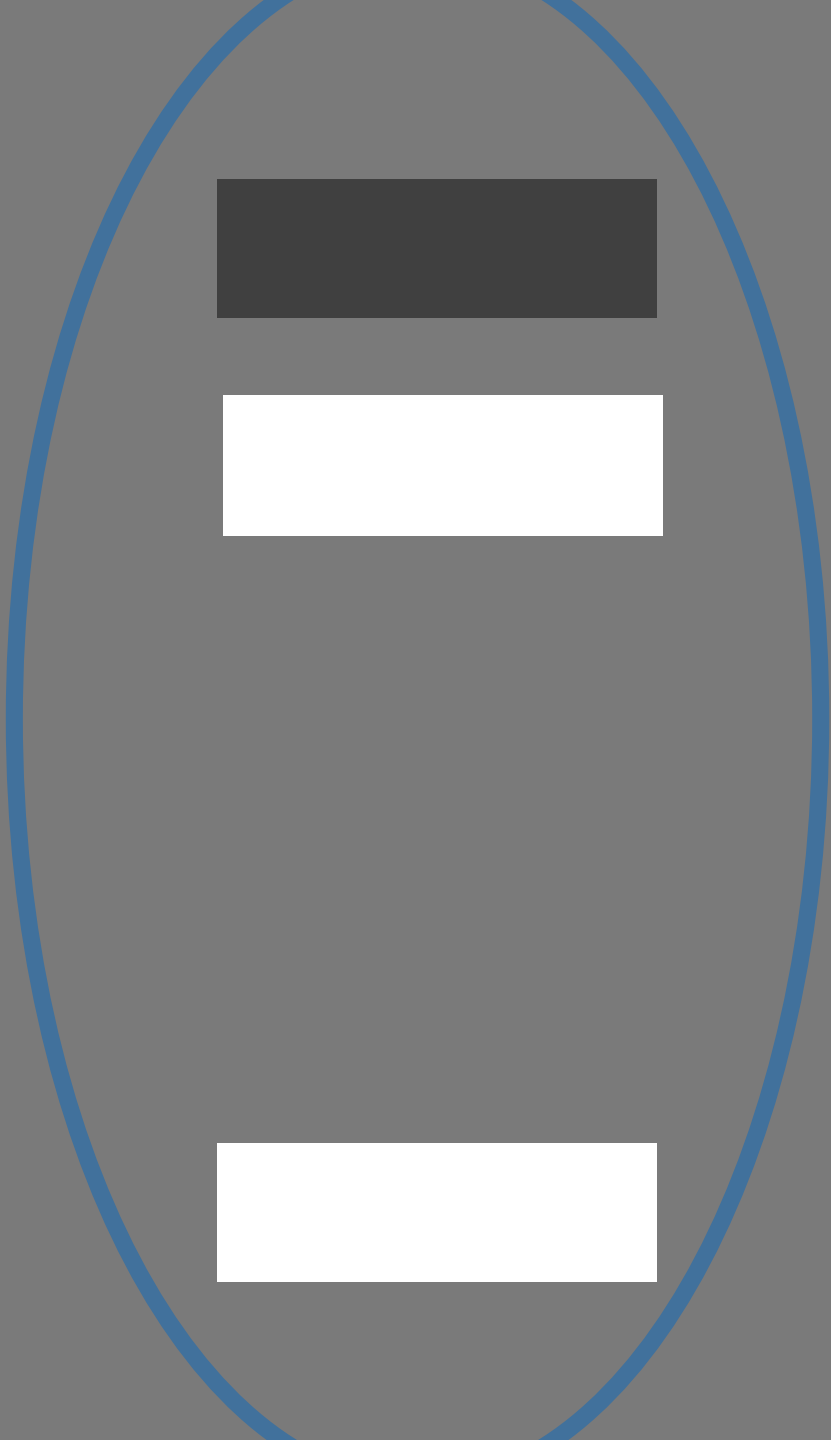
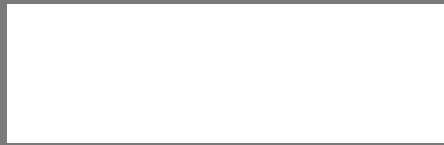
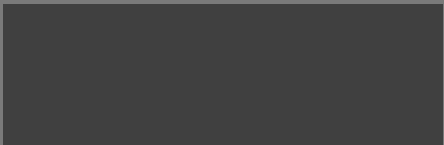
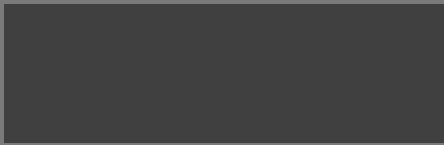




Who are the
parents?







H₂O



Lesson three



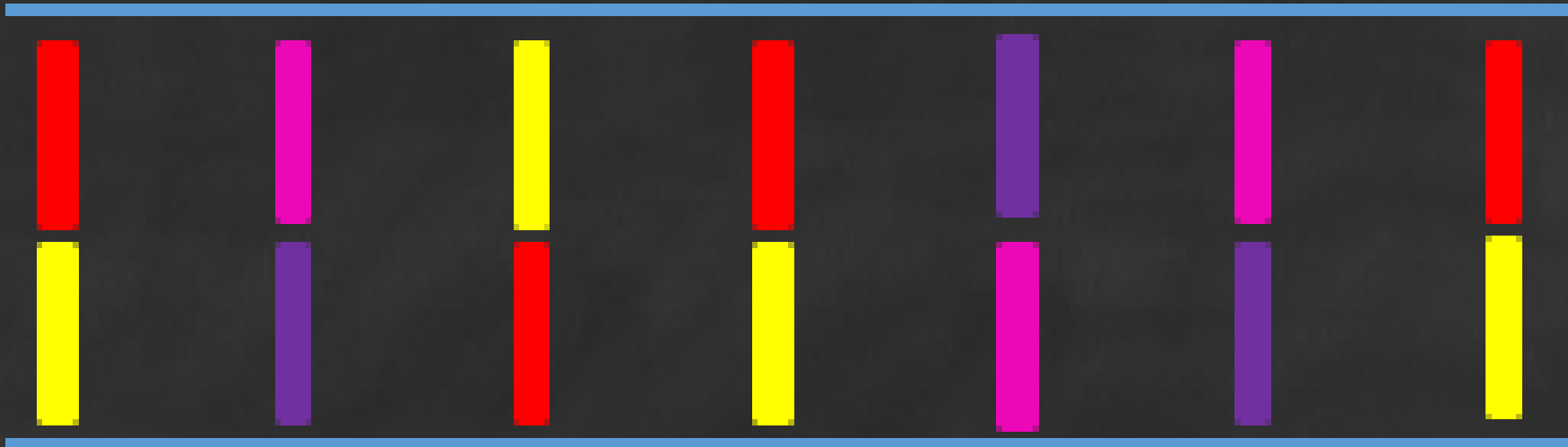
$$\frac{\sqrt{AB+CD}}{2} = H^2$$

A³



Gene

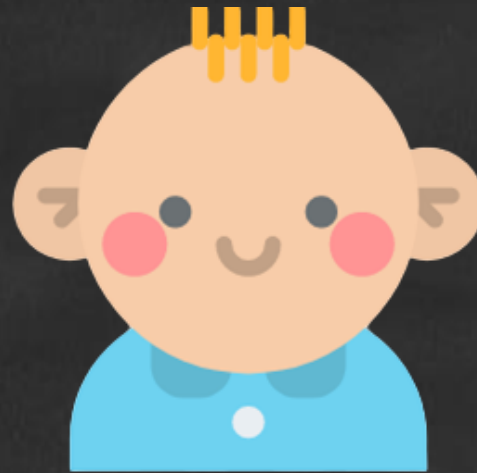




Gene determines who we are



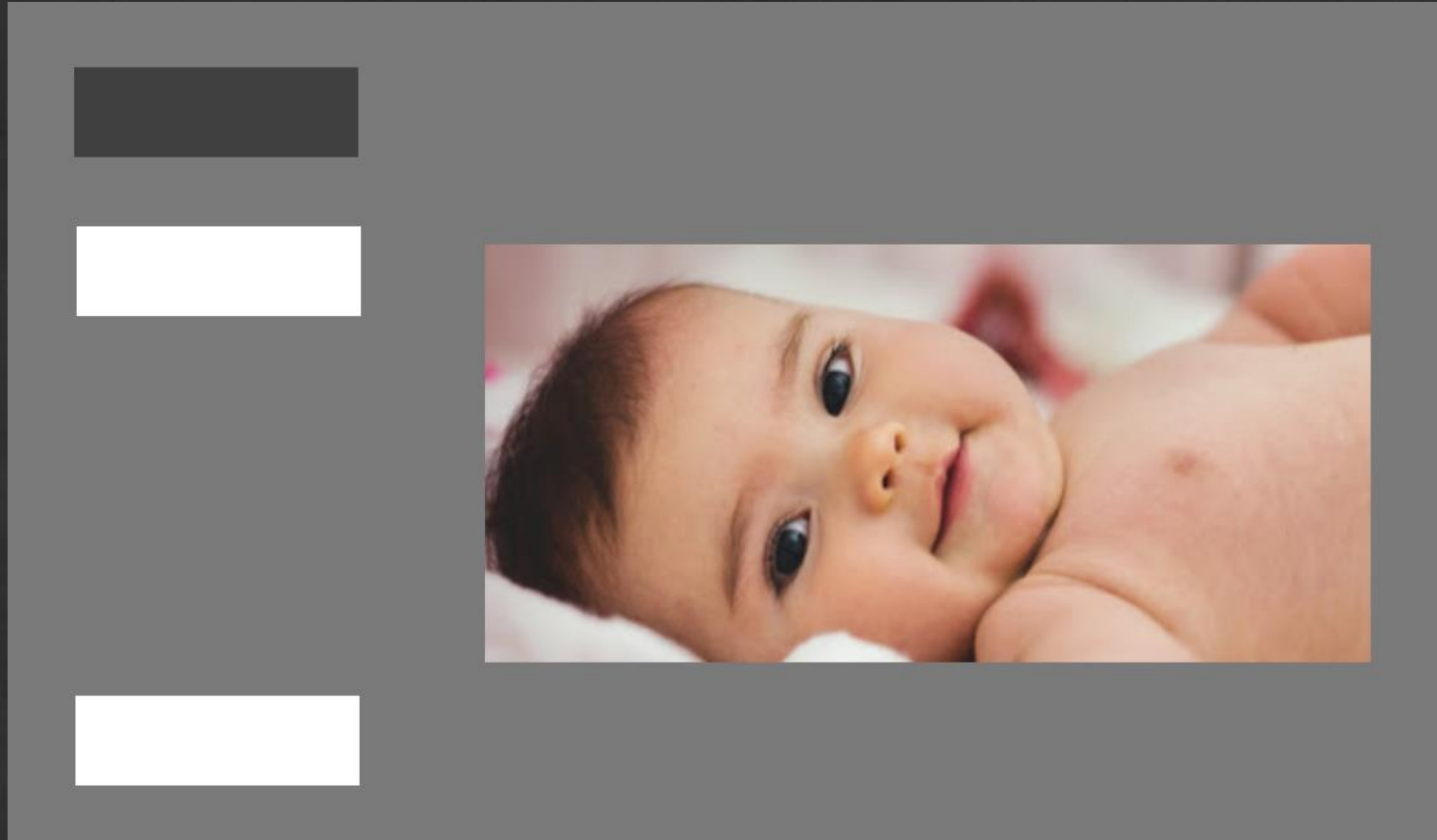
Genes have dominant and recessive



Genes determine our looks



Genes come from parents

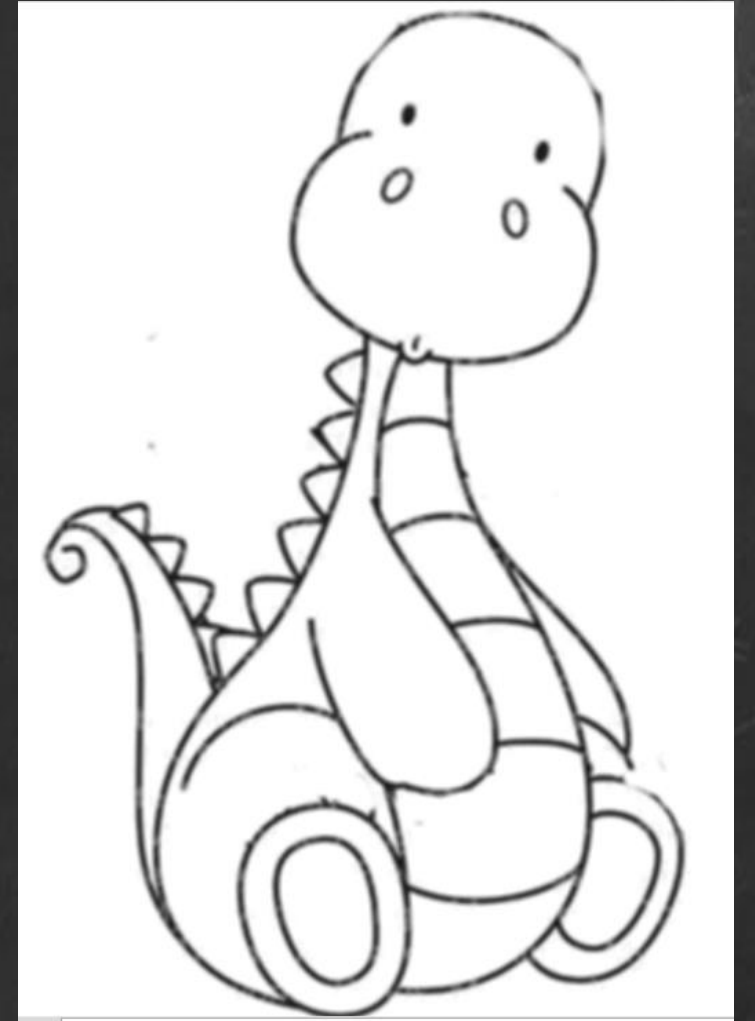


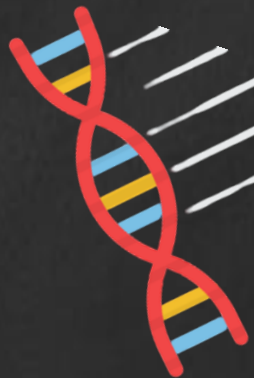
Genes make families look like each other



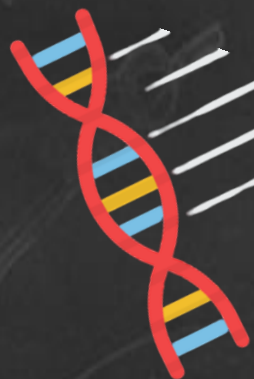
Now using the concept of genes,
let's draw a unique dragon

