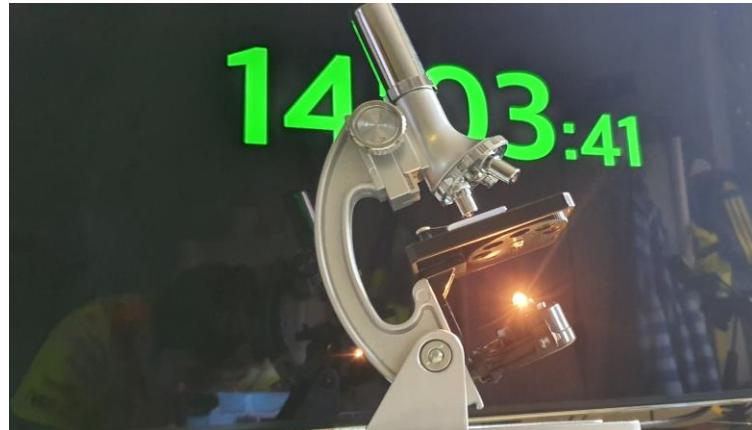
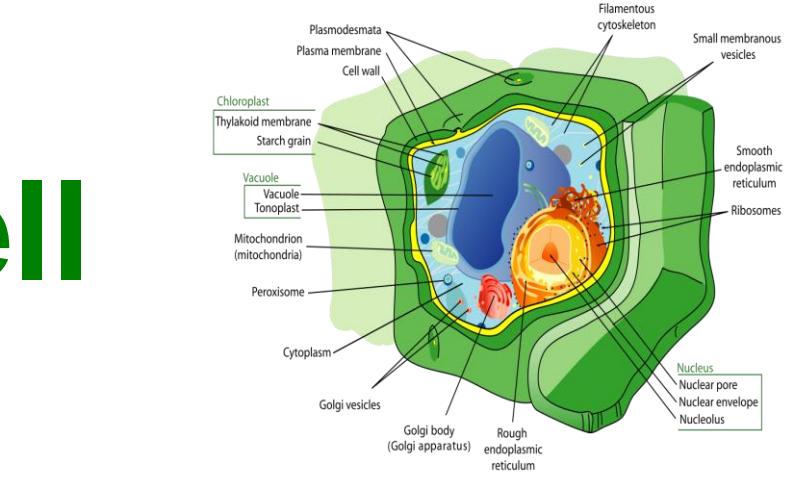


# Plant cell

Viktor  
Science  
MYP1  
2020



# Questions

- Is it **True** that all parts of a plant are made up of cells?
- Can a plant cell be seen well through a school microscope?



# Tasks

1. We need to prepare the microscope.
  - a. If the microscope uses artificial light (LED), plug the microscope in to the electrical outlet.
  - b. If the microscope doesn't use artificial lights, ensure good light in the room, or your laboratory.
2. Get your slide/slides prepared. Put a piece of the onion skin onto the slide, and put some iodine on it. Prepare also the slides with a piece of leaf, a piece of root, a piece of flower, a piece of stem.





