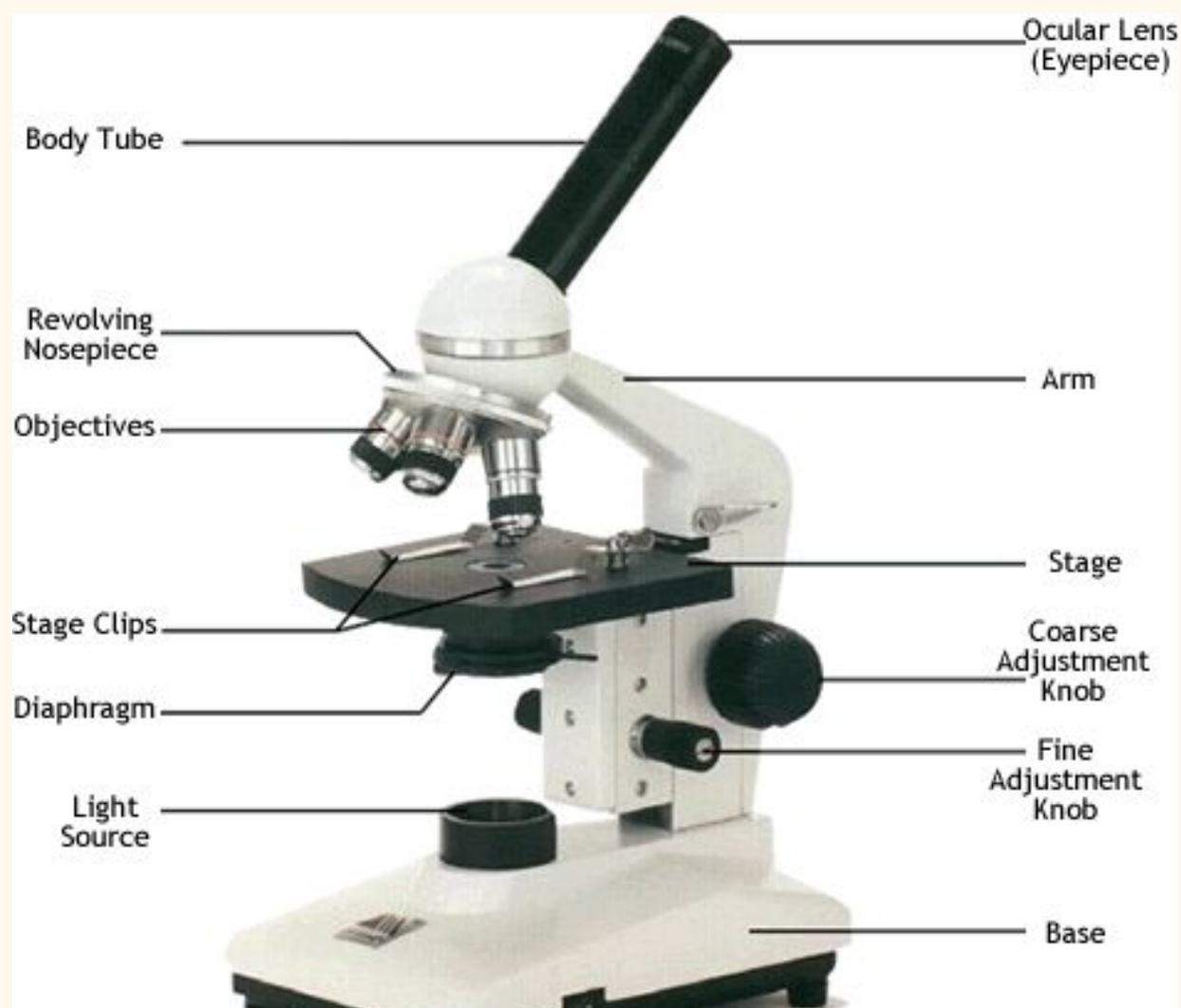


SCIENCE PERIOD 5
MRS. BUDROW

CELL INVESTIGATION

By Awesome Student



Purpose

To provide evidence that living things are made up of cells.

Materials

1. Microscope
2. Outlet
3. Cola Lense
4. Tea Lense
5. Basswood Stem
6. Cucurbits Stem C. S.

Procedure

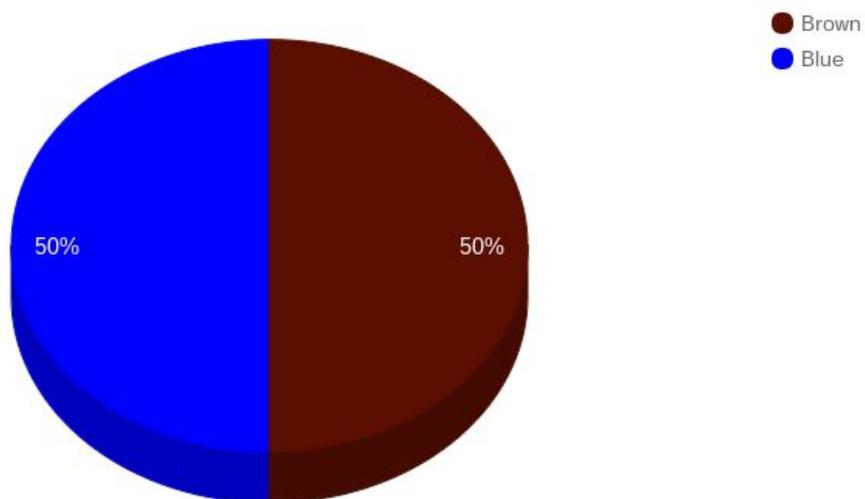
1. Get microscope
2. Plug in microscope
3. Flip on/off switch if there is one on the microscope
4. Get Cola, Tea, Cotton, & Fern Spore lenses
5. Place any of the lenses from step 4 so the sample is faced up in the center of the light
6. Take the lowest objective (10x) so it is the one you are looking through
7. Take stag clips and place them over lense
8. Look through the eyepiece
9. Turn the coarse adjustment knob until you see the sample as clearly as possible
10. Turn fine adjustment knob if you need to until you see as clearly as possible
11. Take out sample (unclip the stag clips and take lense out)
12. Repeat steps 3 through 9 until you used all the lenses in the materials
13. Record data
14. If there is one flip the on/off switch to be off
15. Unplug microscope
16. Put back where came from