Little Dinosaur

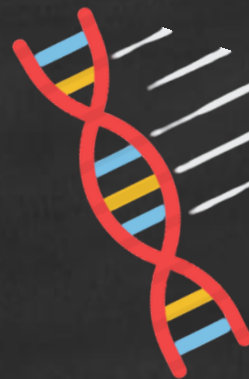




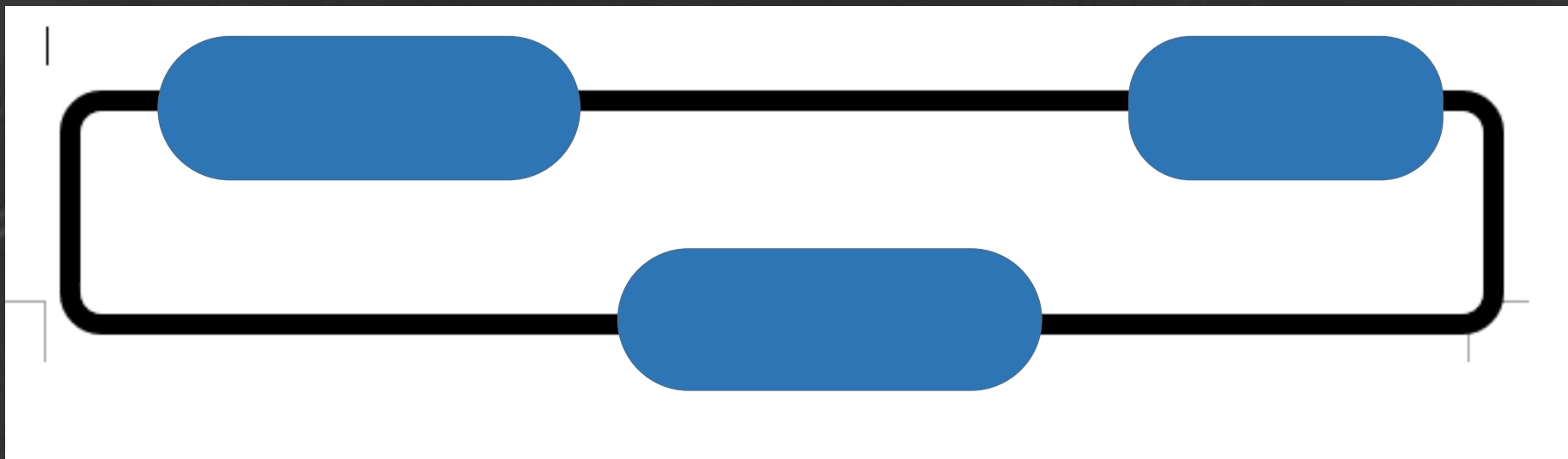
Tail



Color



Claws

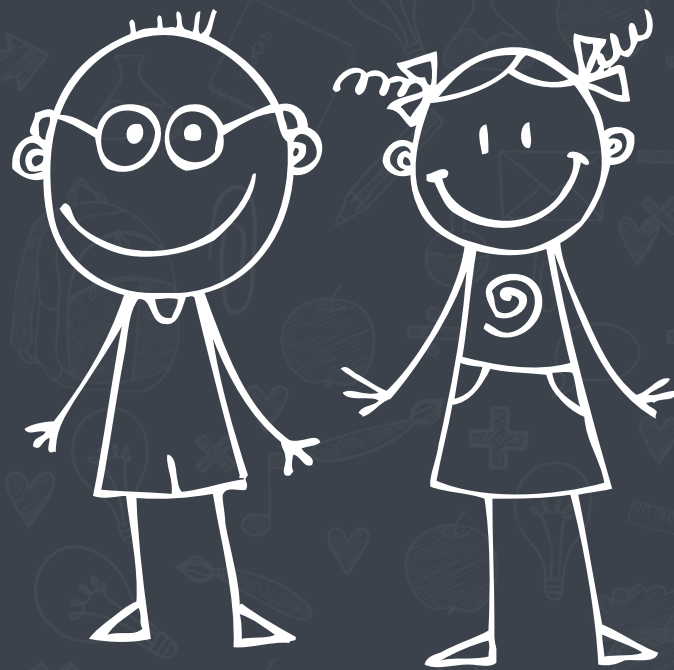




VIRUS

- ✓ CCU Taiwan iGEM Team
- ✓ 2020/08/08

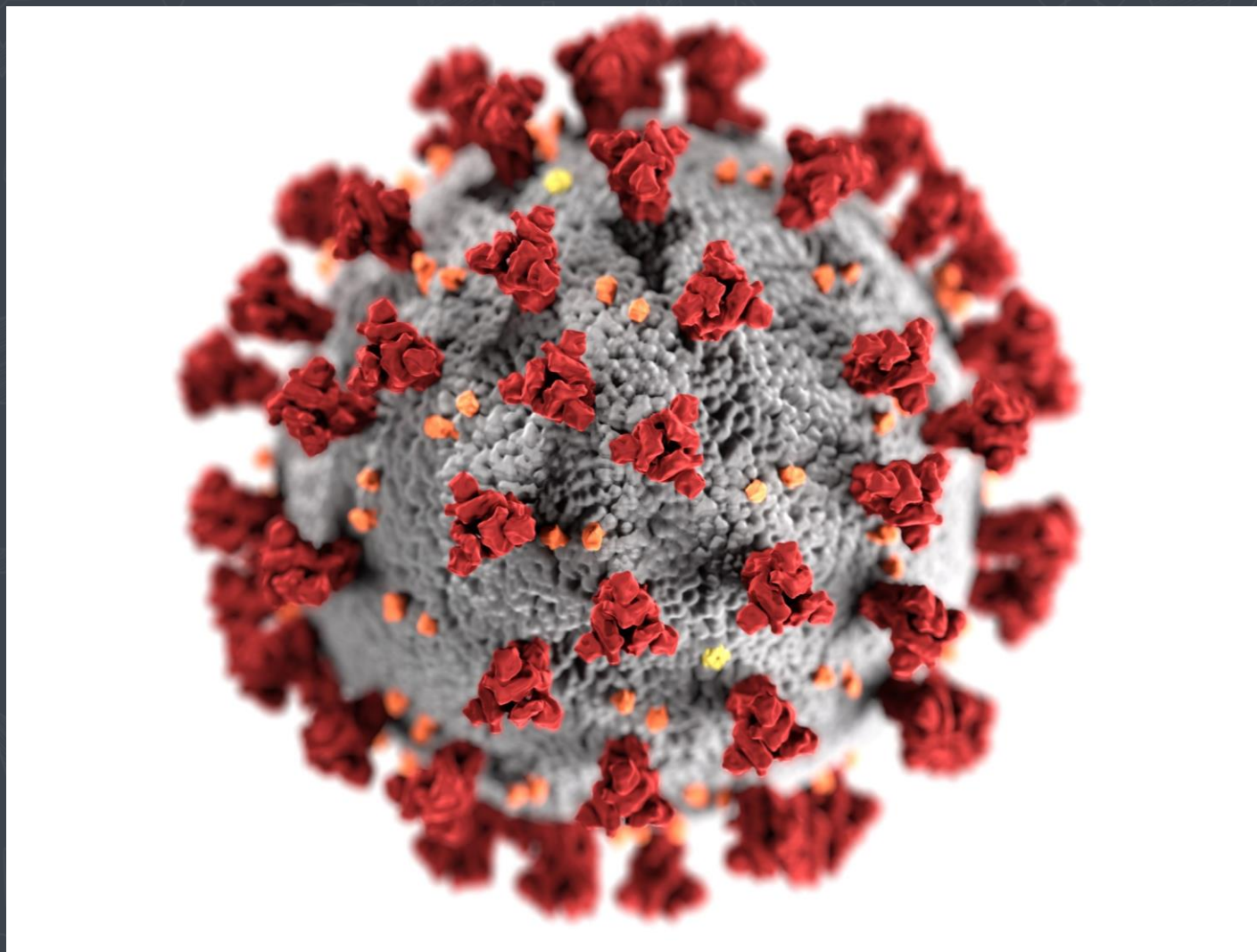
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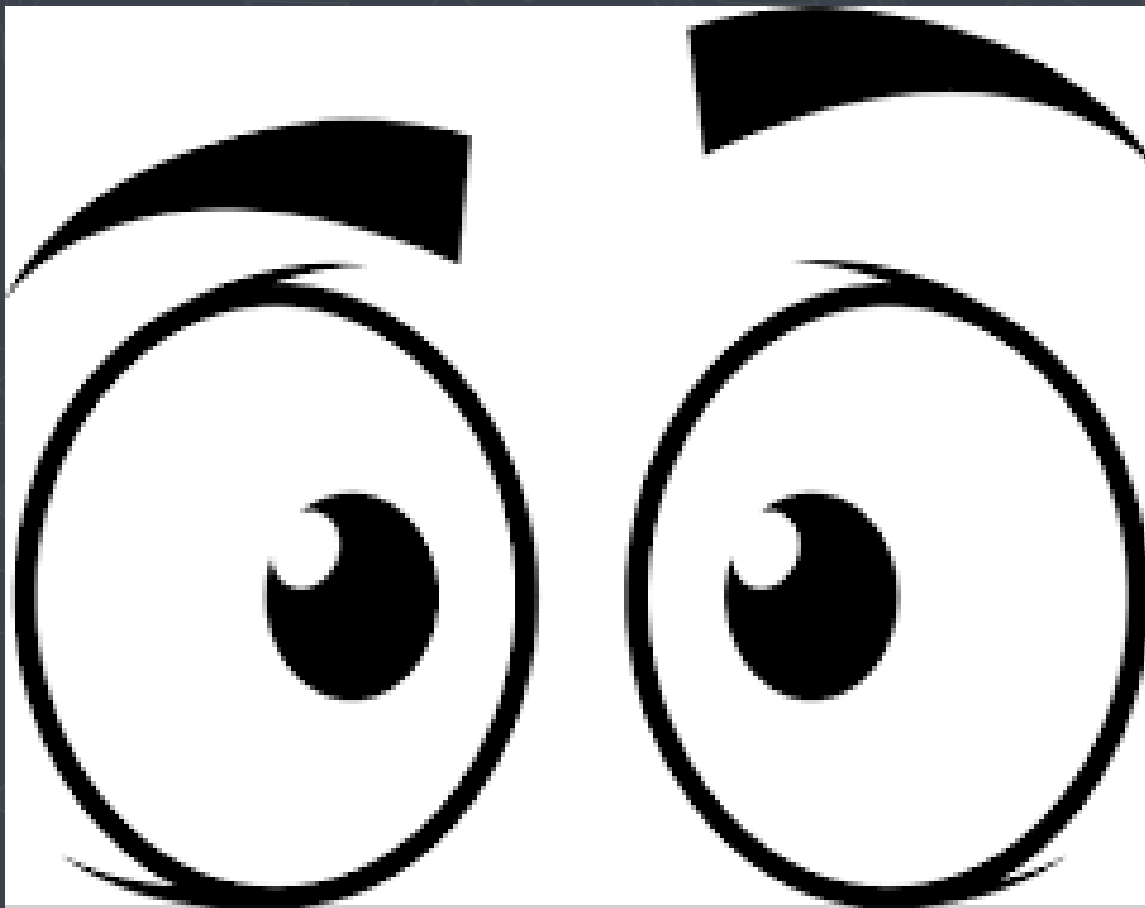
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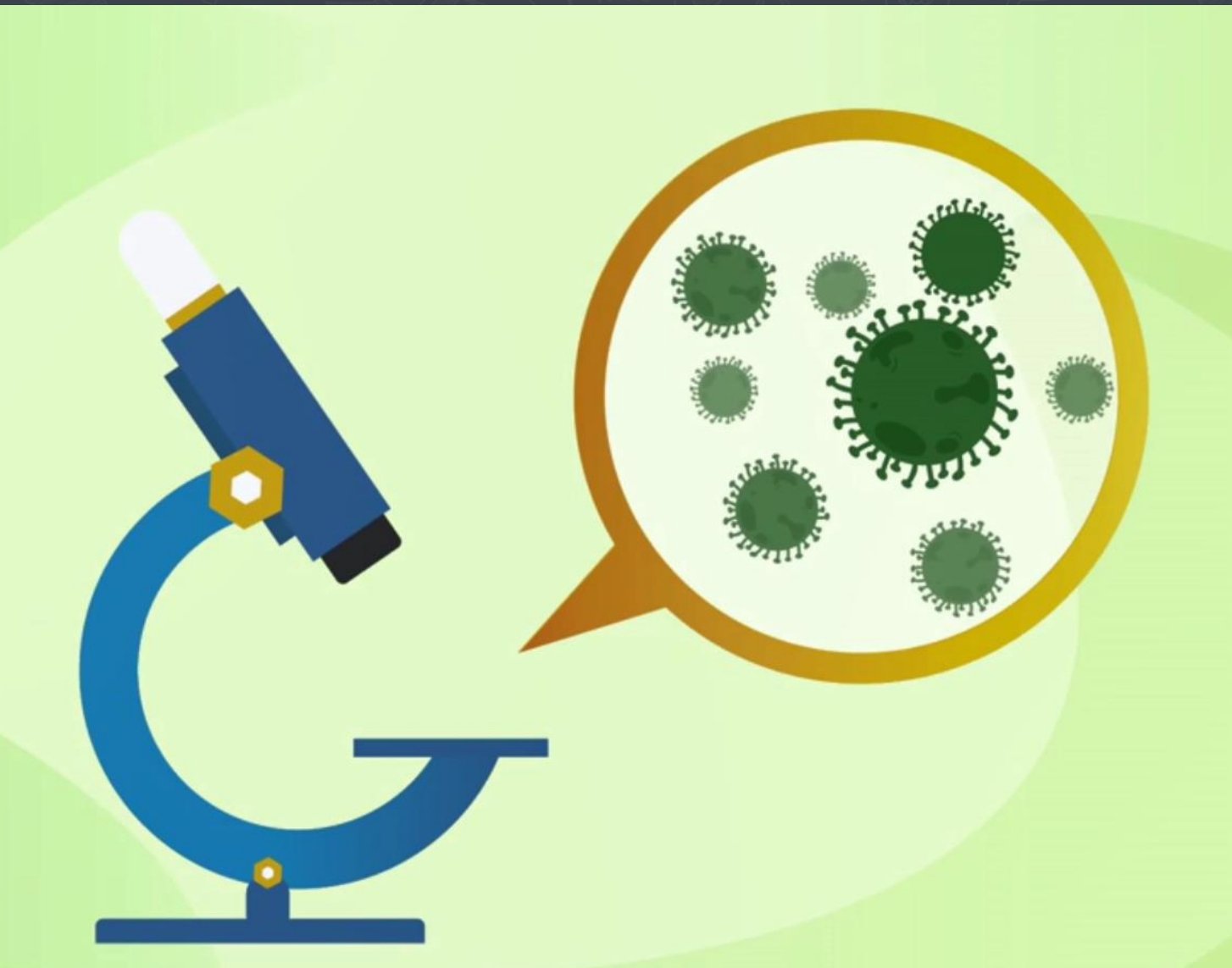
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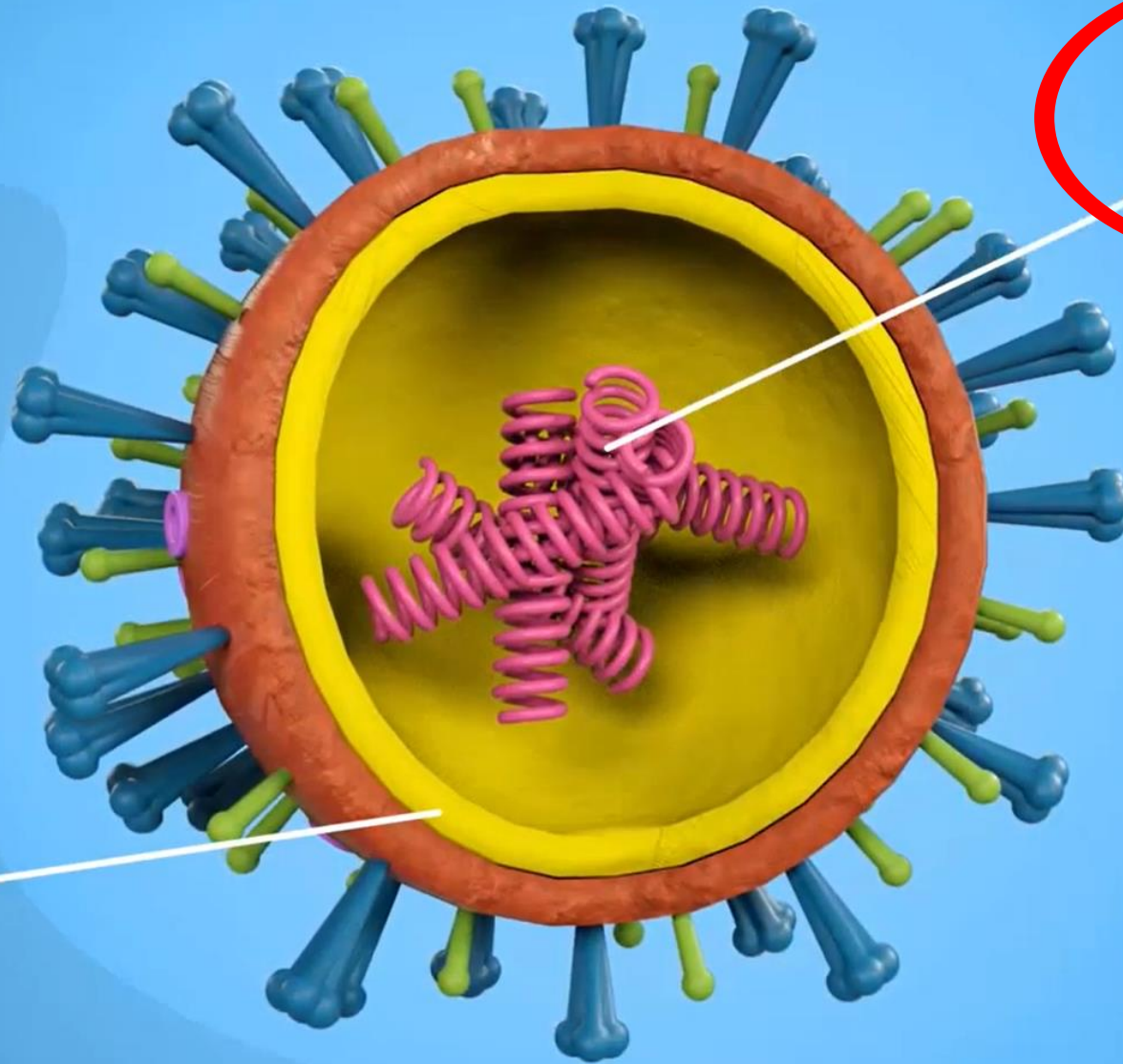




Virus structure

Capsid

Genetic material



what is
Genetic material?



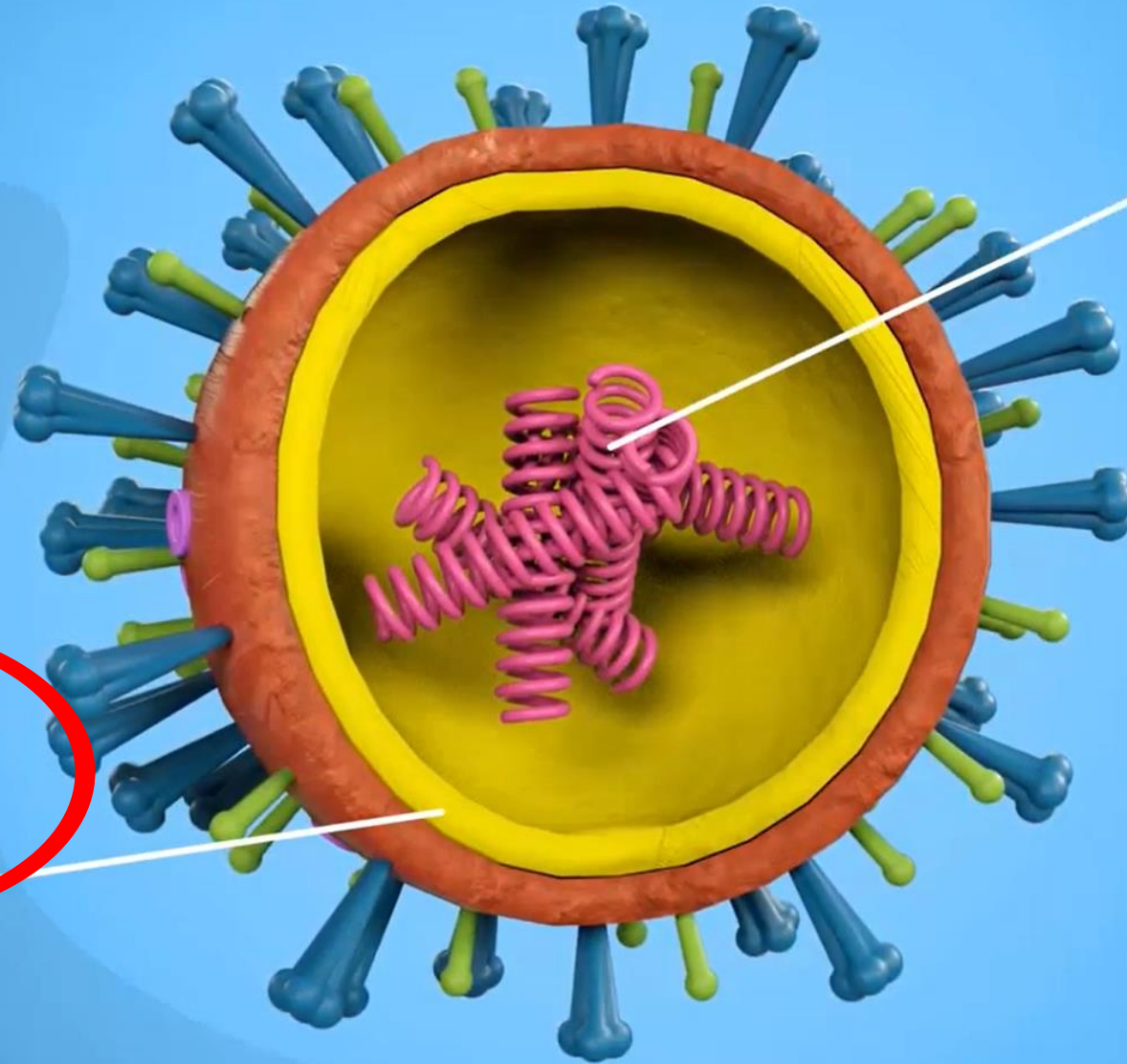


Reproduction



Genetic material

Capsid

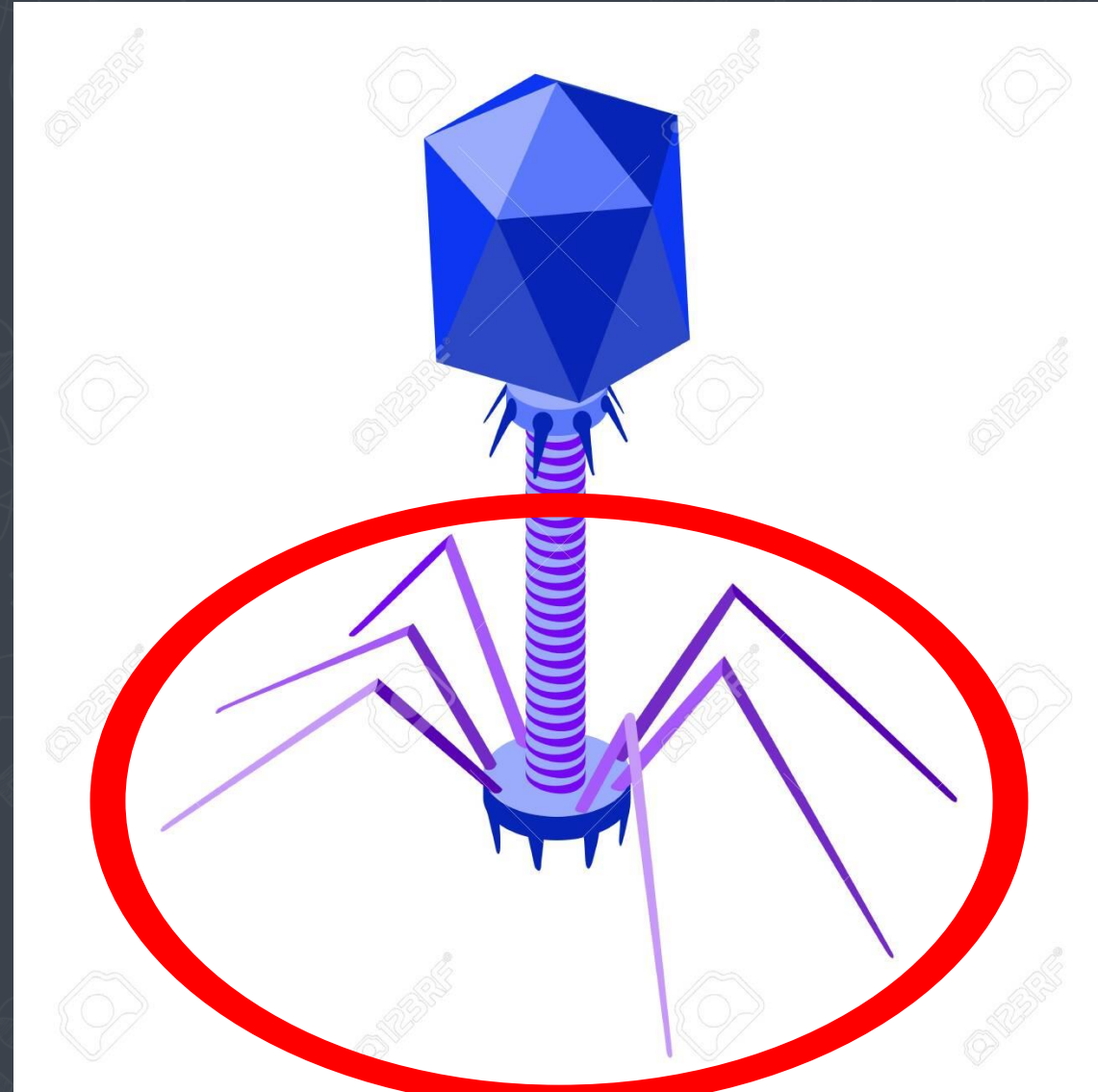
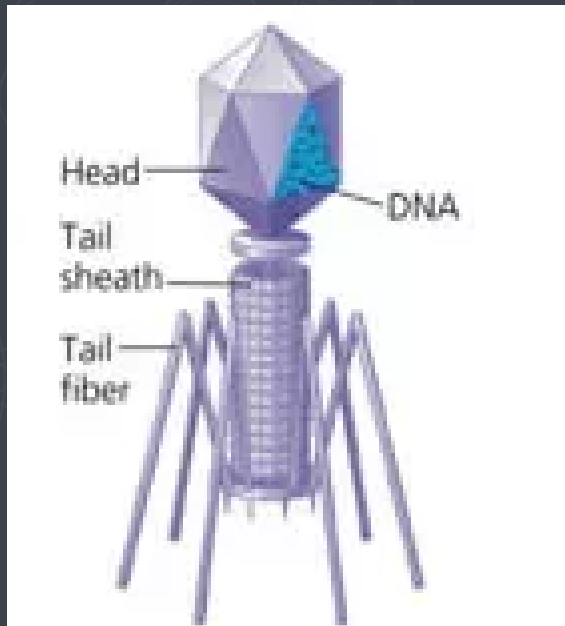


A white paper airplane icon is shown flying from left to right, with a dashed white line representing its path. The background is a dark grey color filled with a repeating pattern of small, light grey icons related to education and science, such as a globe, a lightbulb, a backpack, a notebook, a ruler, and a microscope.

Four Viruses Introduction

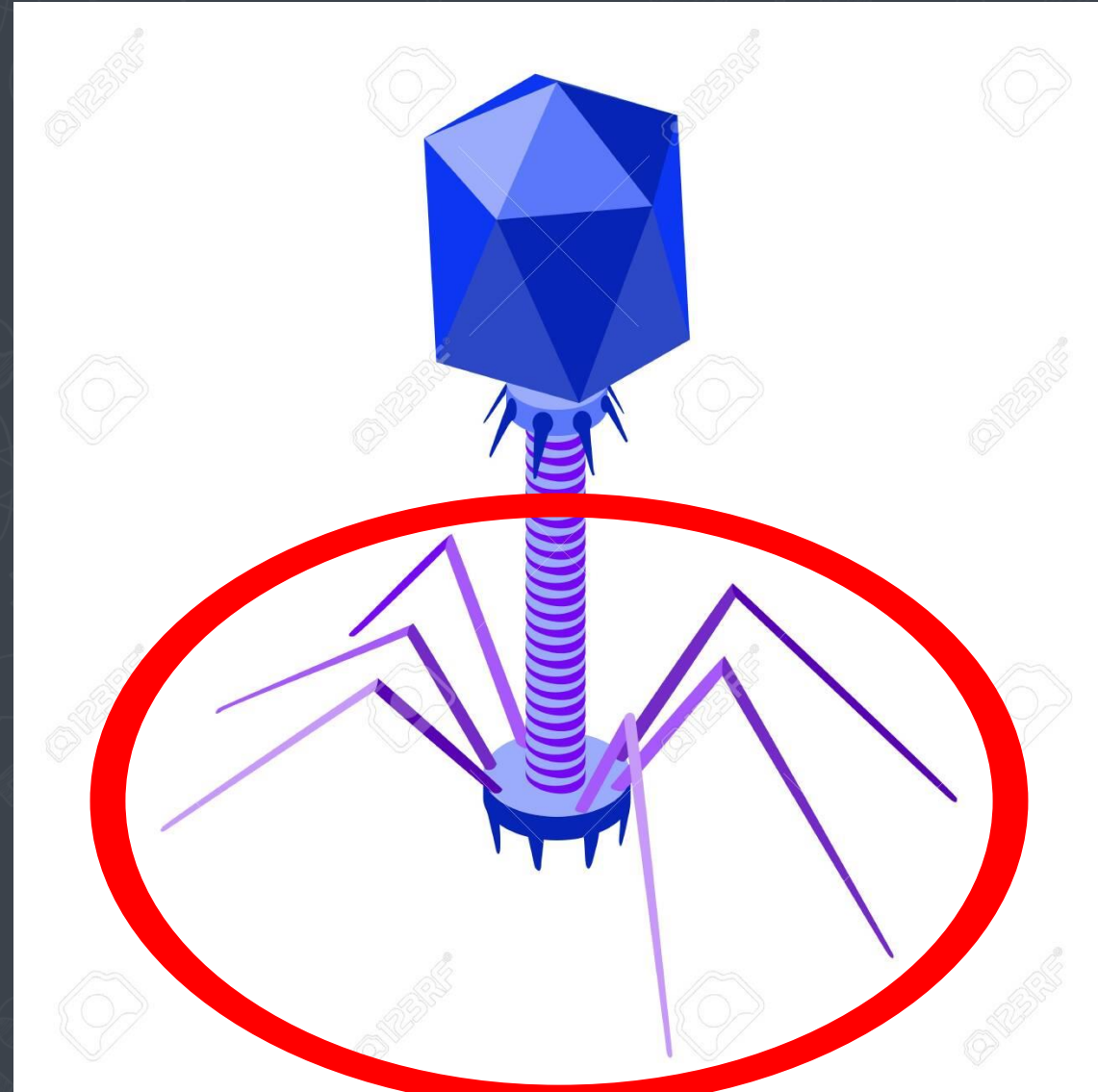
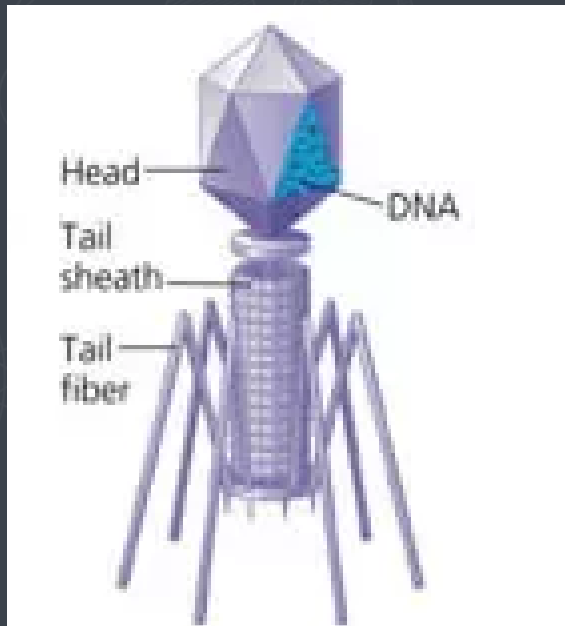