**It was not easy to prepare all these slides.**

**A very thin cut should be made of all parts of the plant.**



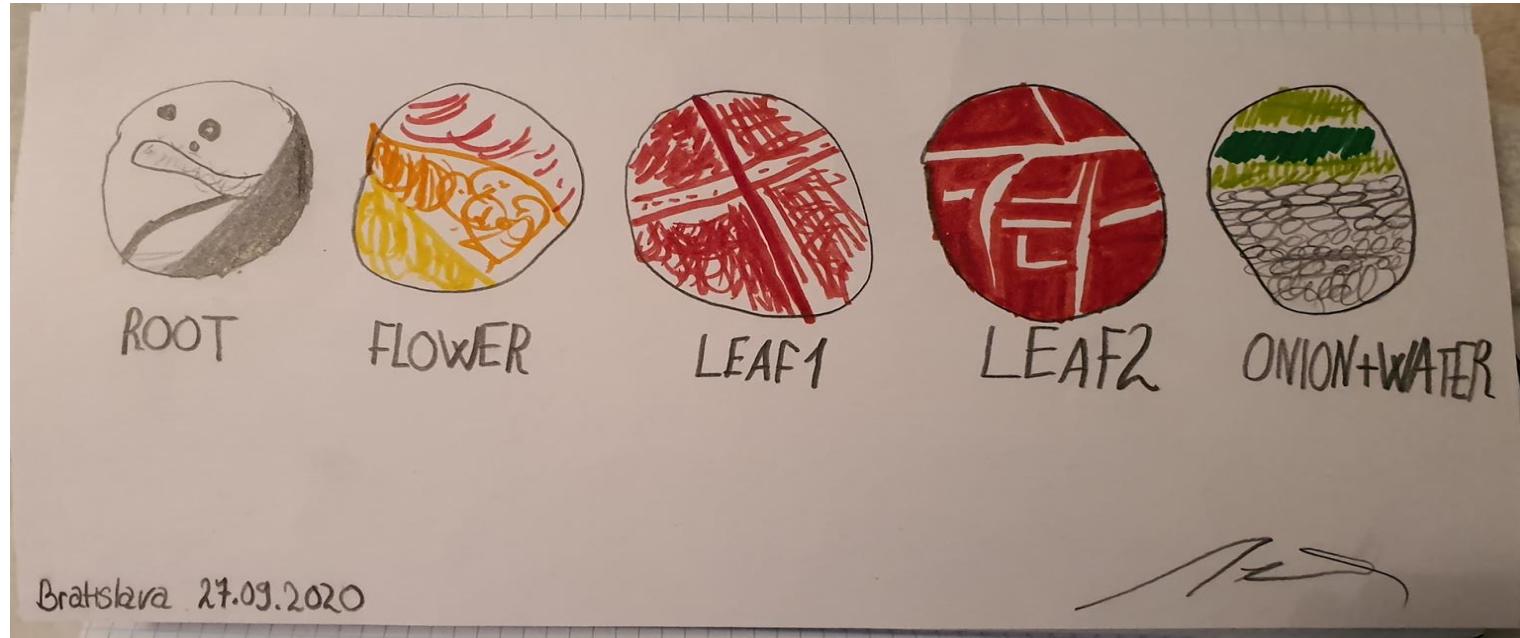
**My home solution to the problem**





# My drawings...

Is it clear? Do you see cells?



Maybe the teacher wasn't satisfied with my drawings?



# How to solve this problem?

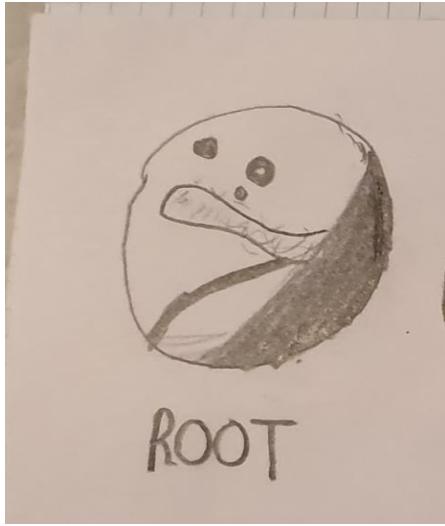


What have I come up with?

May be I can use my phone and take photos through a microscope eyepiece?

Super!