Bacteriophage



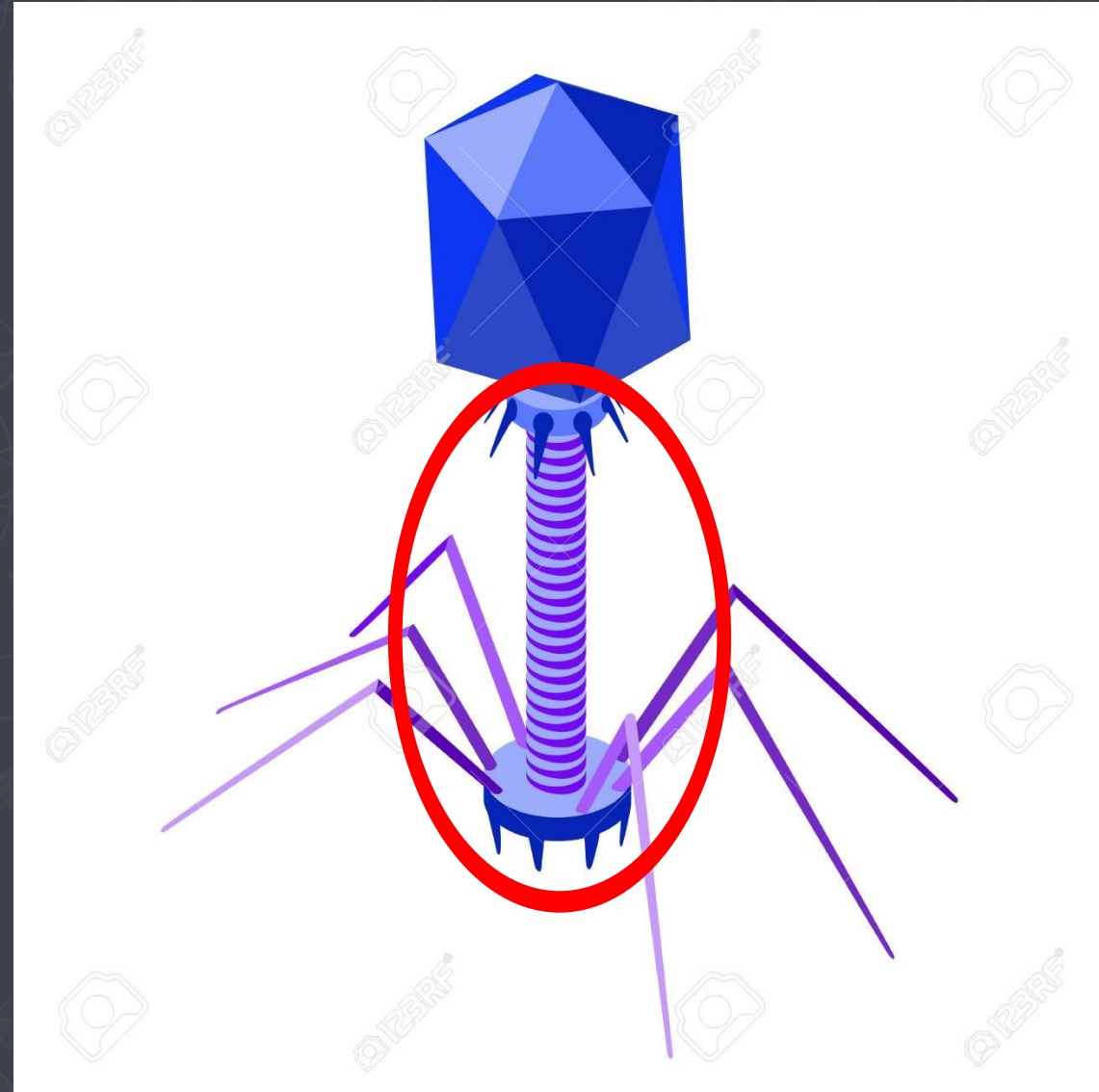
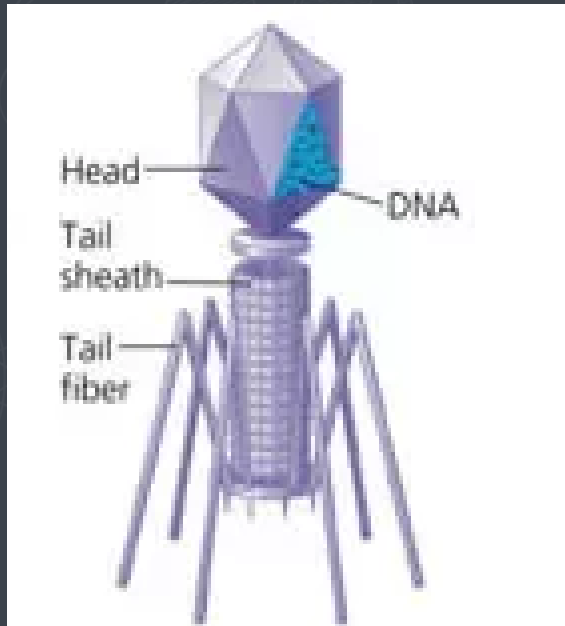


Bacteriophage



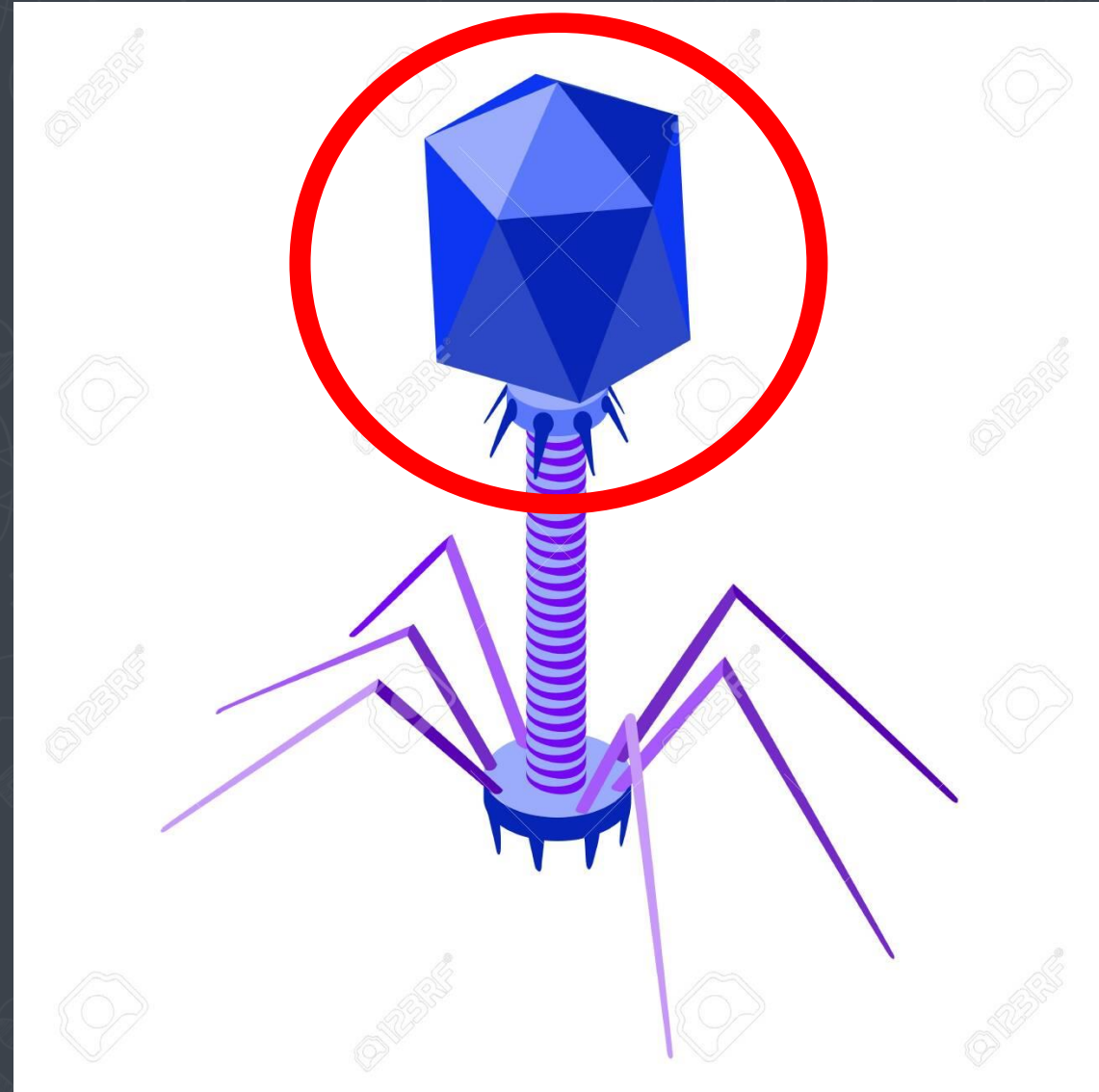
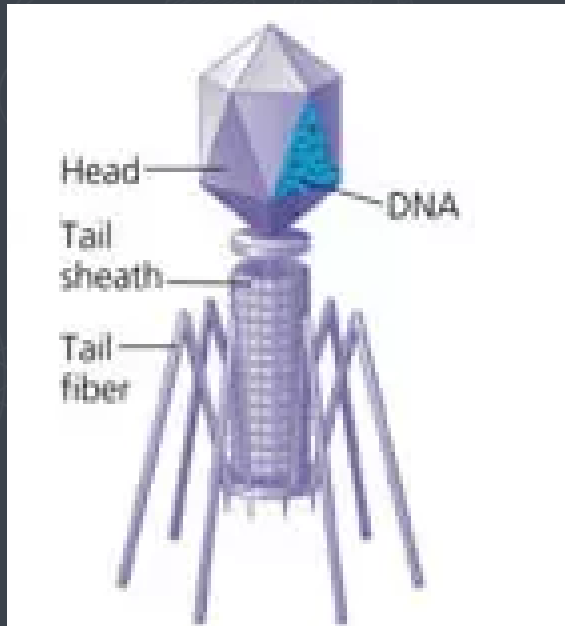


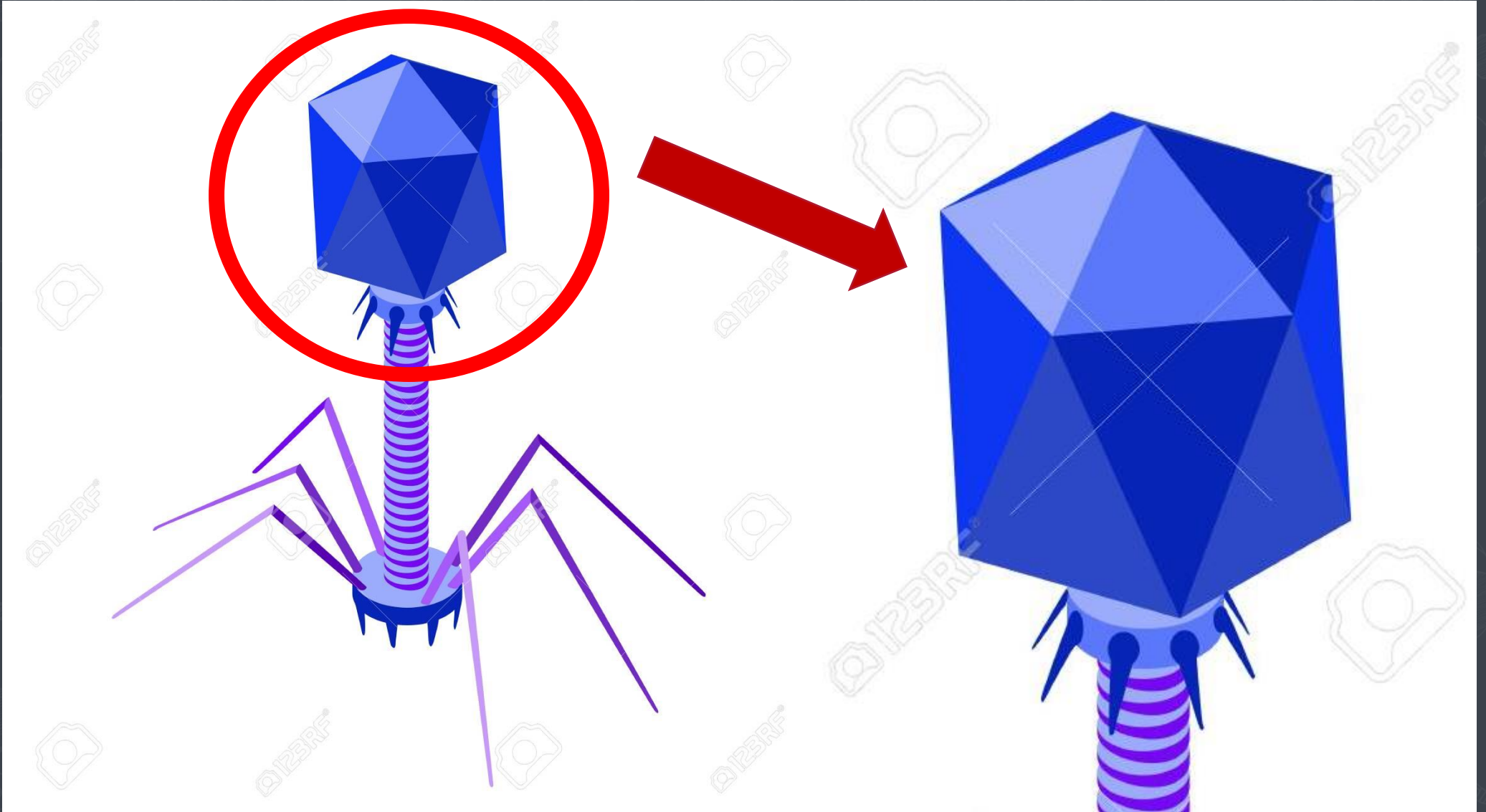
Bacteriophage





Bacteriophage





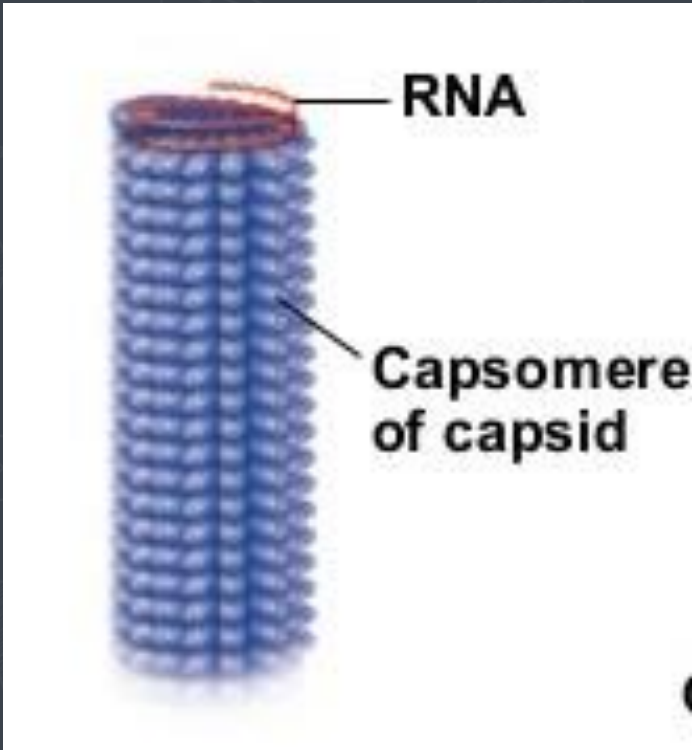


There are 20



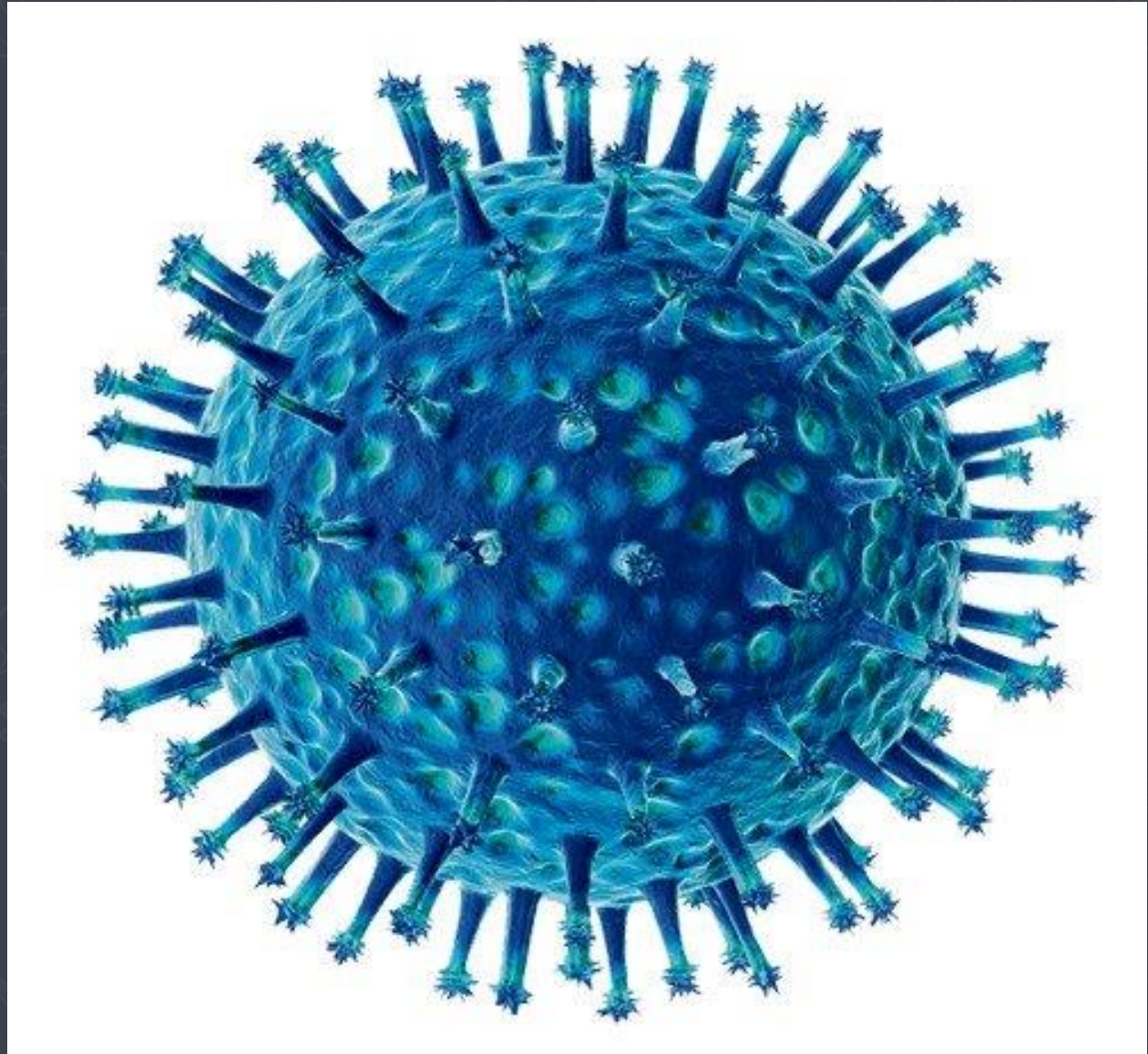
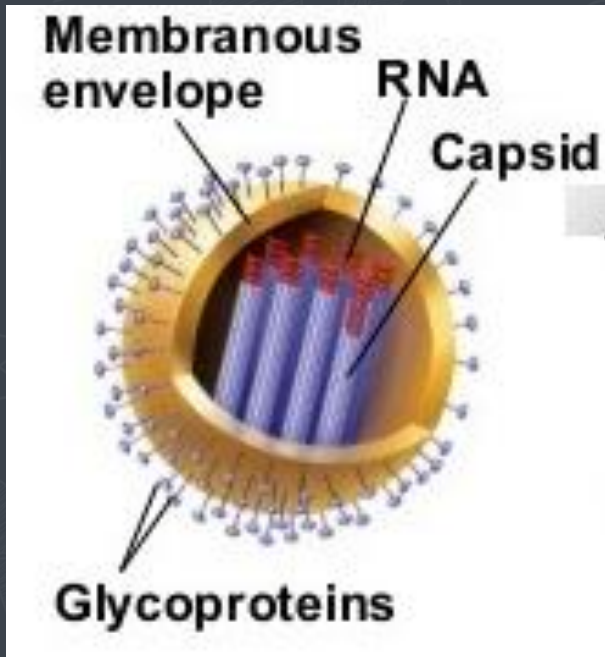


Tobacco mosaic virus



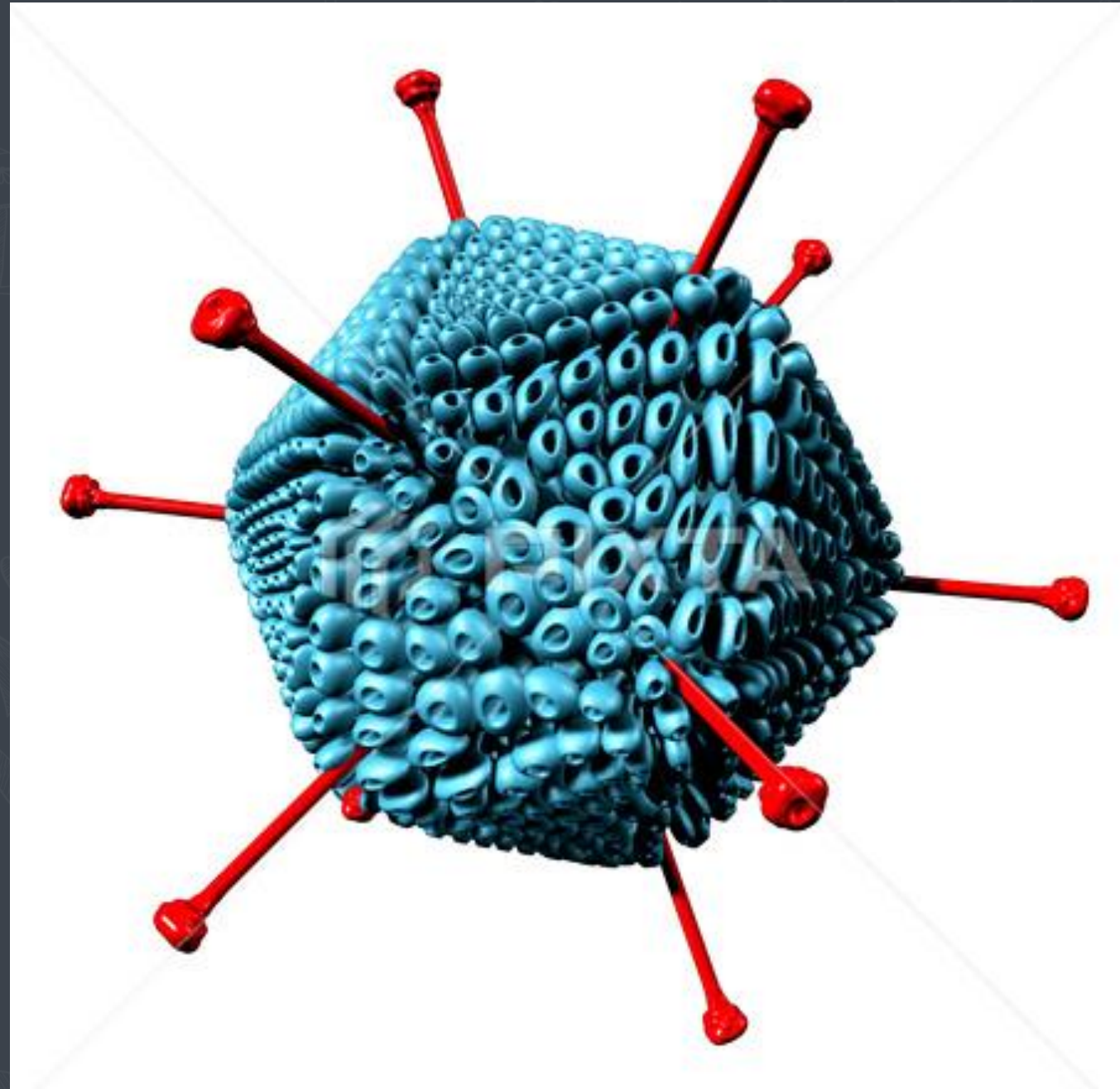
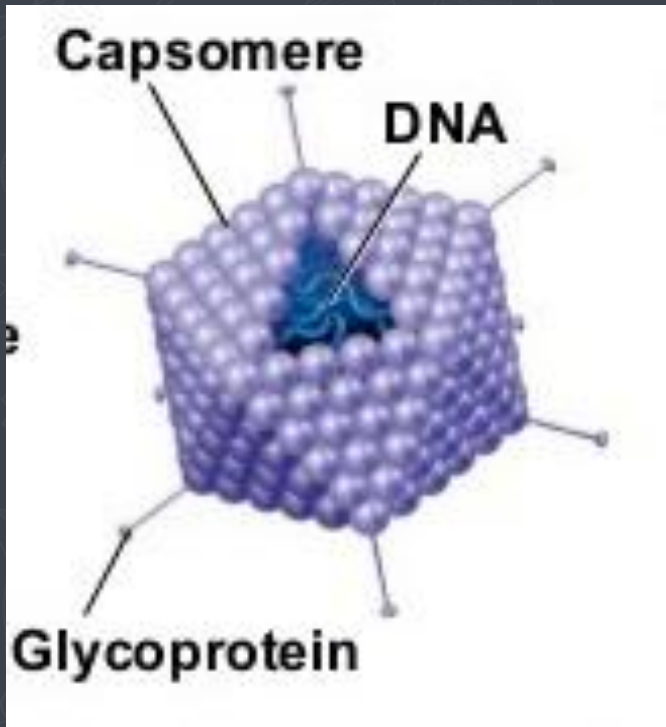


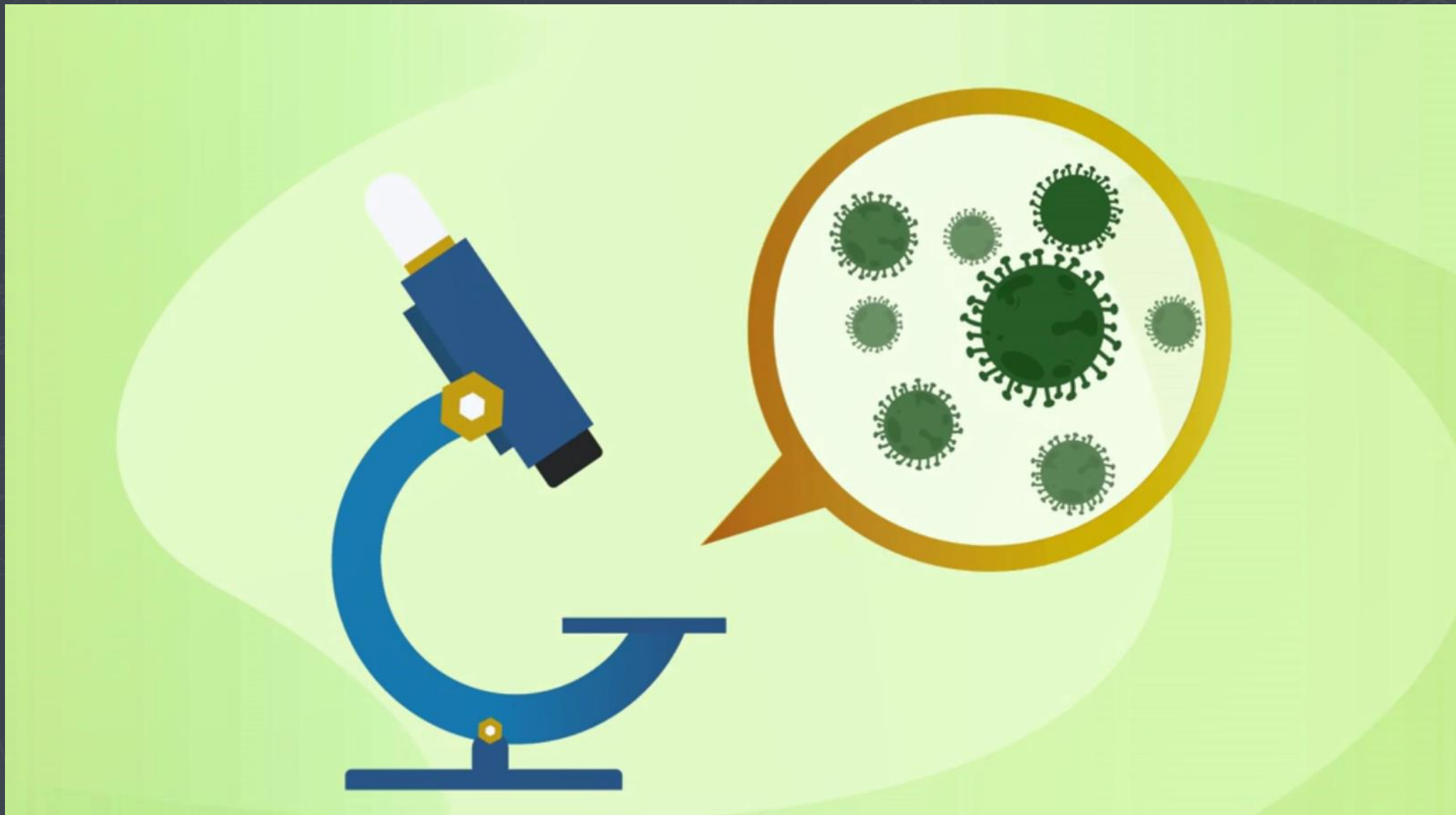
Influenza virus

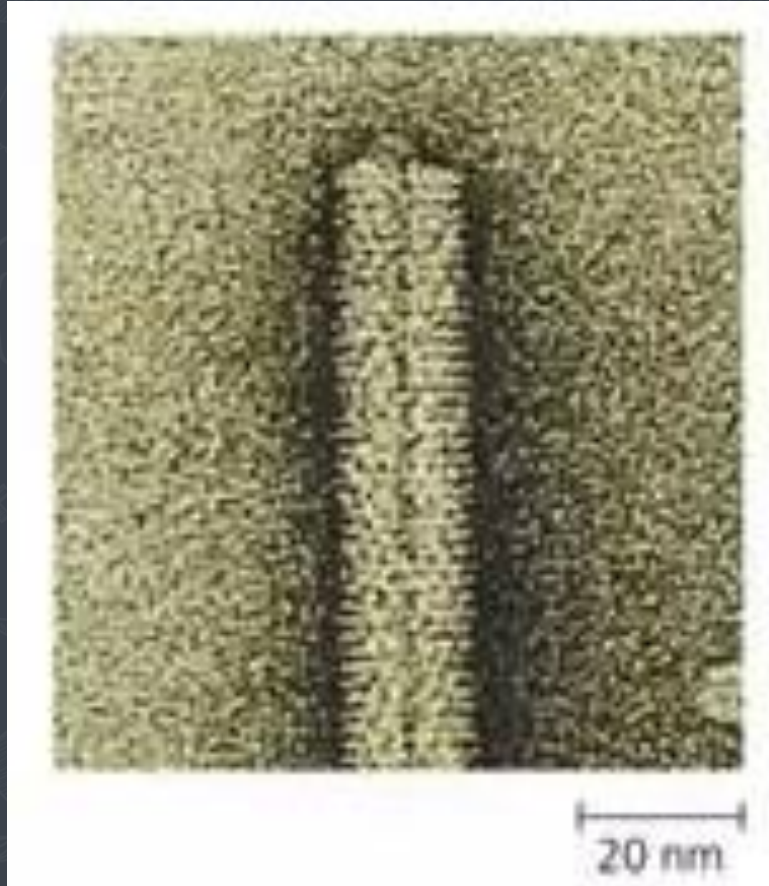
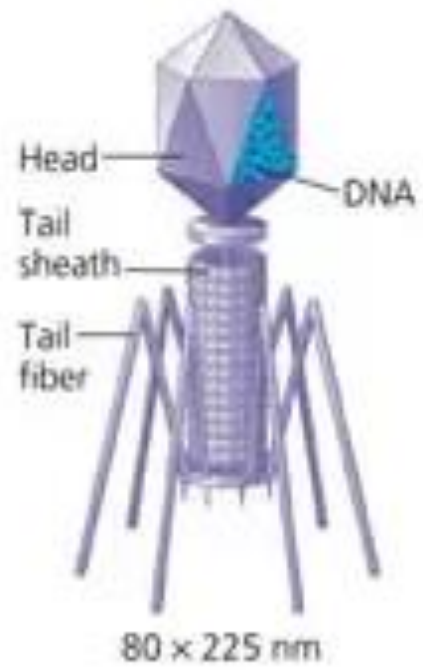
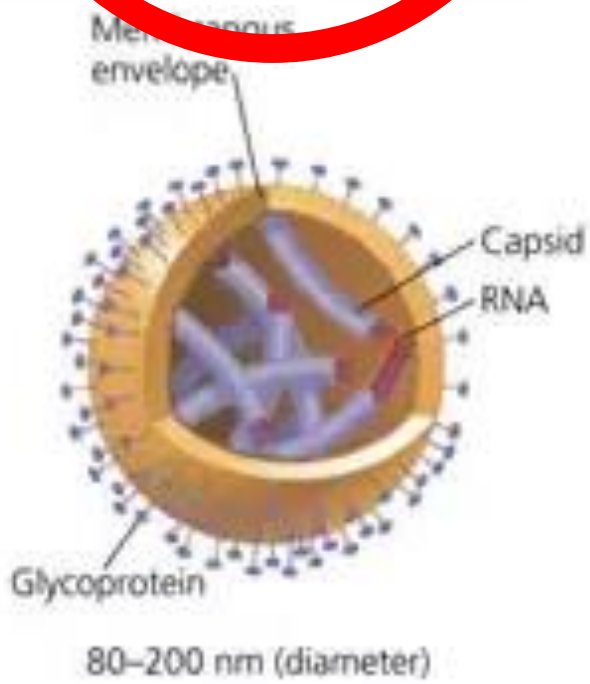
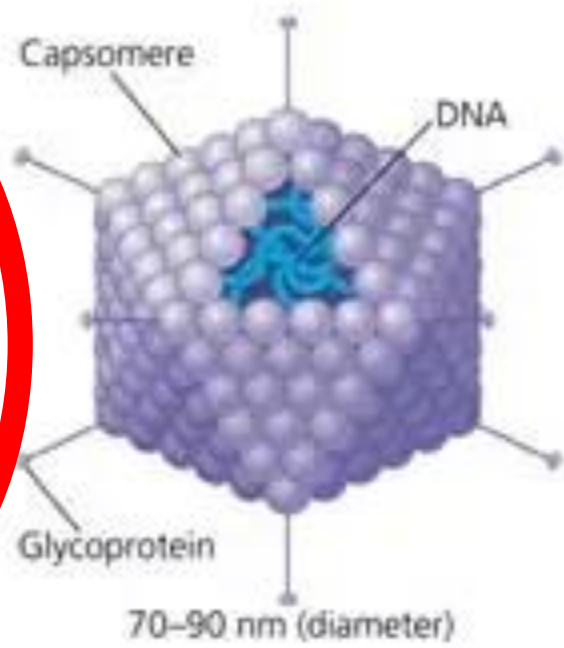
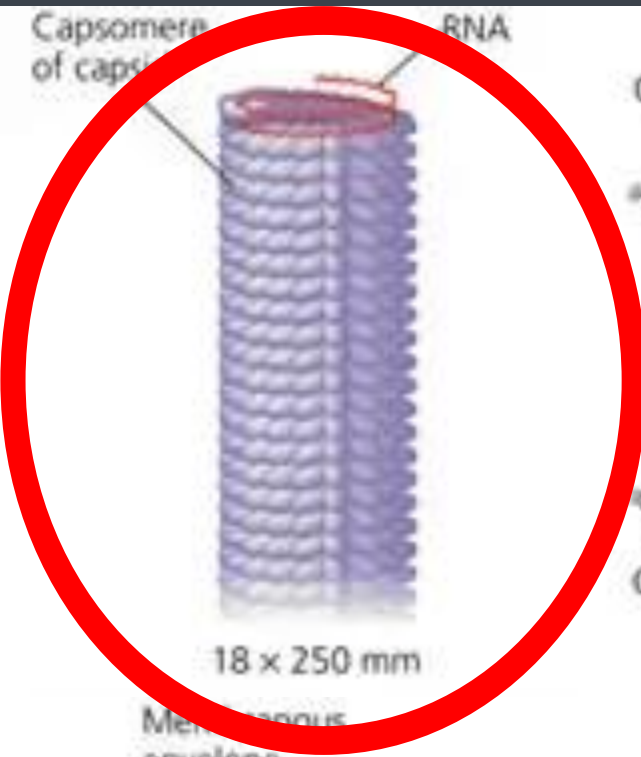


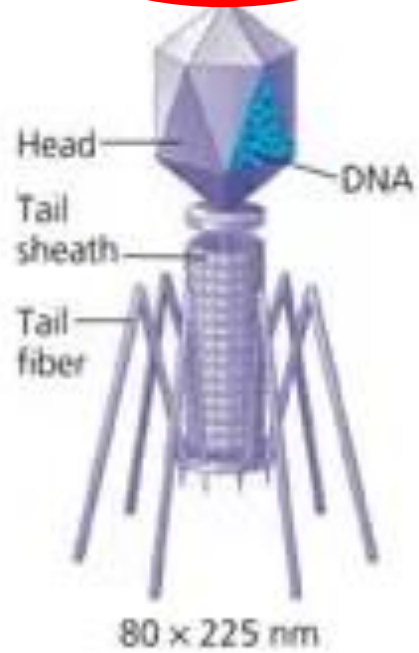
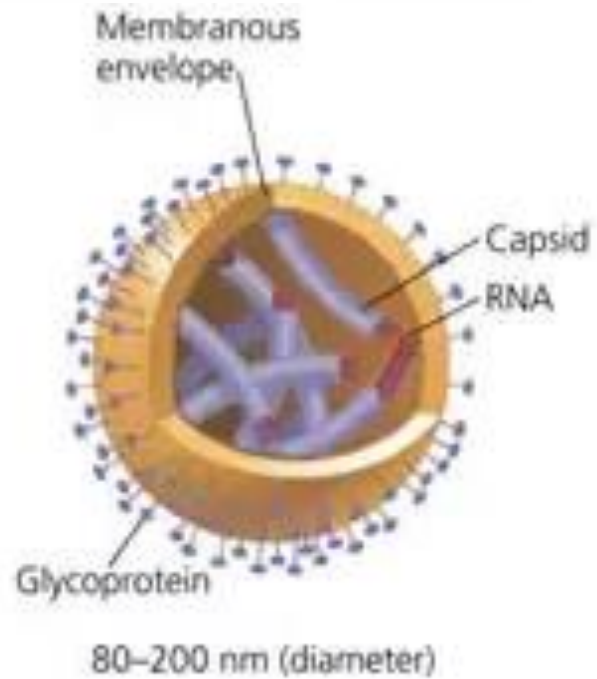
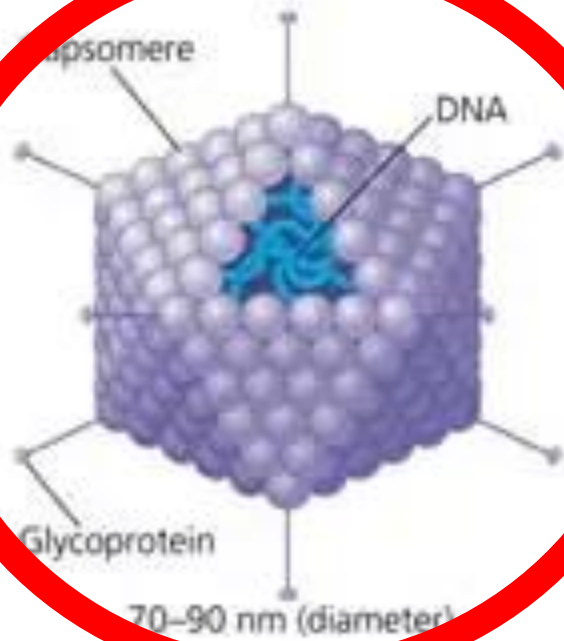
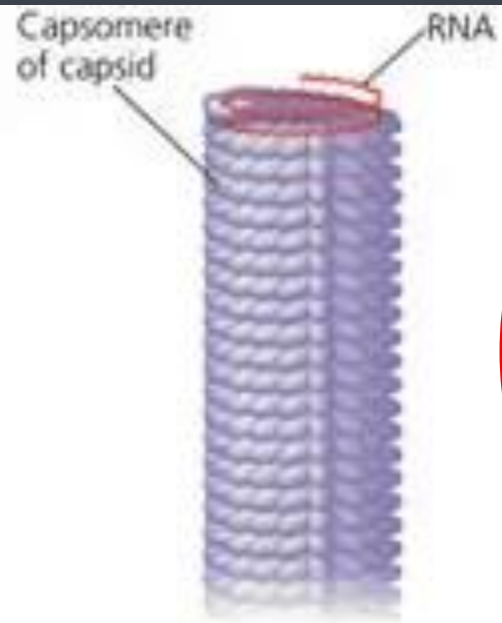


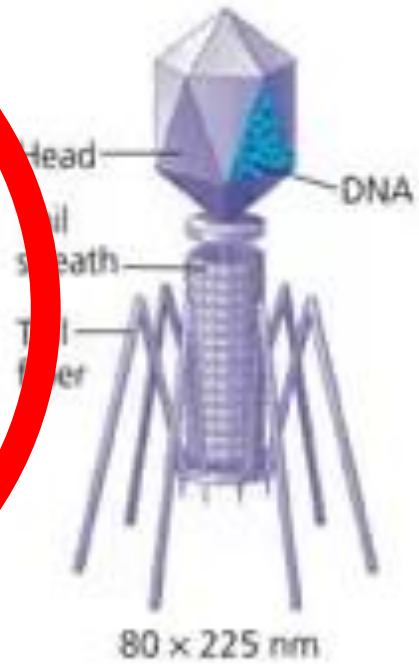
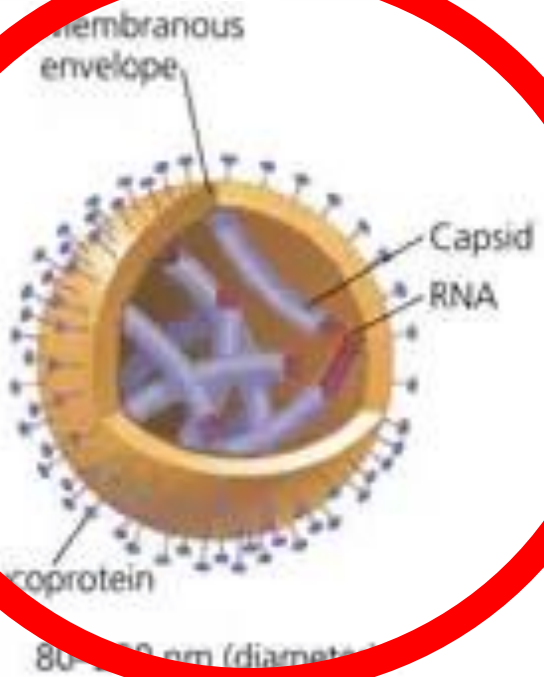
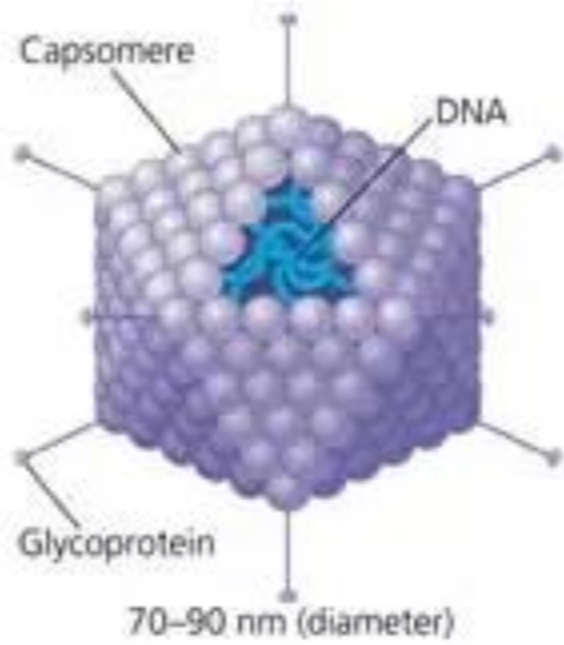
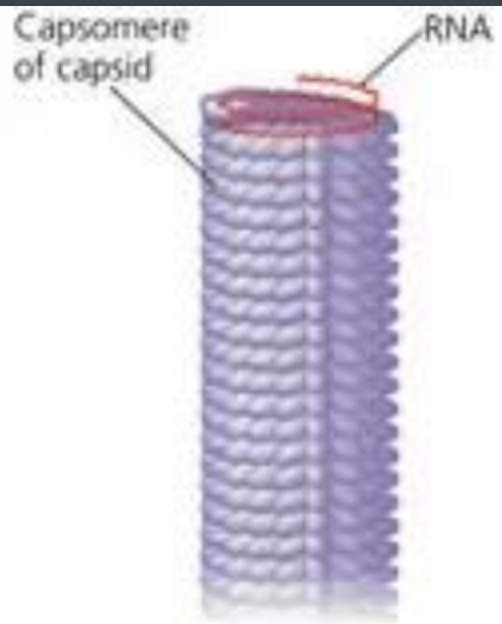
Adenovirus

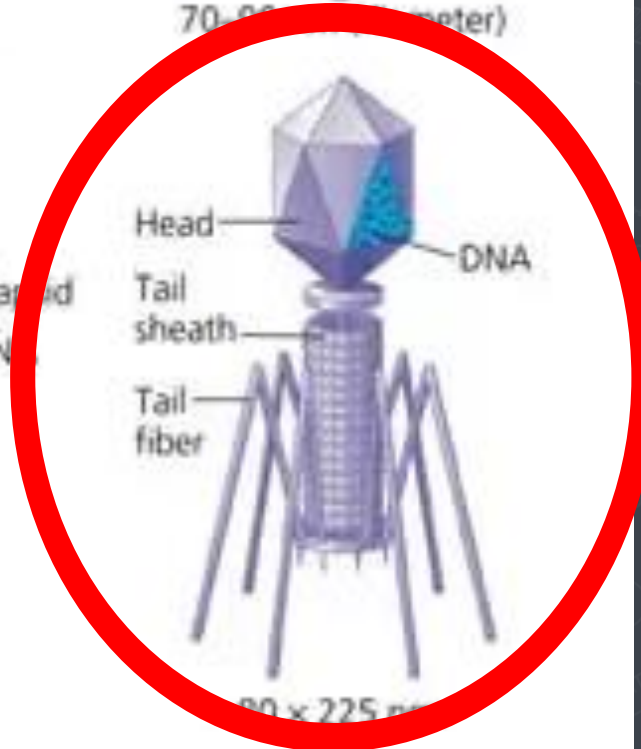
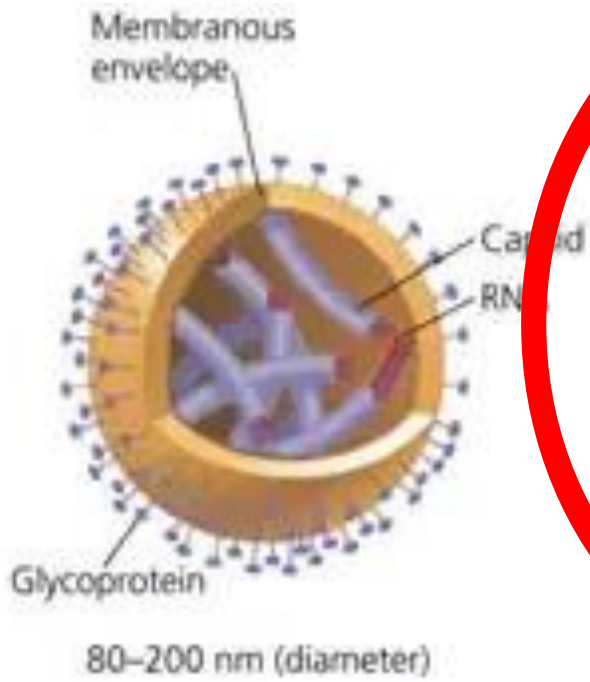
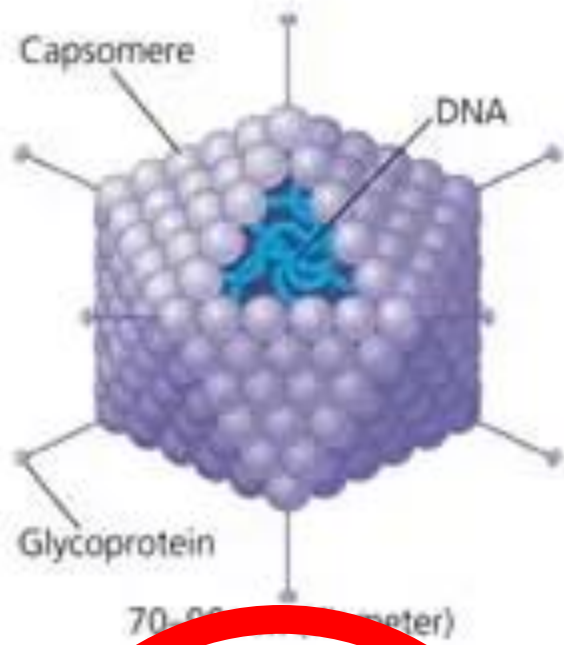
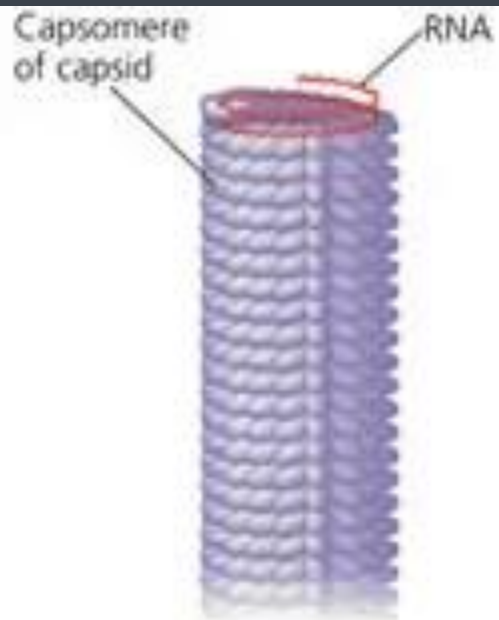