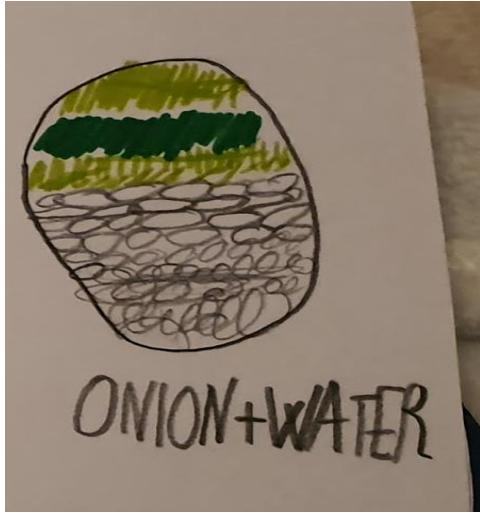
ROOT

My drawing



Photo by my phone

**The root of a plant is composed of cells!**



ONION+WATER

My drawing

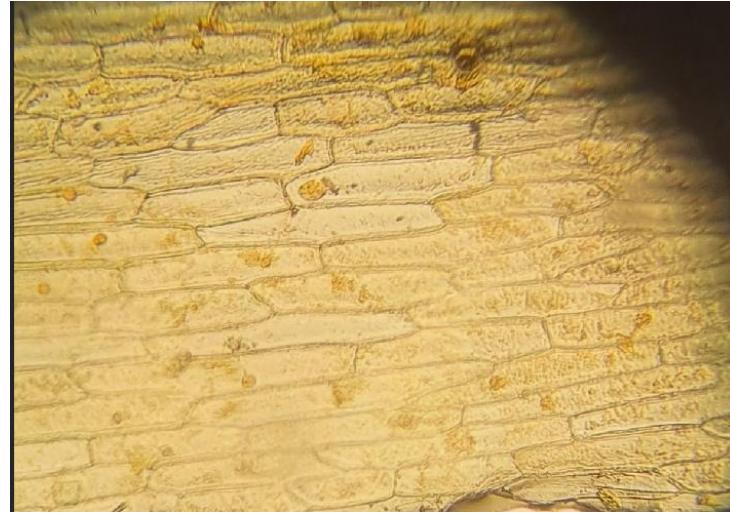
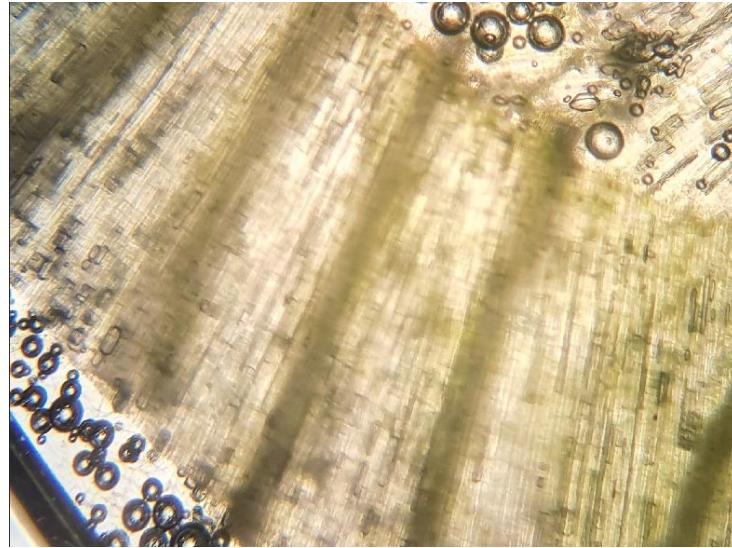


Photo by my phone

**The skin of an onion is composed of cells!**



My drawing (I forgot to make it!?)