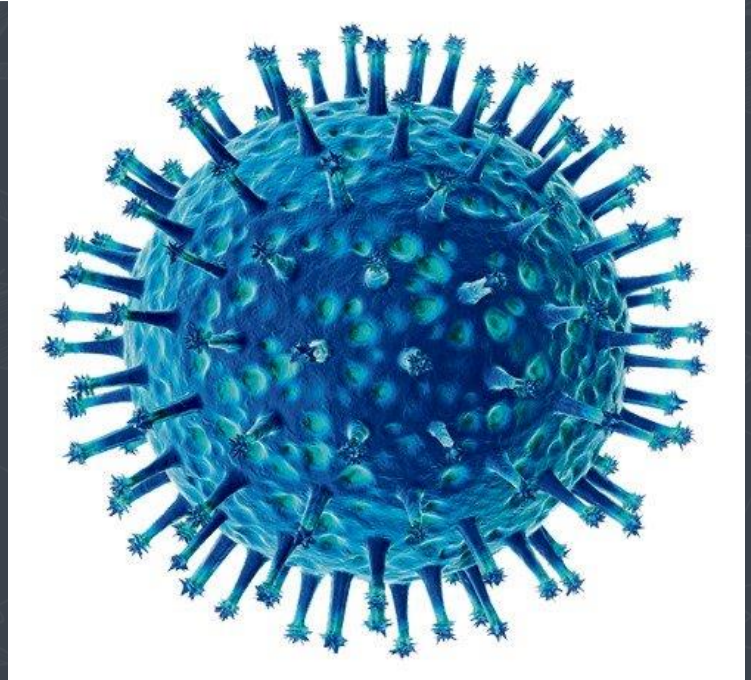
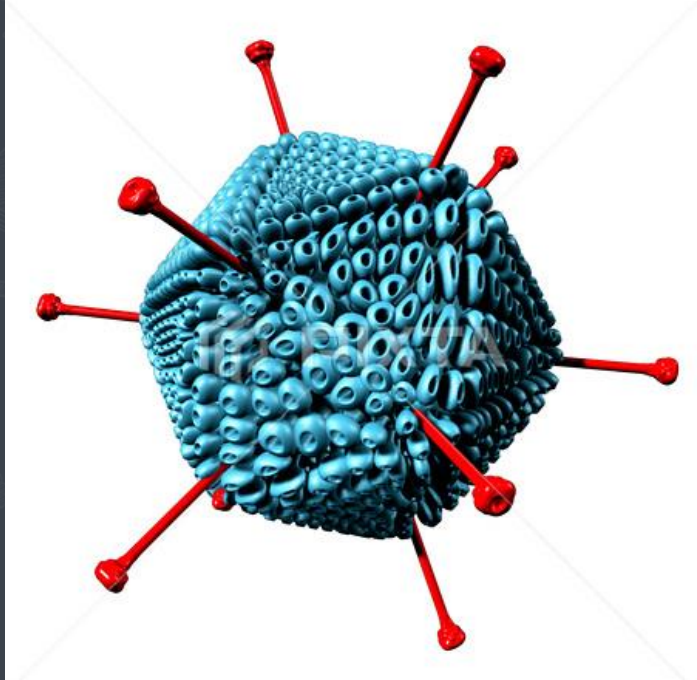
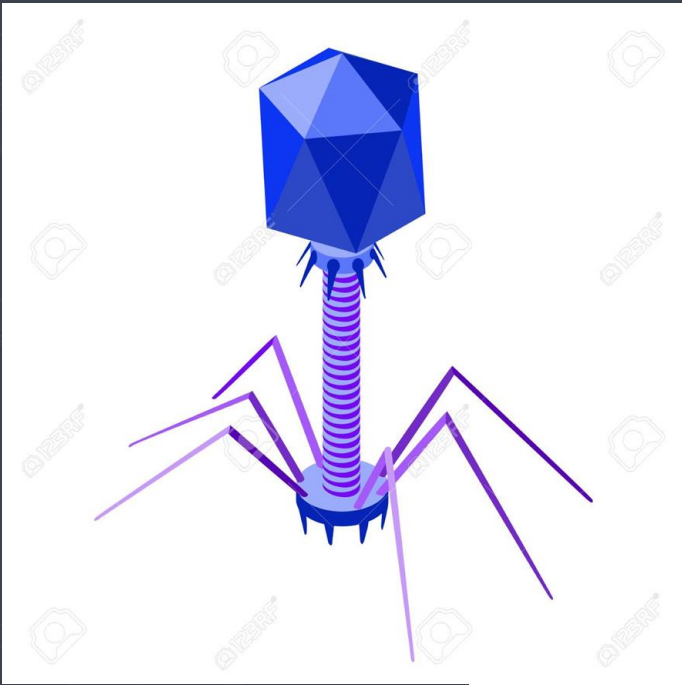






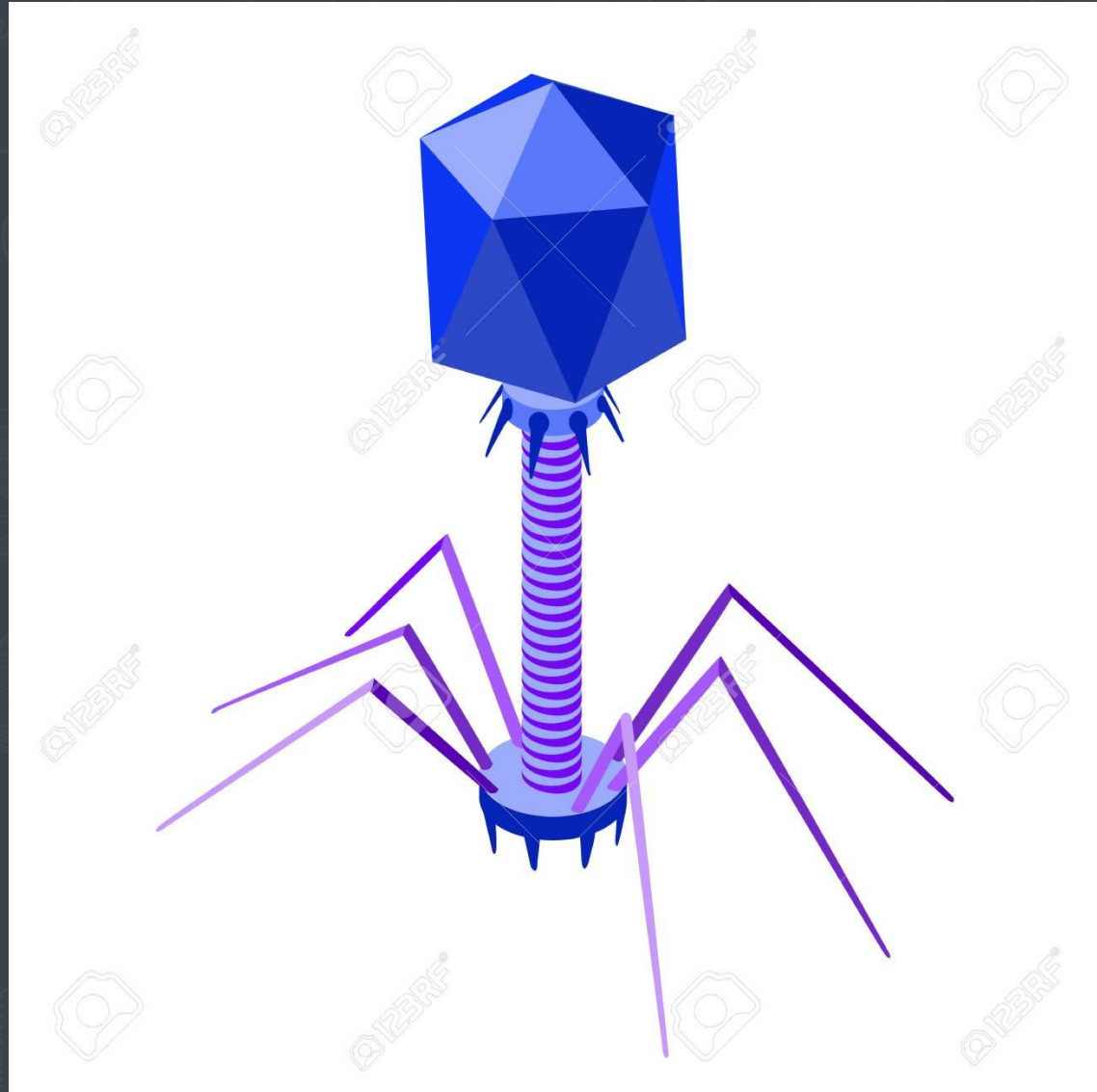
Puzzle Fun



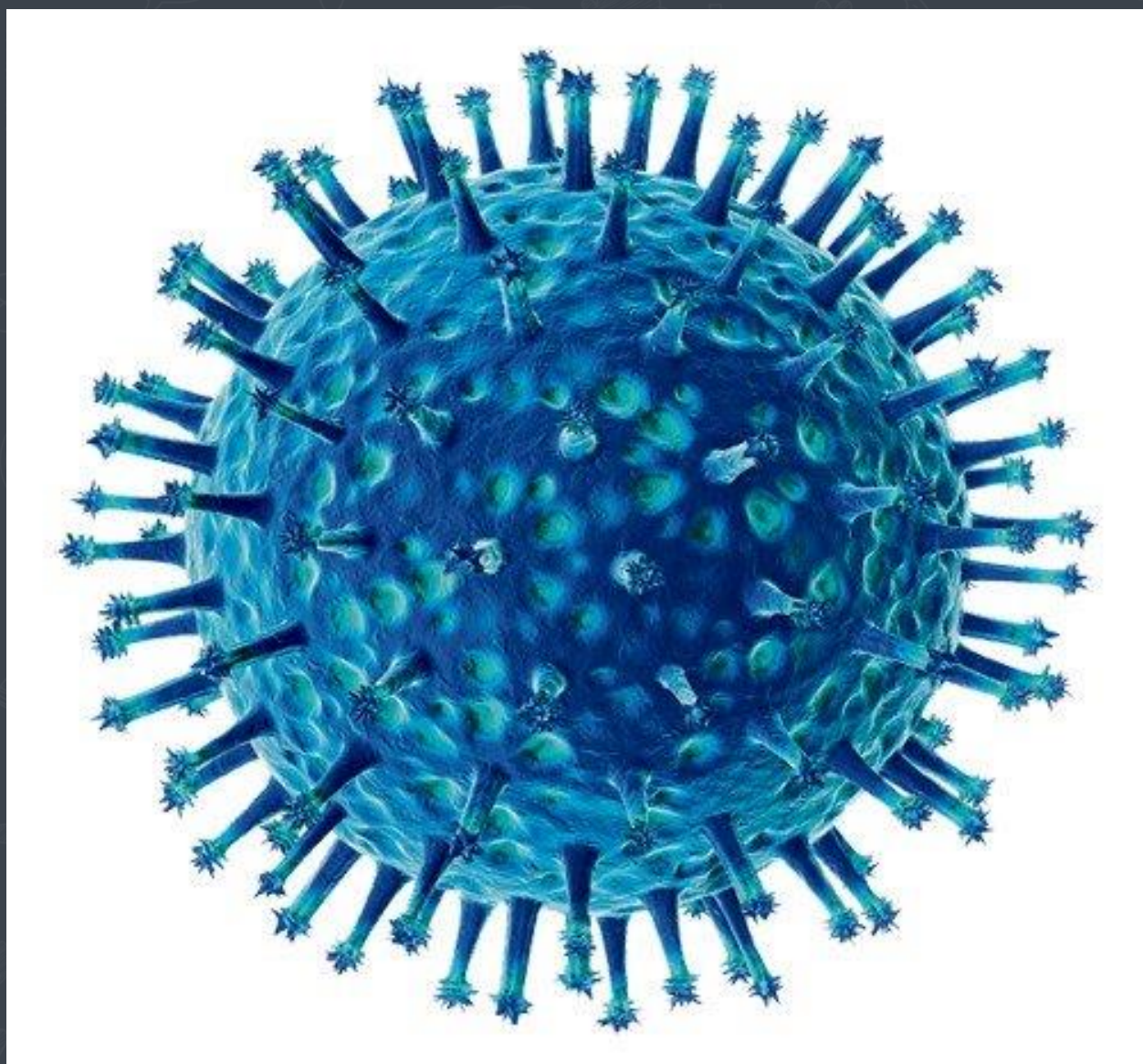




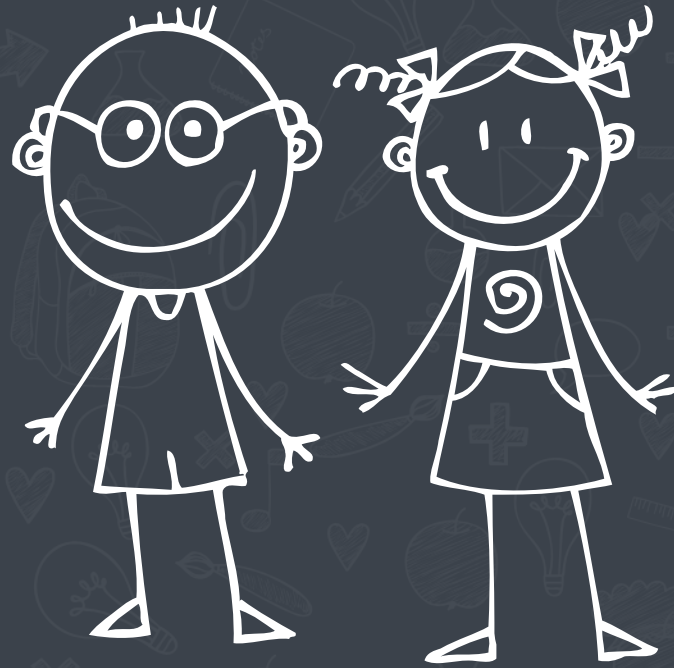
Guess the Viruses







02





Bad?



Good?



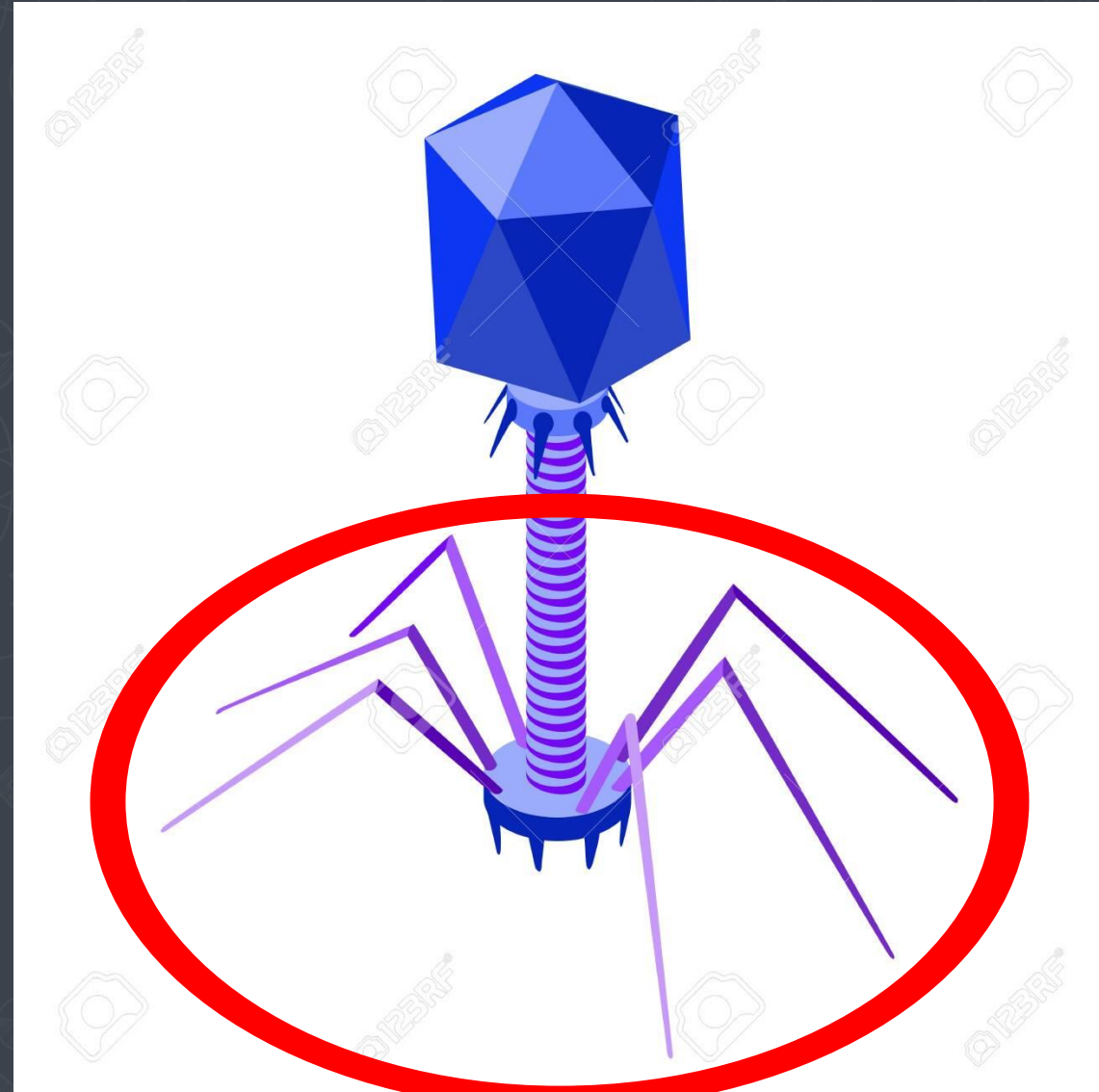
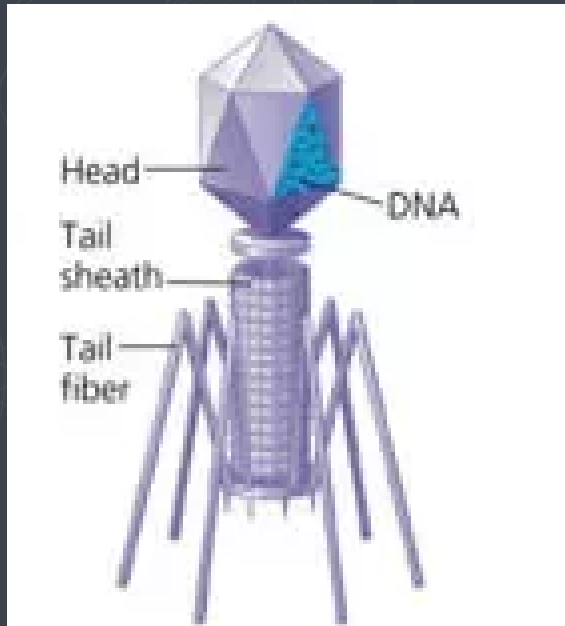
There are good and bad.

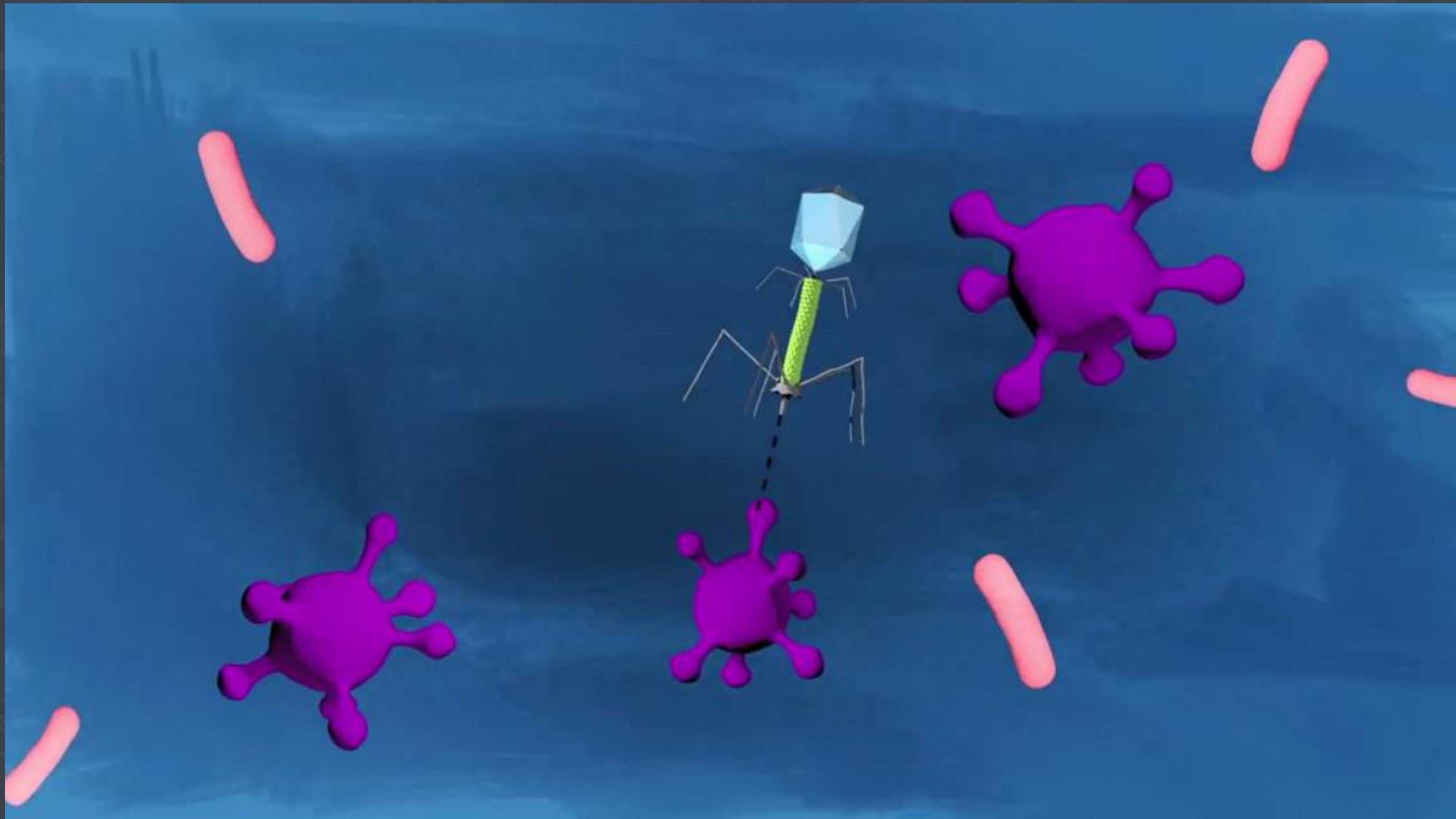
Good virus





Bacteriophage



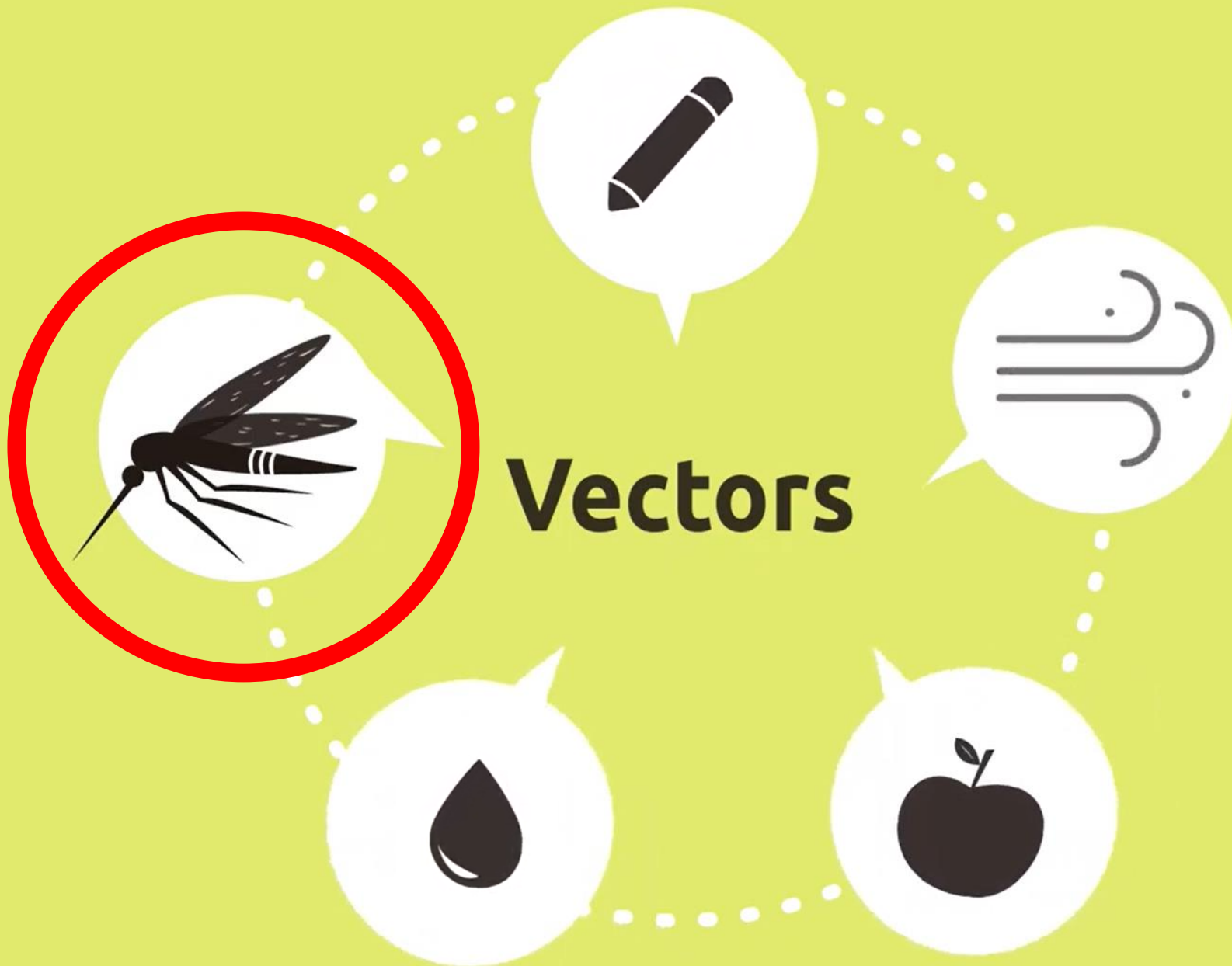


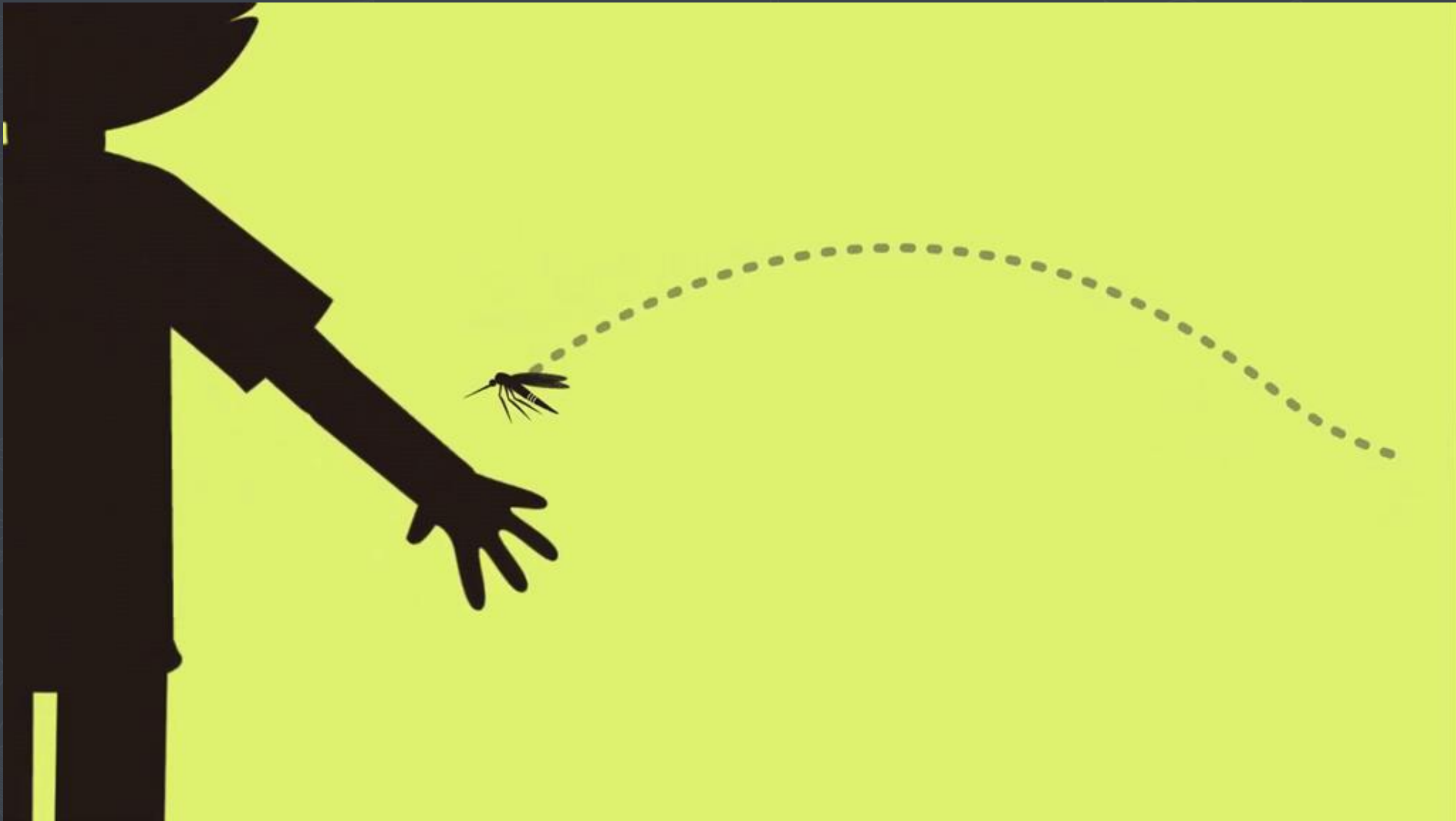
Bad virus



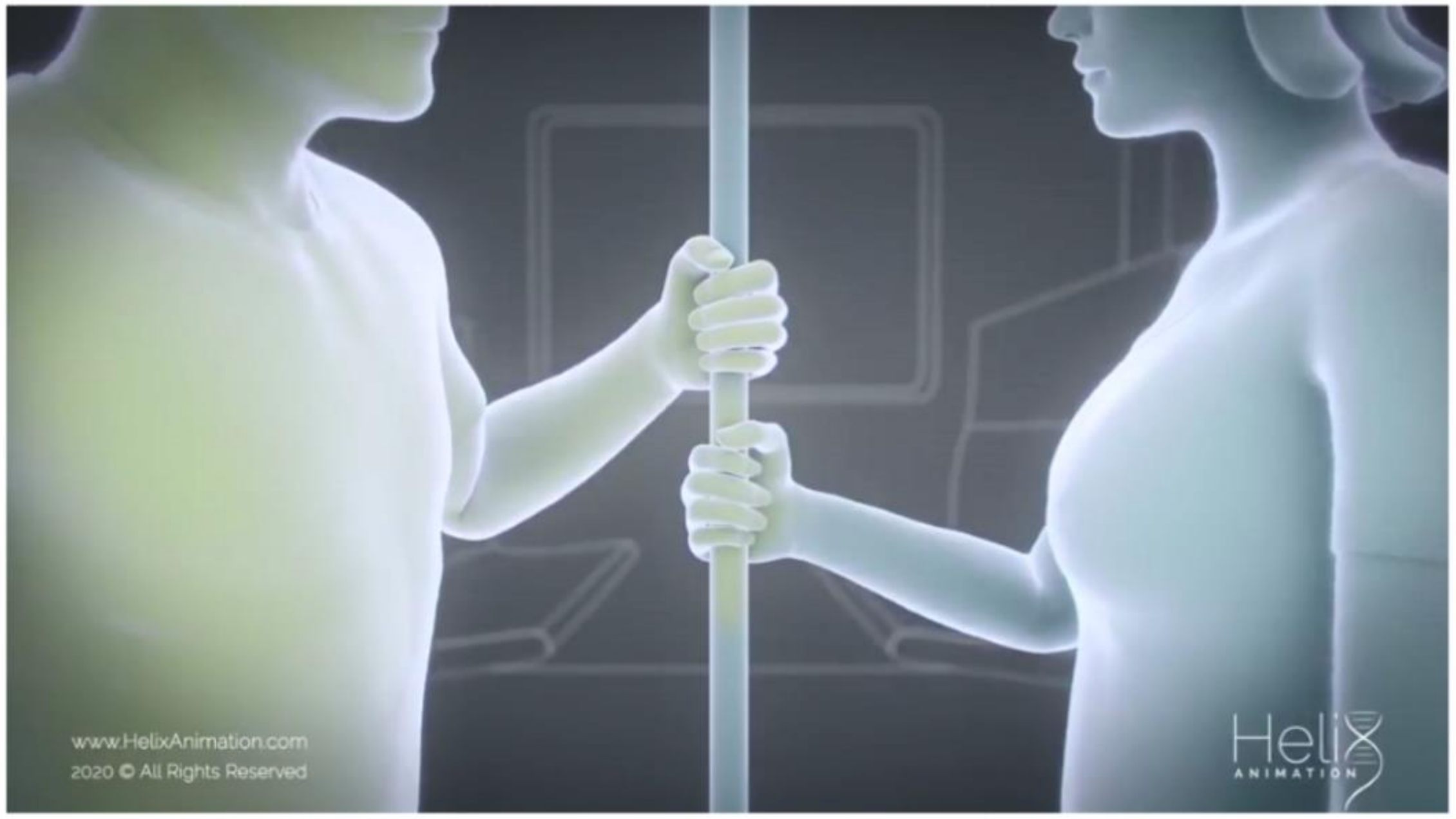


Transmission route





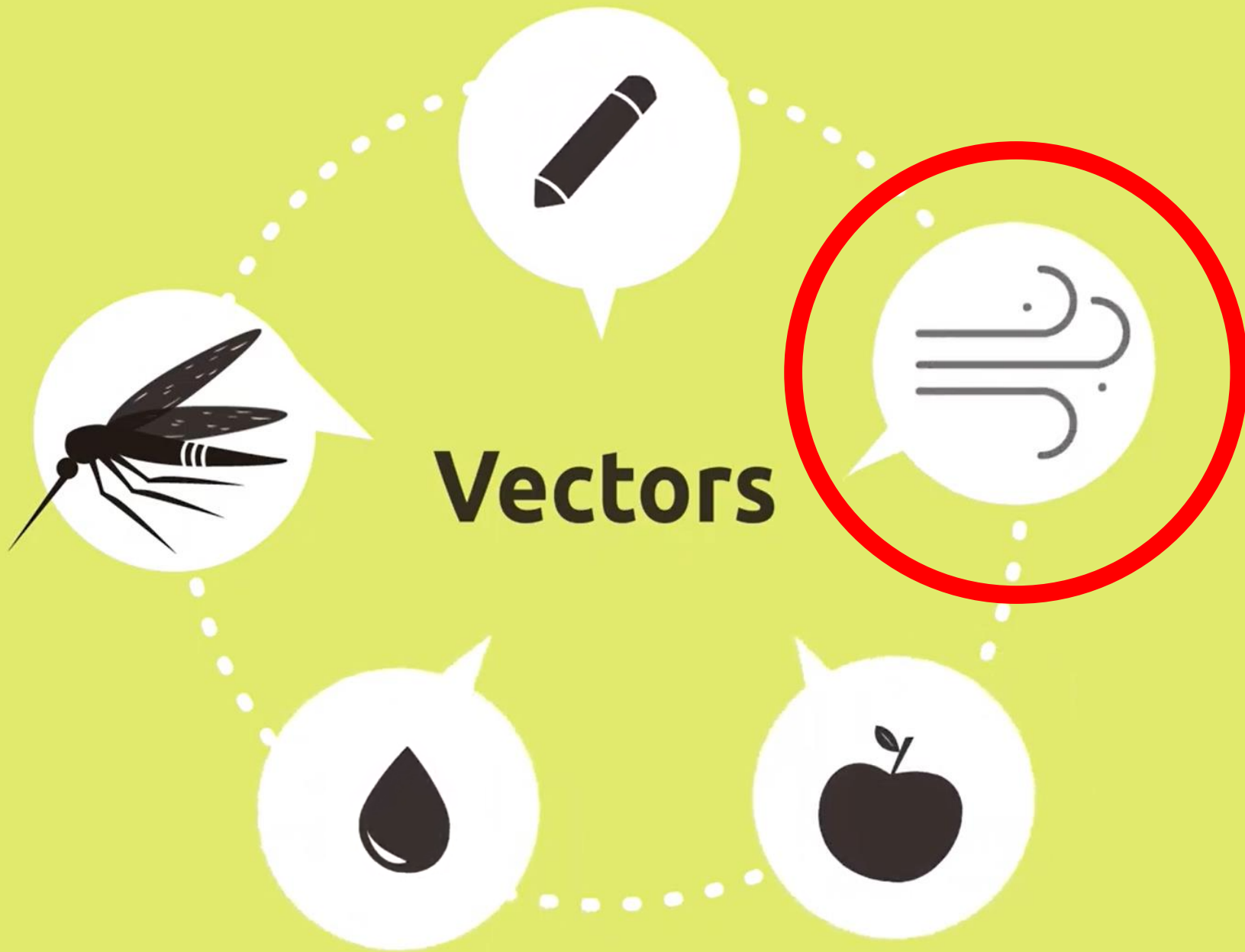


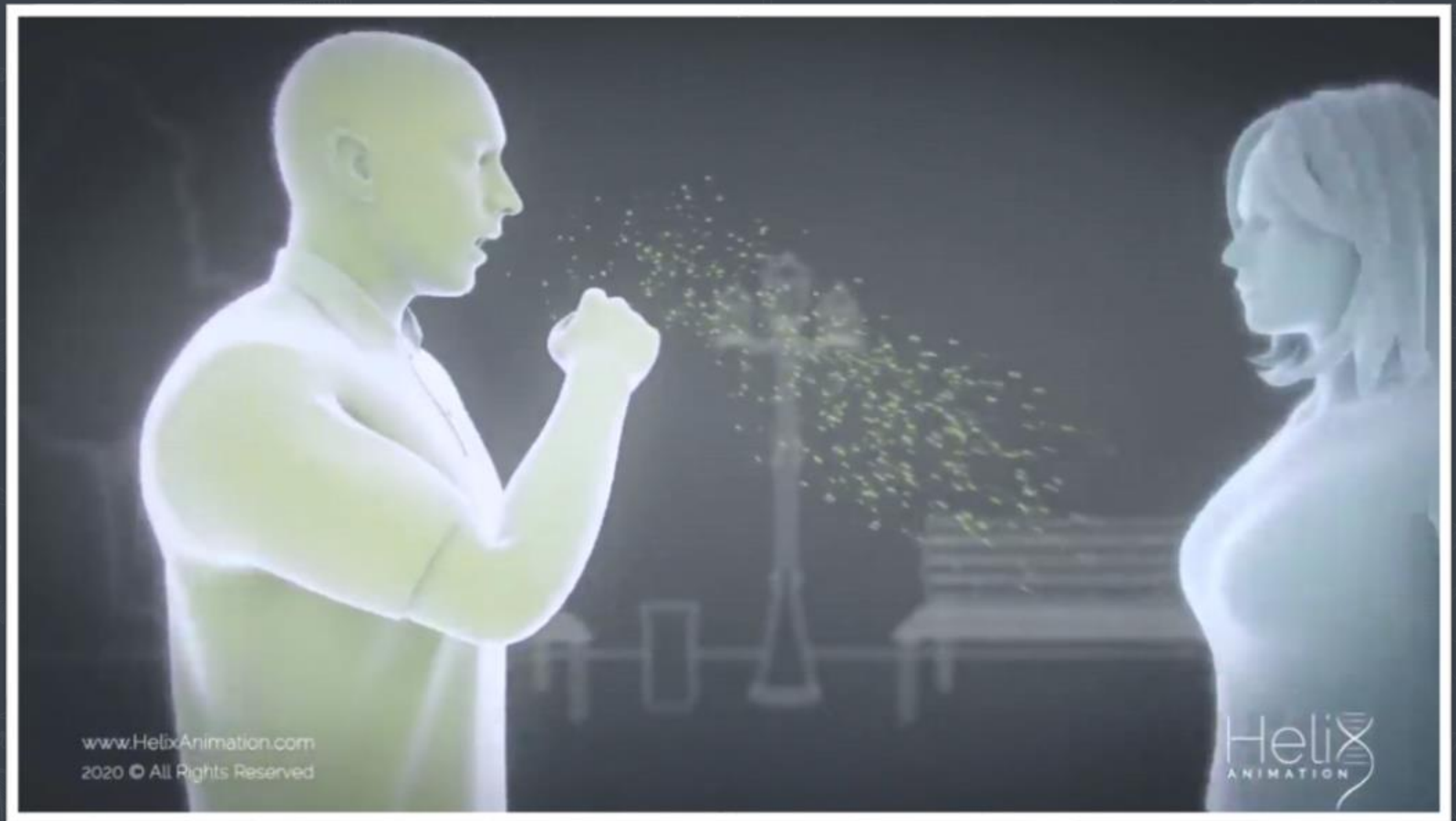


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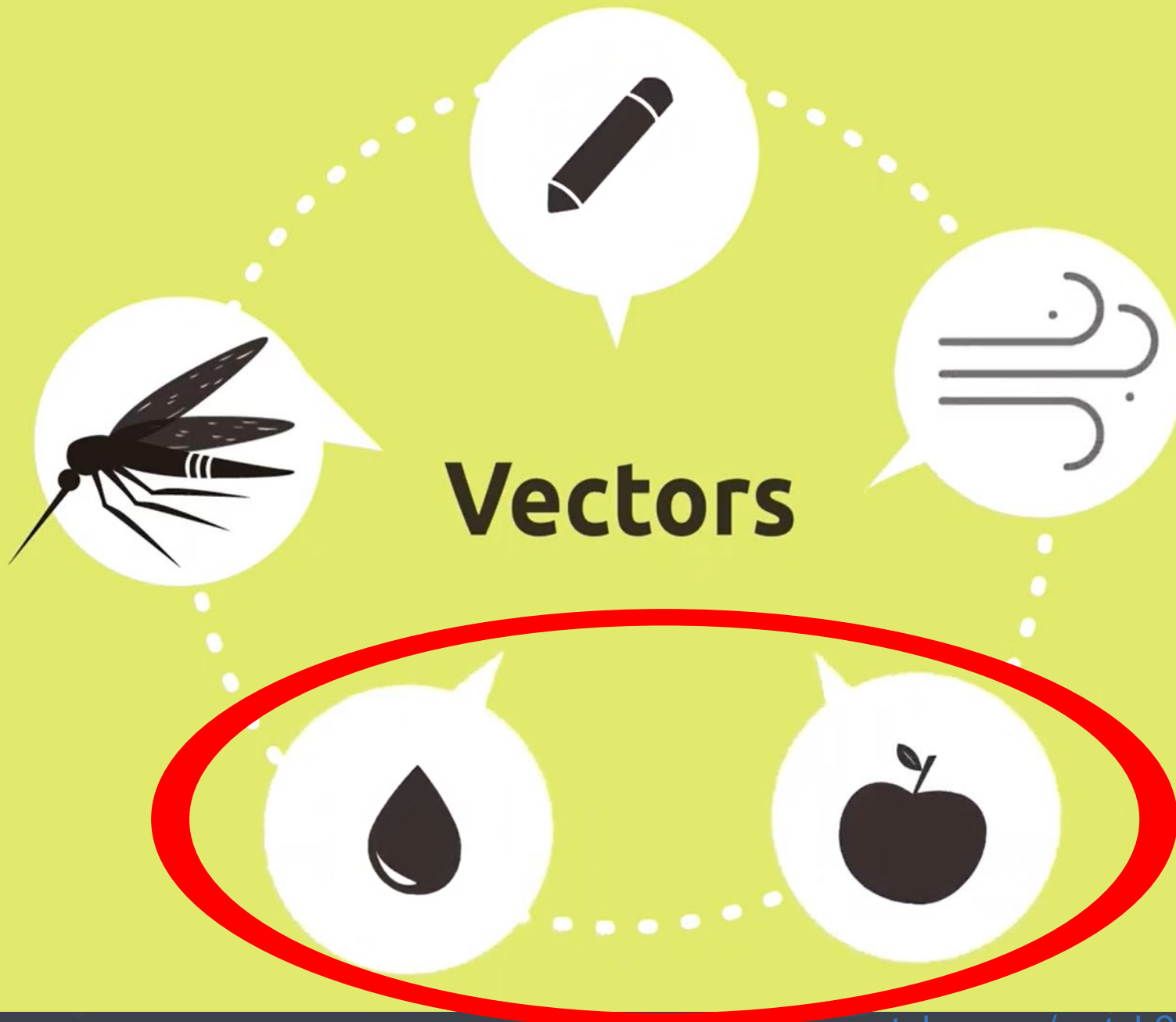
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<https://www.youtube.com/watch?v=PSnSo9kYIH4>