Photo by my phone

**The stem of a plant is composed of cells!**



My drawing

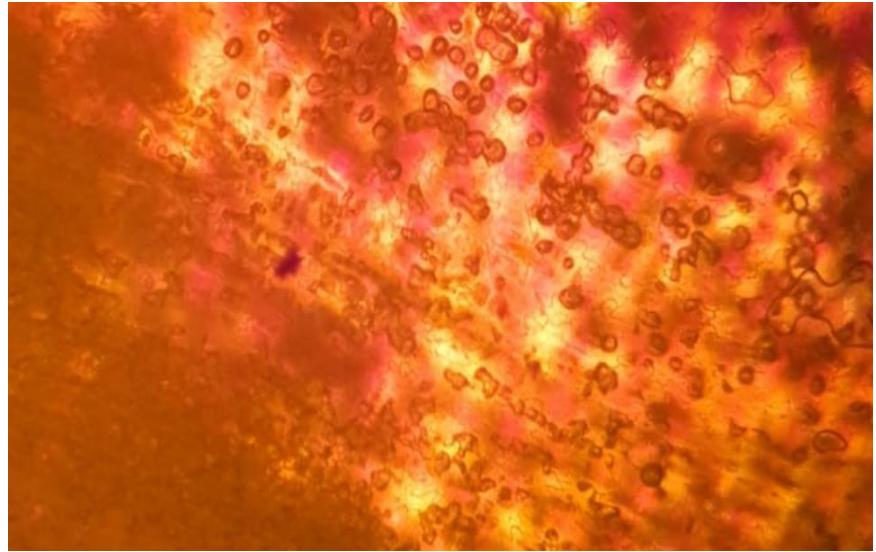


Photo by my phone

**The flower of a plant is composed of cells!**



My drawing

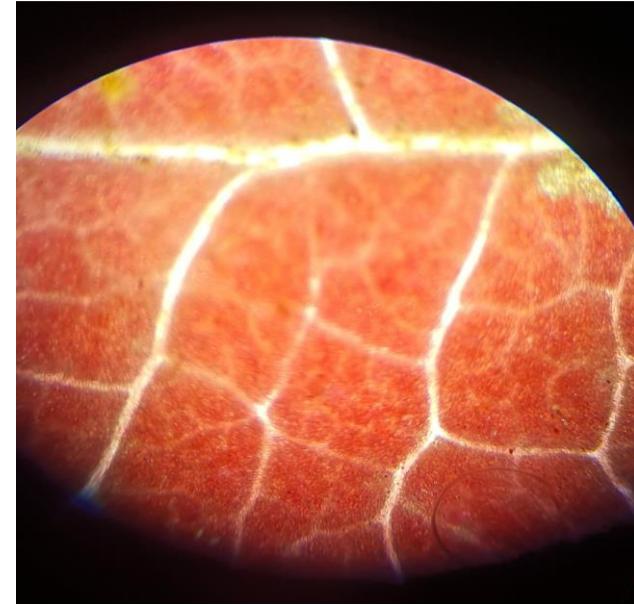


Photo by my phone

**The leaf of a plant is composed of cells!**

Now, my teacher was satisfied with my results!

# Answer

How can you prove that plants compose of cells?

When I looked under the microscope,  
I saw small bubble-like circles.

The bubble-like circles had some cell core in the middle.

I think the bubble-like circles are cells.

The only way to prove plants compose of cells is with a  
MICROSCOPE.

7-1/27.09.2008

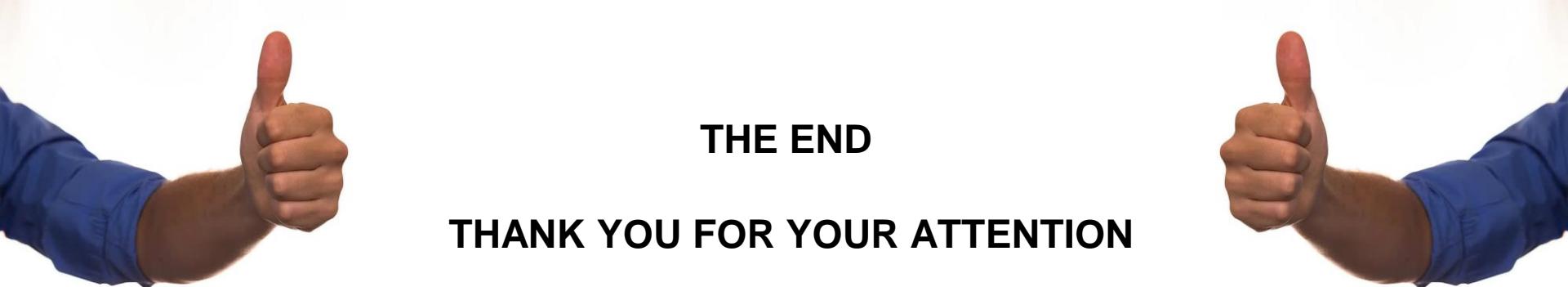
# Answers (Truth-check)

**YES**, all plants consist of cells because if plant cells weren't alive, they would be like rocks that can't make similar copies of themselves.

Cit. <http://sciencline.ucsb.edu/getkey.php?key=5016>

There was a big plant research in 1838 where a scientist called Matthias Schleiden concluded, that ALL plants are made of cells, and he also stated that all living things are made up of cells.





**THE END**

**THANK YOU FOR YOUR ATTENTION**

[www.viktorizak.com](http://www.viktorizak.com)