<https://www.youtube.com/watch?v=PSnSo9kYIH4>





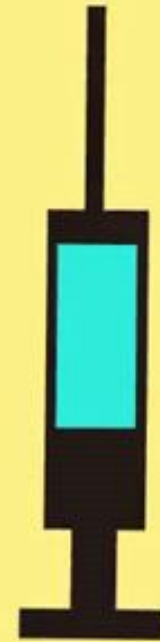
Precautions

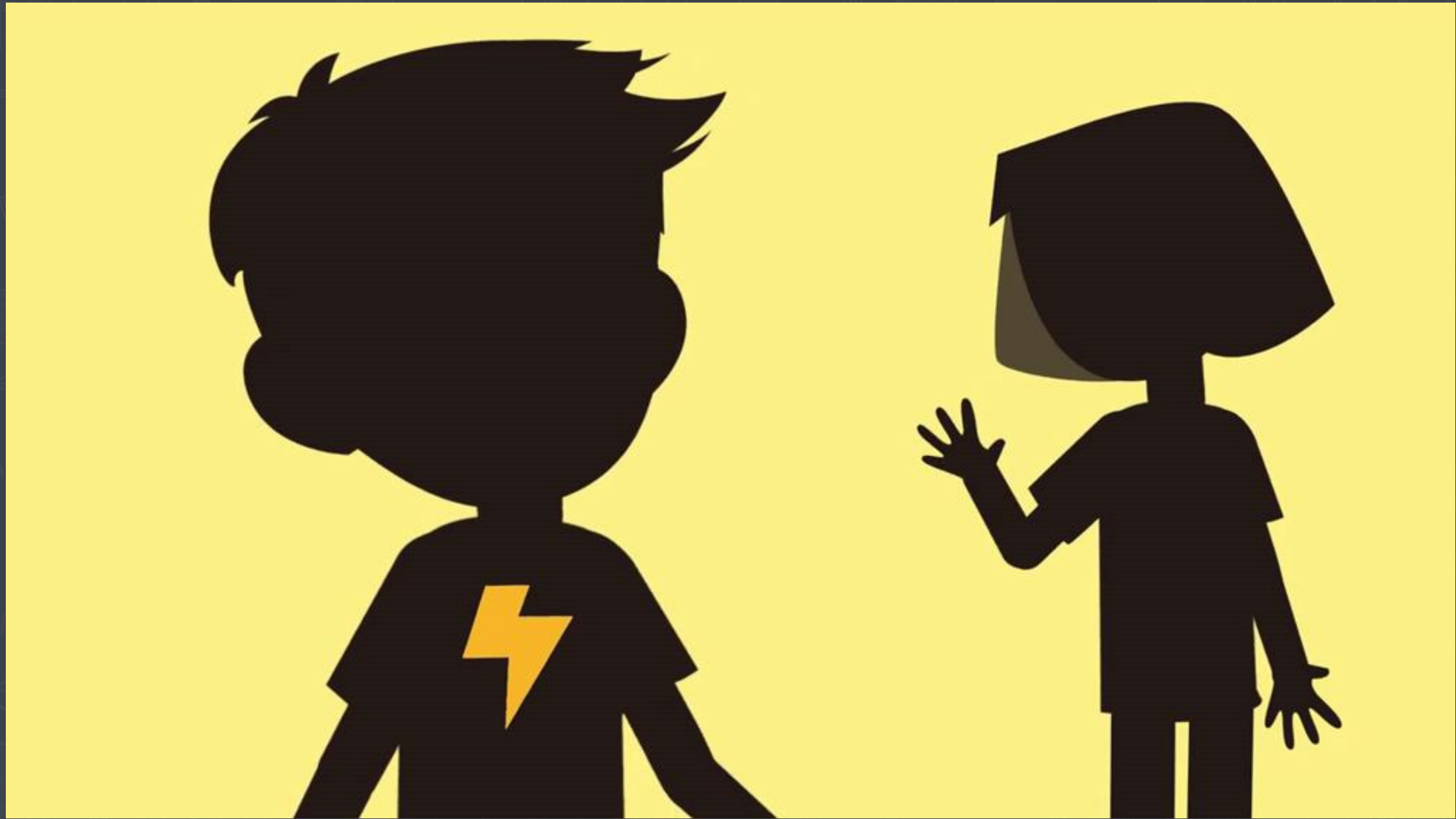




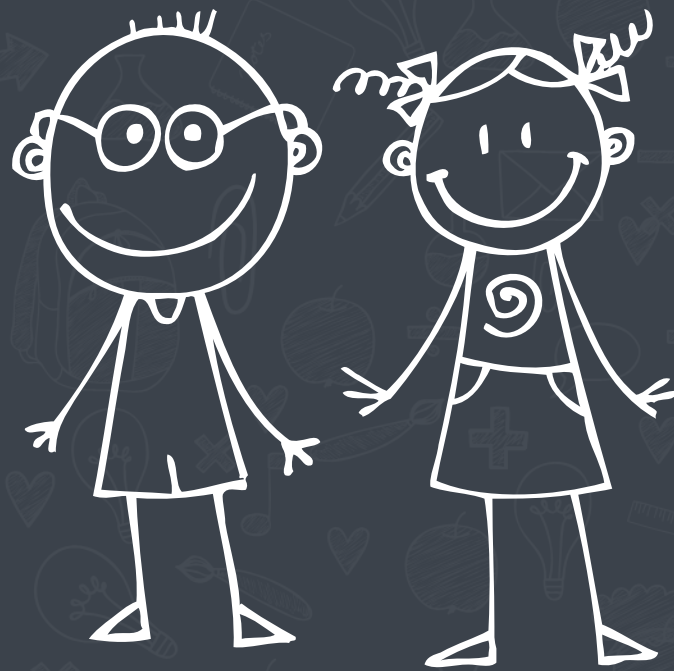


Prevention method





03

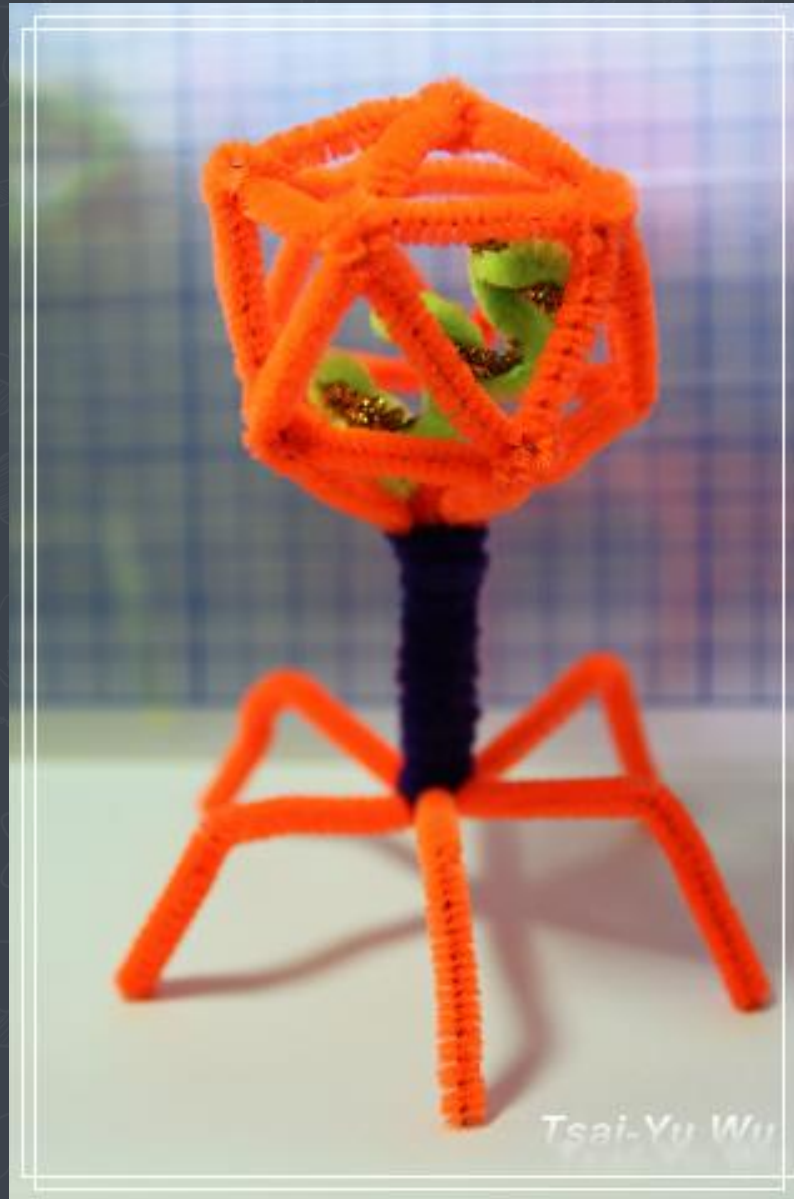


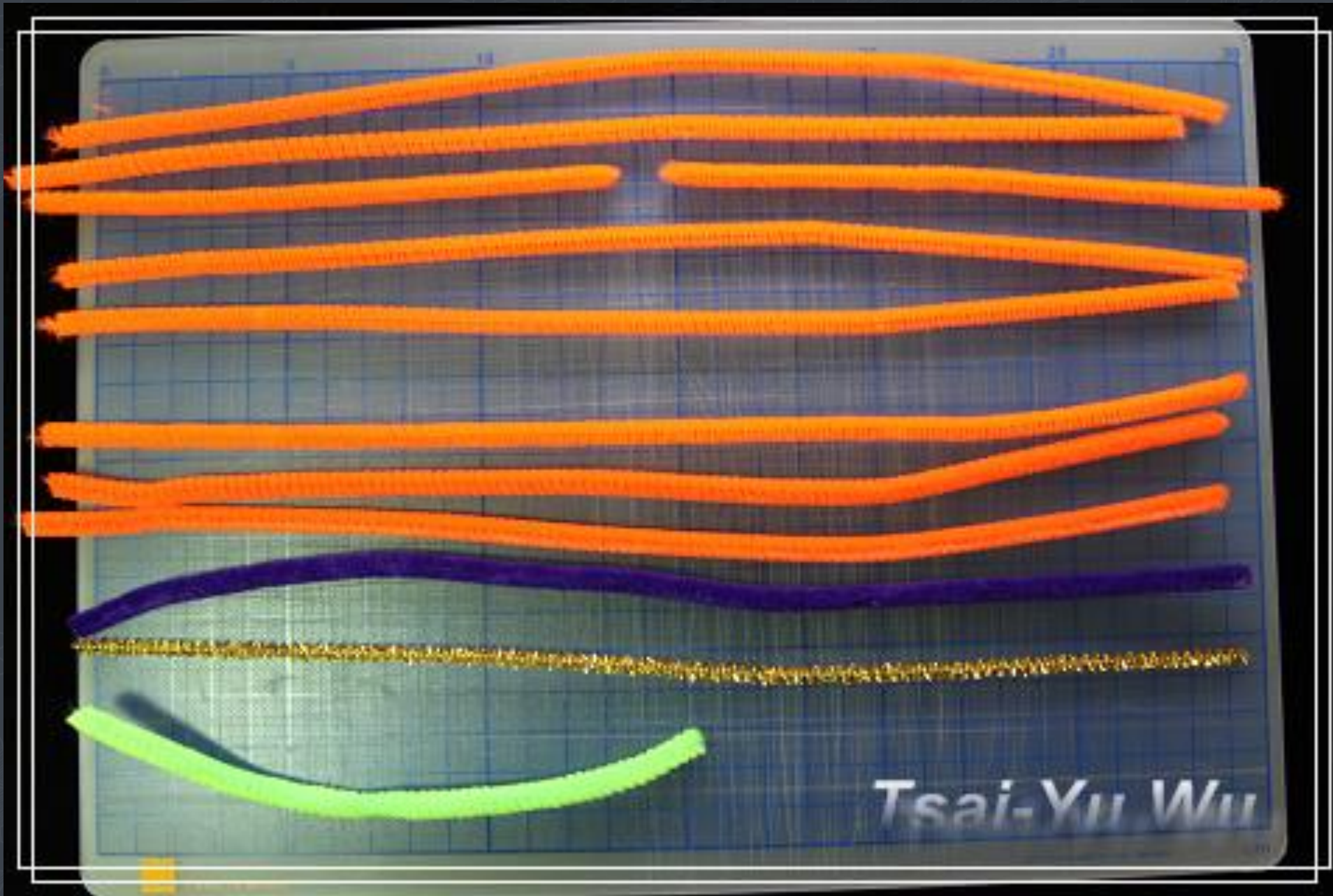


Hands-on

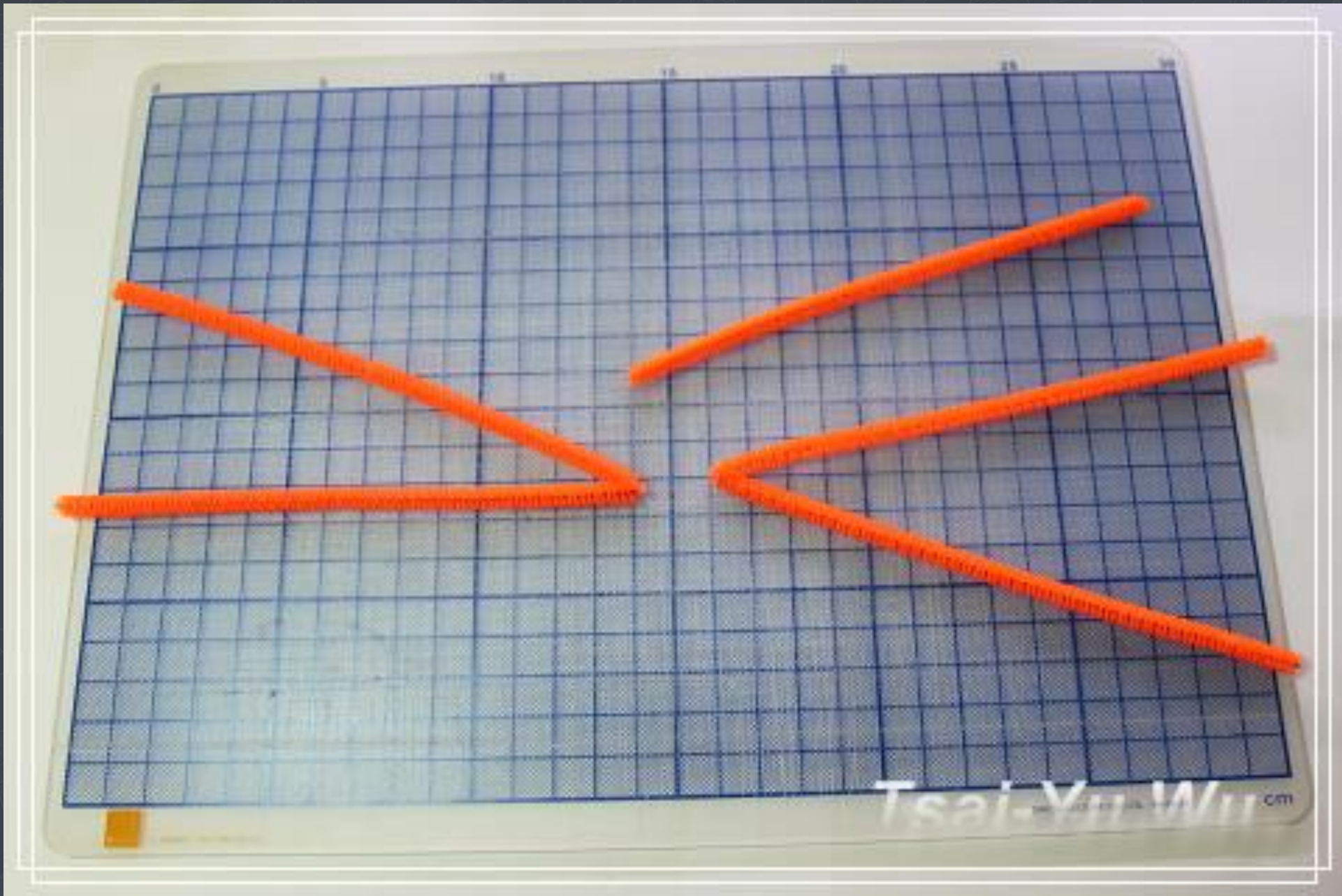
<http://rostratula.blogspot.com/2011/04/3.html>

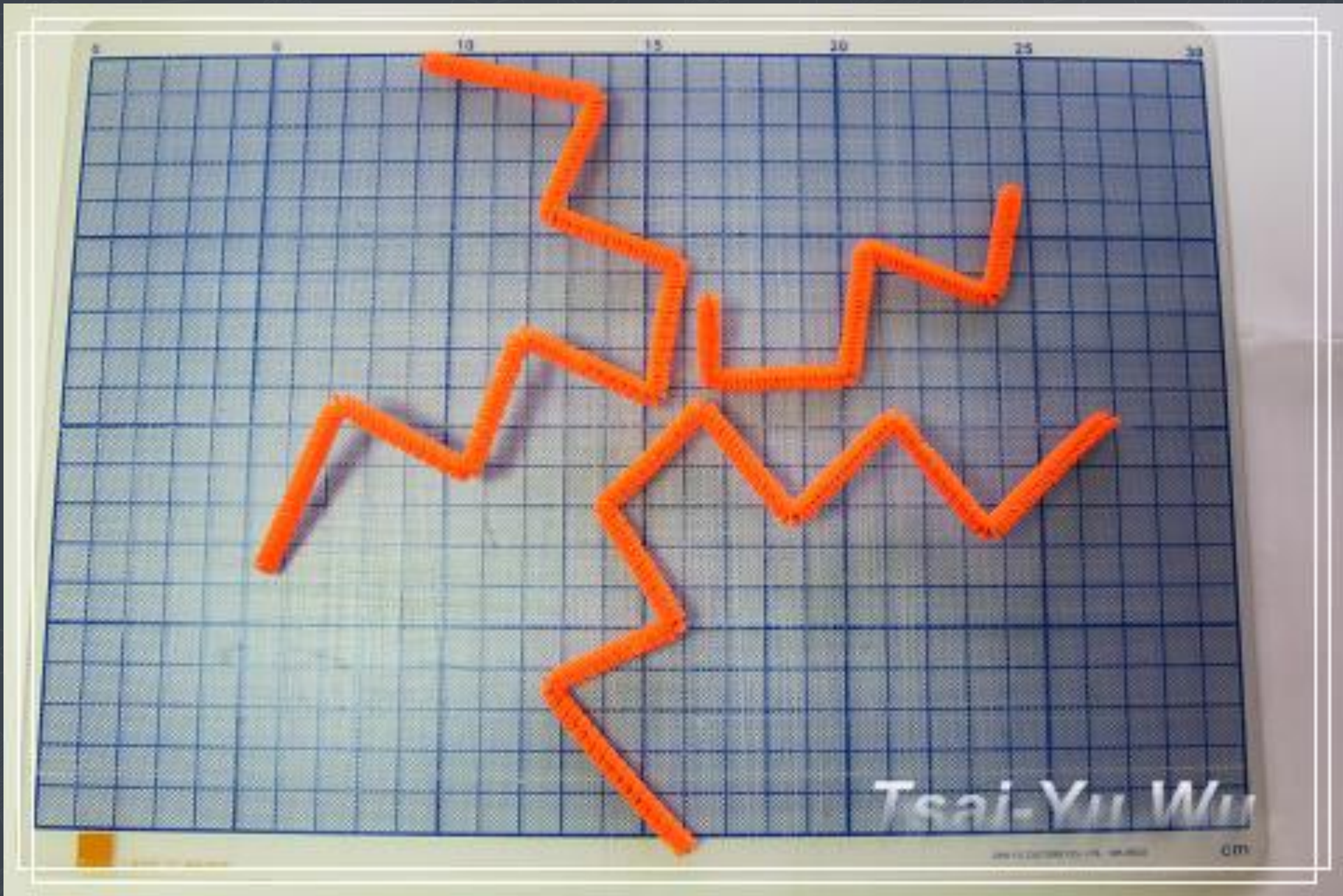
Bacteriophage

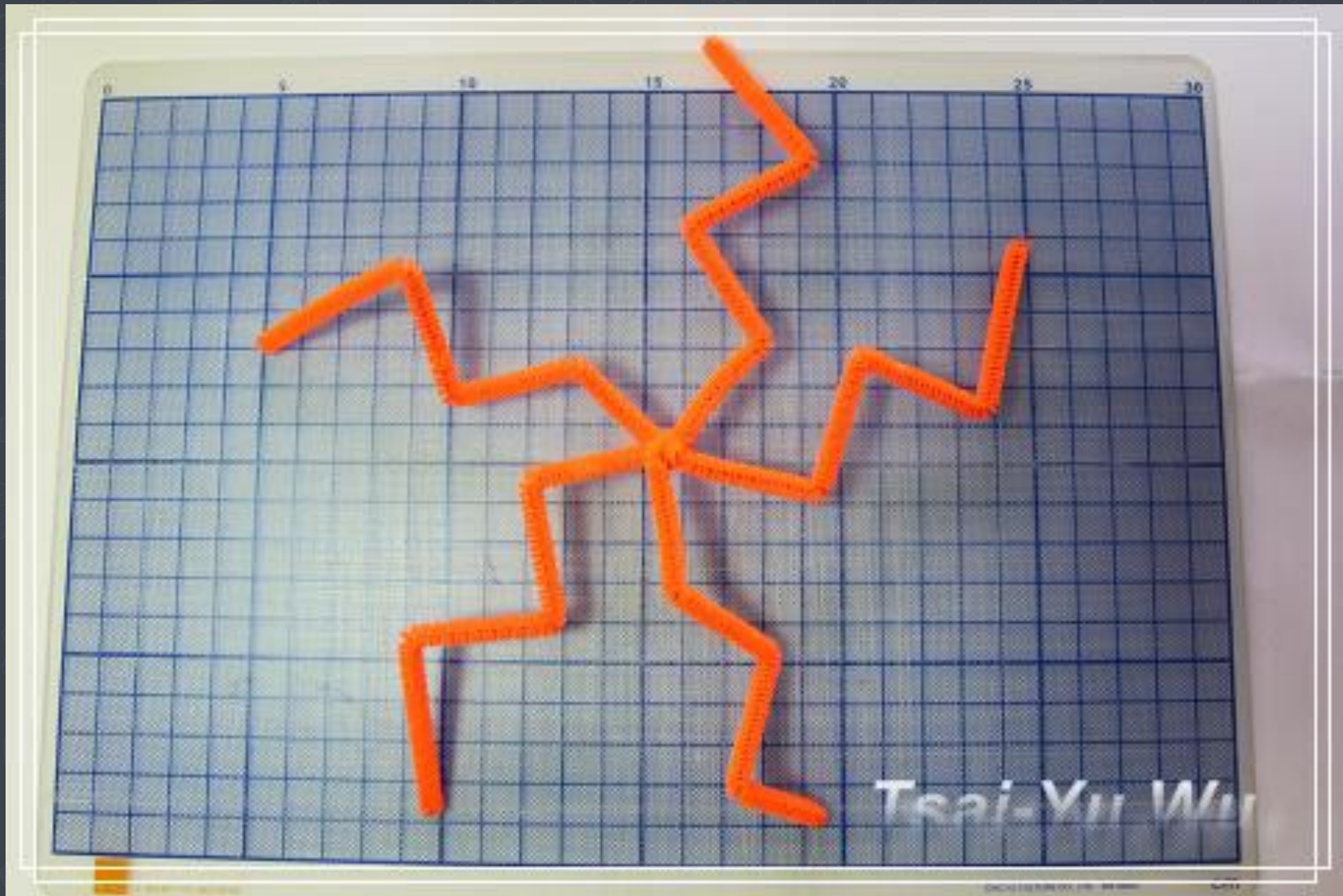


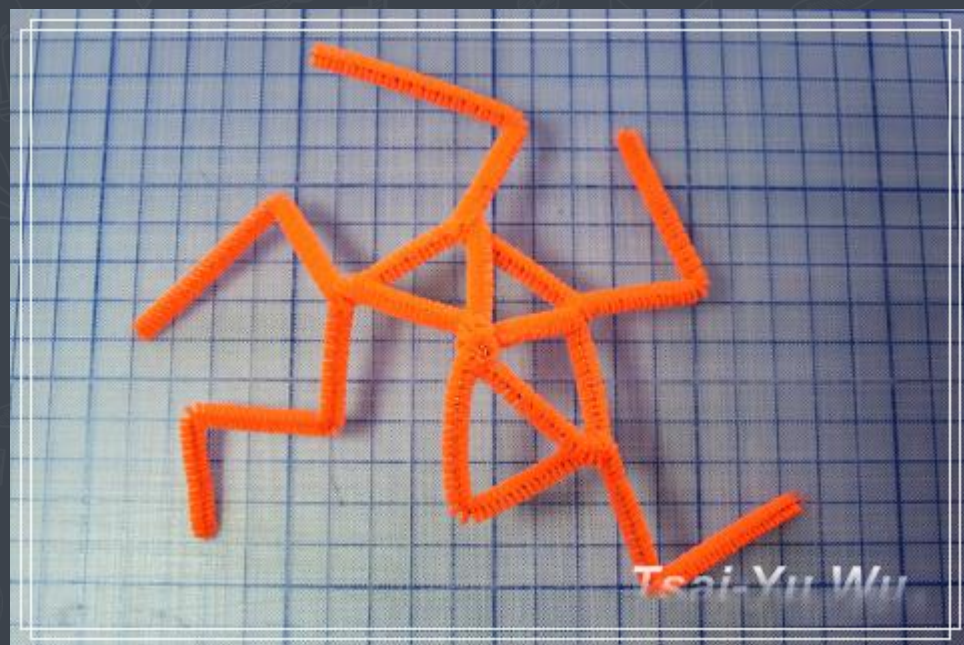
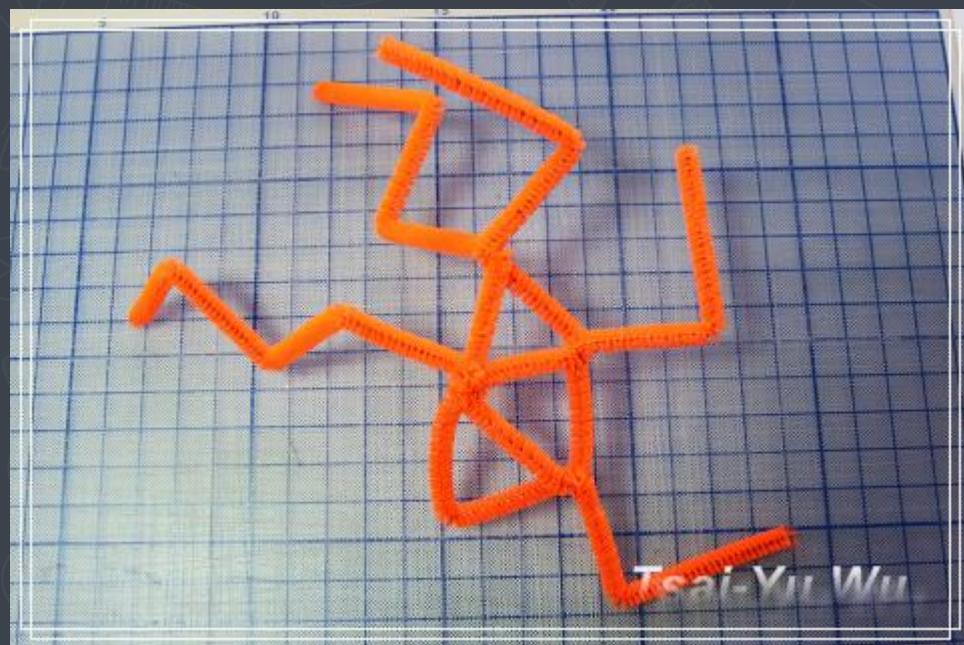
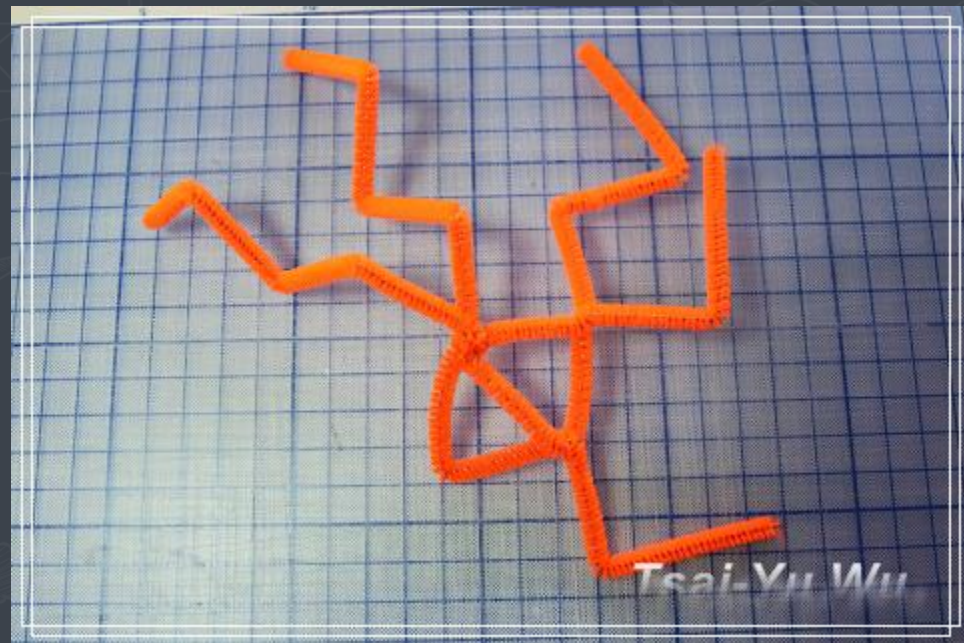
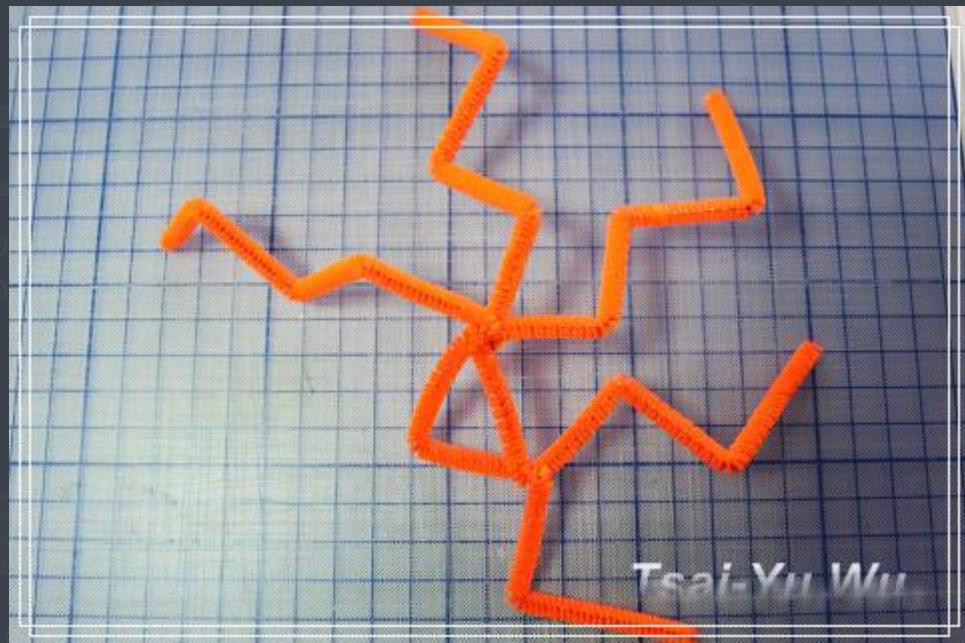


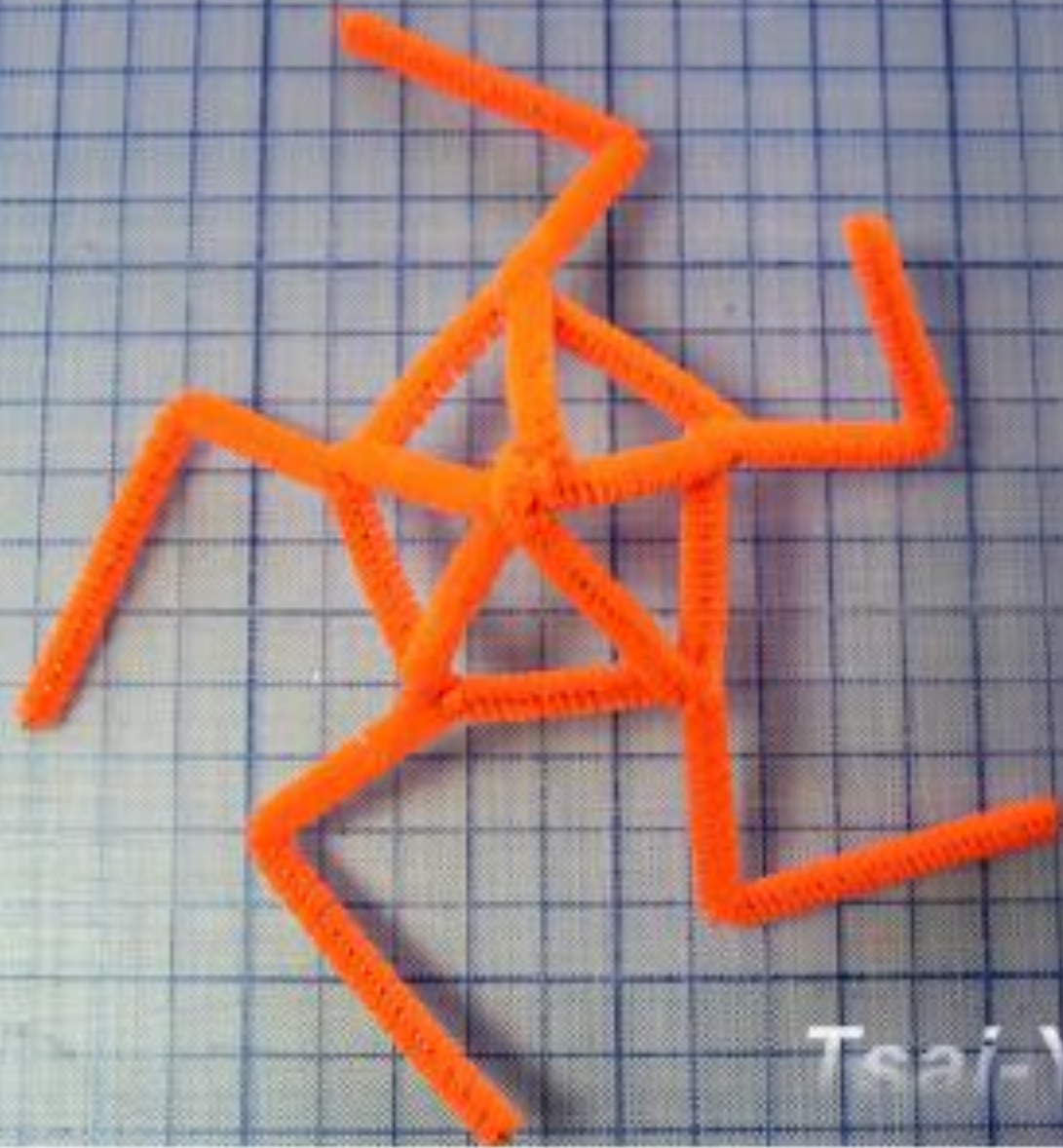
Tsai-Yu Wu



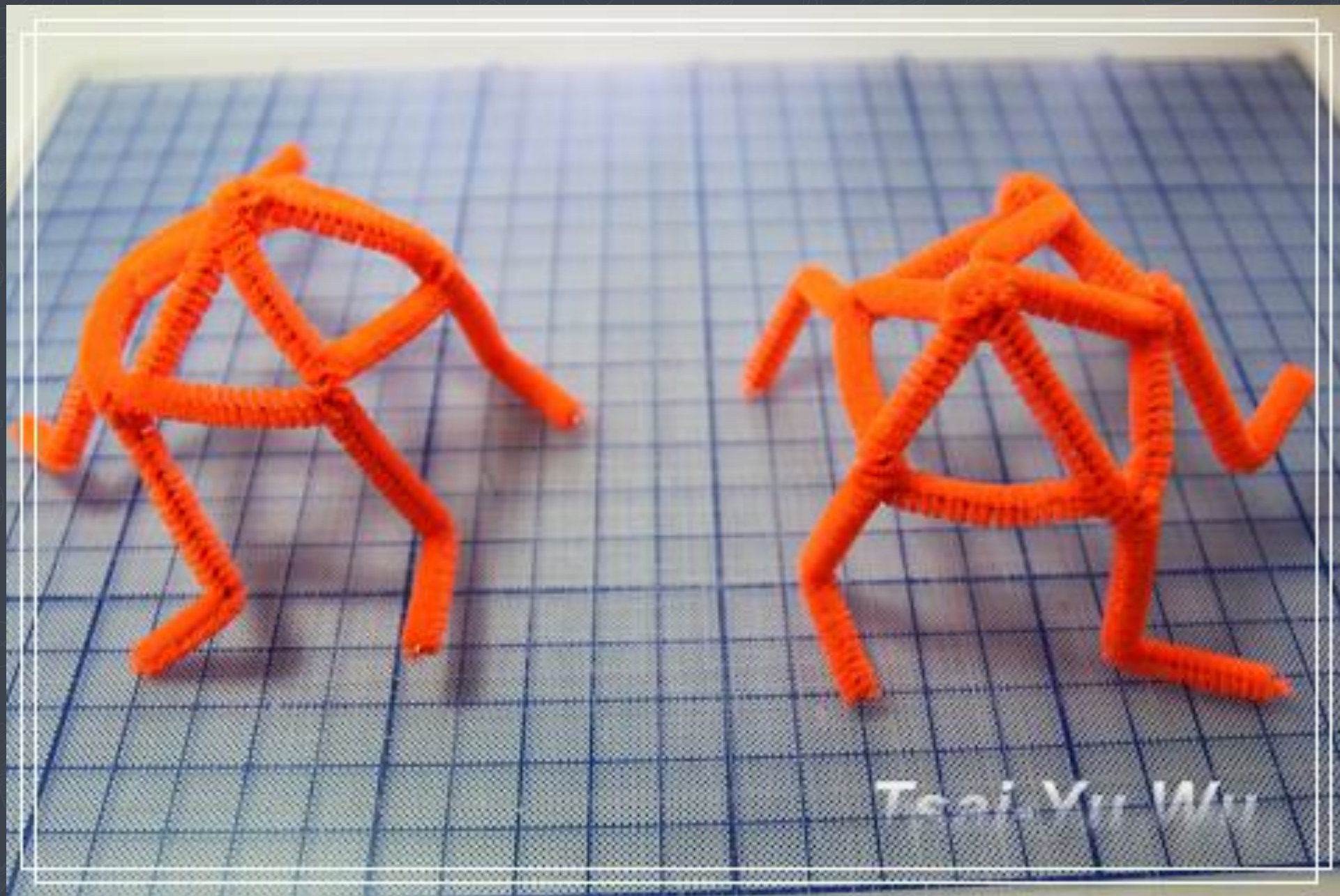




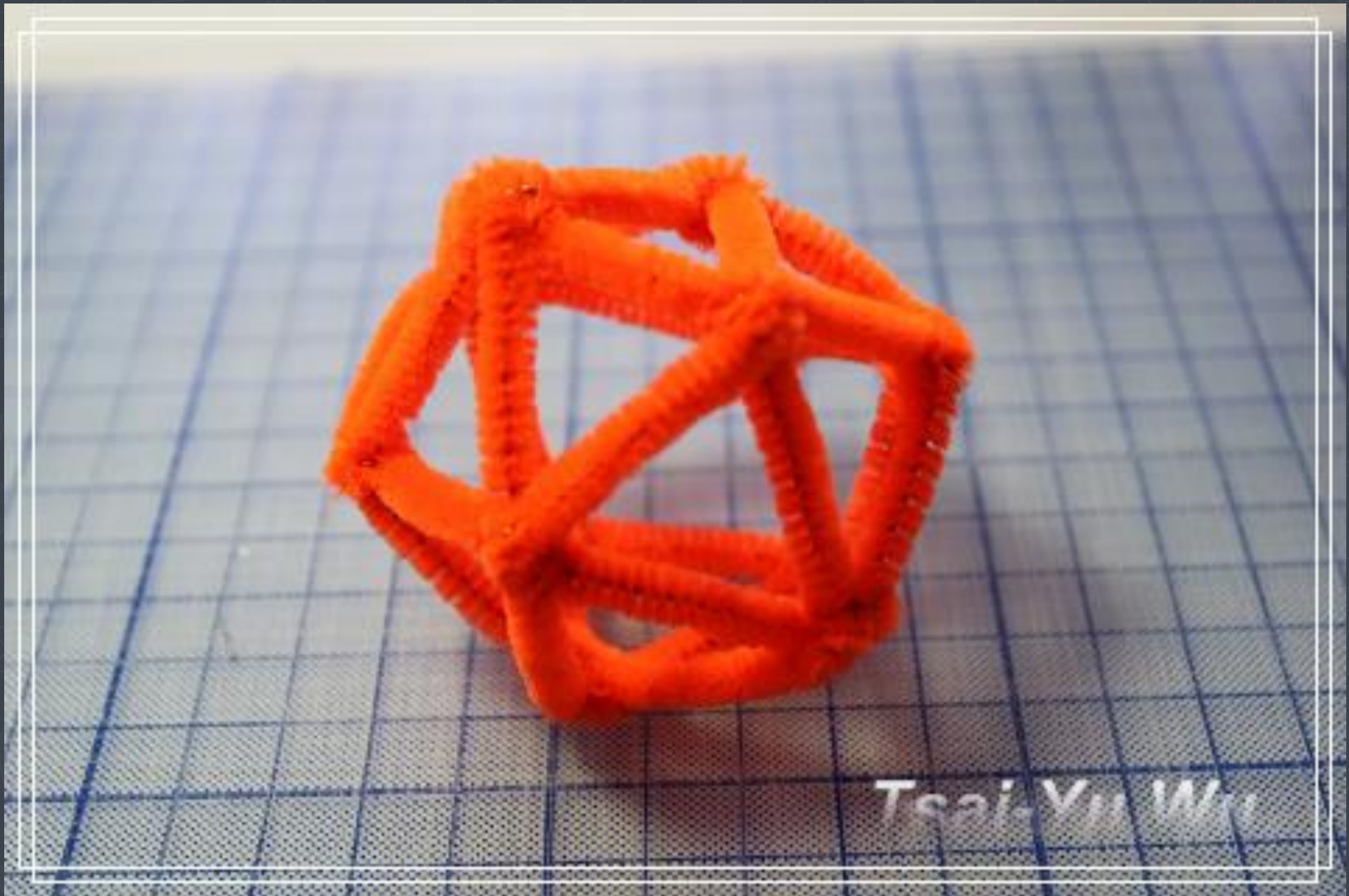




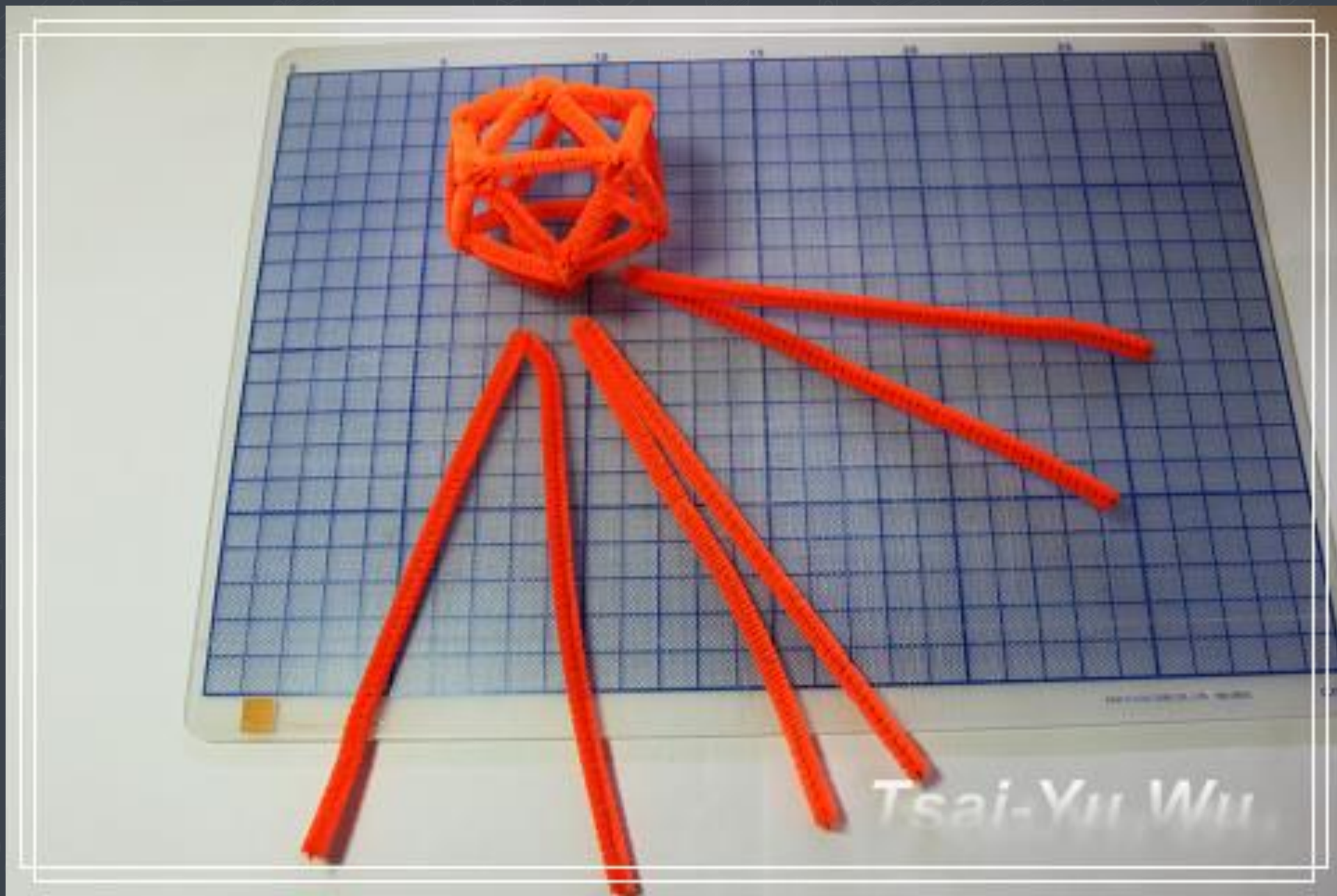
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Teori, Vyr, Wyr



Tsai-Yu Wu



Tsai-Yu Wu







Teal_Yu_Wu



Teal-Yu Wu



Tesi Yu Wu



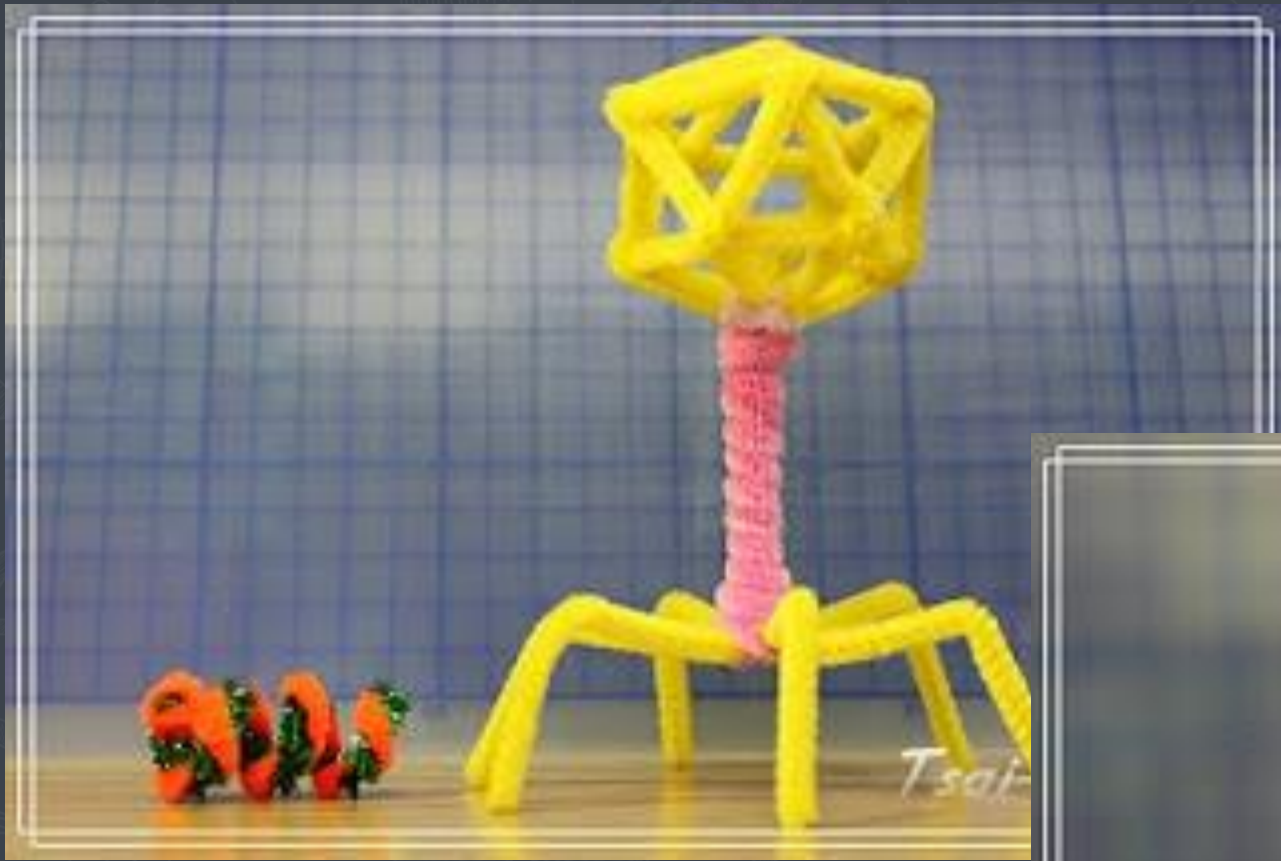
Tsai-Yu Wu

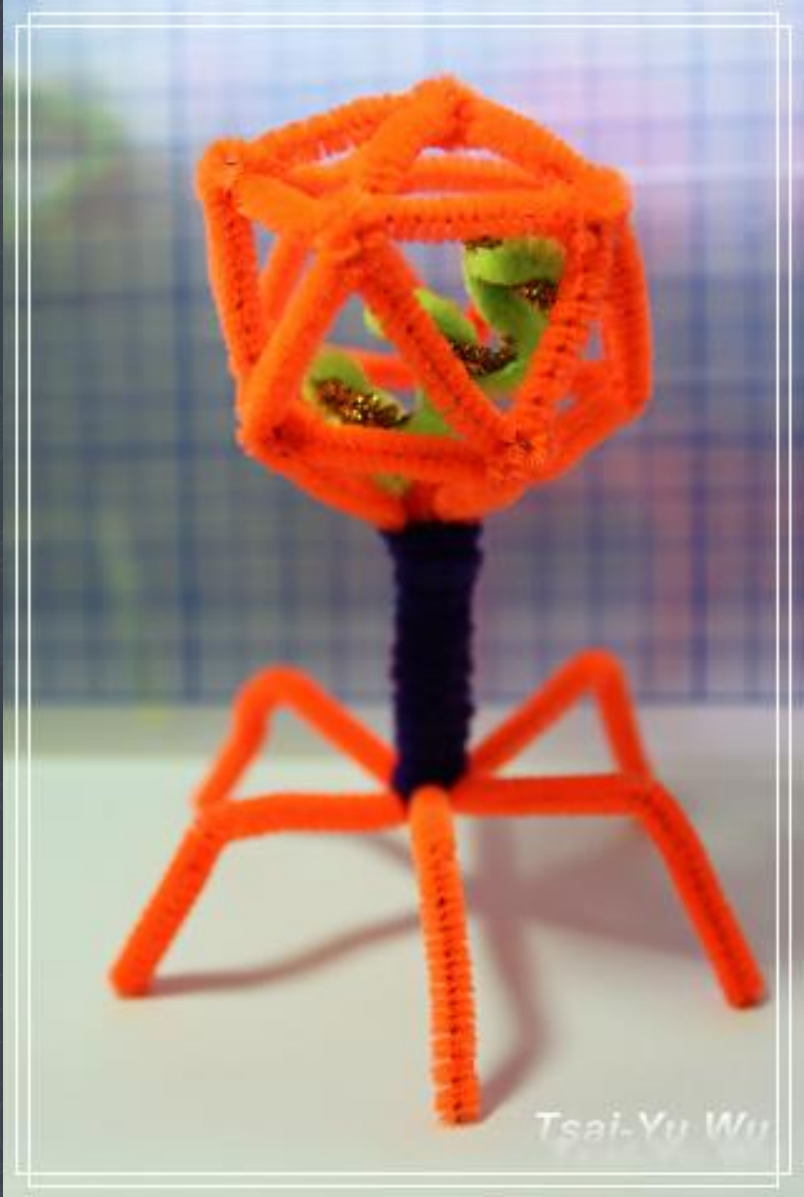


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