Data

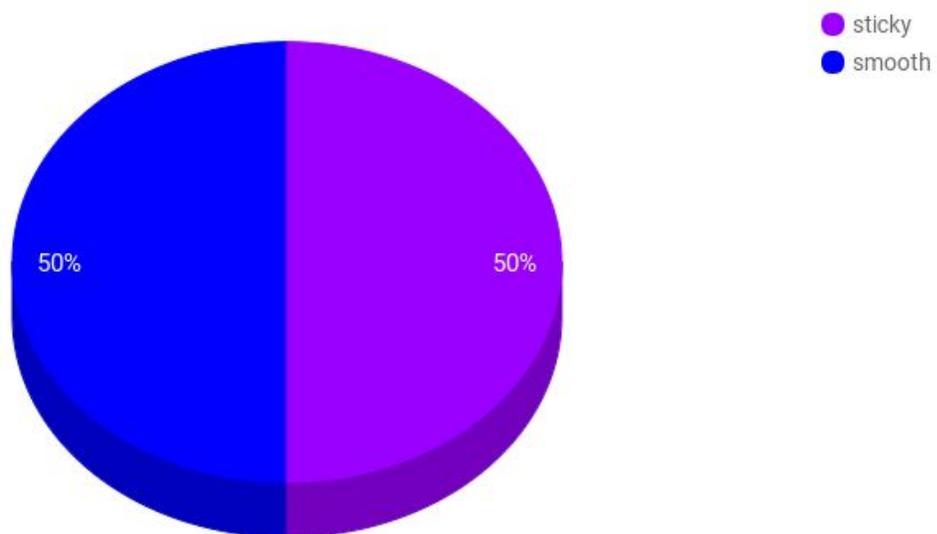
Lenses Description	Cola	Tea	Cucurbits Stem C. S.	Basswood Stem
Color	Light brown and yellowish	Brown, yellowish, and orangish	Light blue and pink	Blue, greenish, purple, and pink
Texture	Sticky, smooth, and hard	Powdery and clumpy	smooth	Smooth
Pattern	Little and big bubbles	Big clumps scattered around	Circles, squares, and pentagons that are turquoise and some are pink	Circles, squares, and pentagons that are turquoise and some are pink
Cells	None	None	Cell walls	Cell walls and nucleus
Shape	Roundish with little sticky clumps	Clumpy circles and stick like shapes	Circles, squares, and pentagons	Circles, squares, and pentagons

Graphs

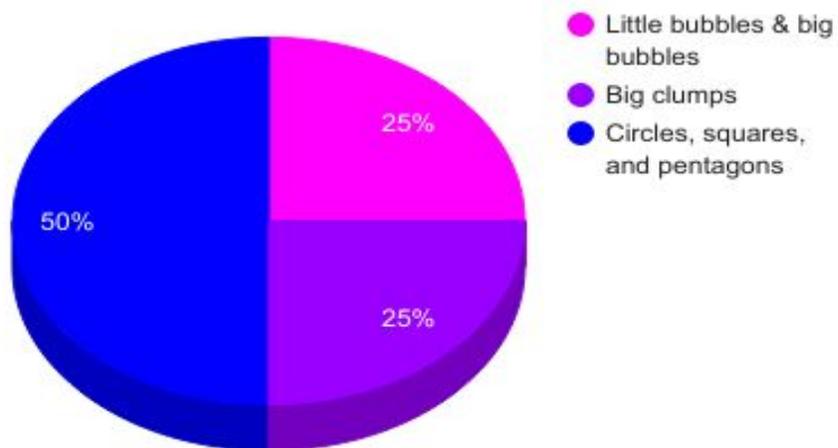
Color of Slides



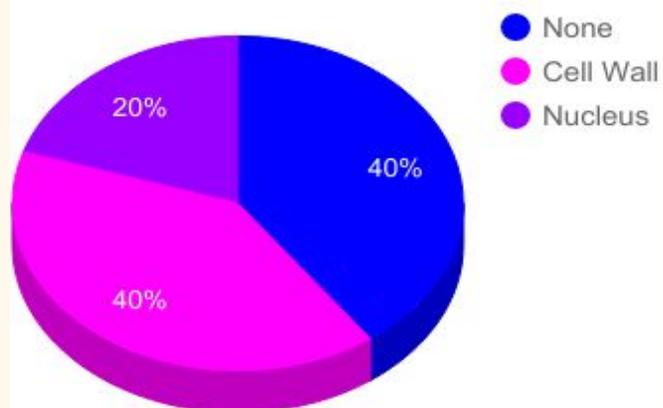
Texture of Slides



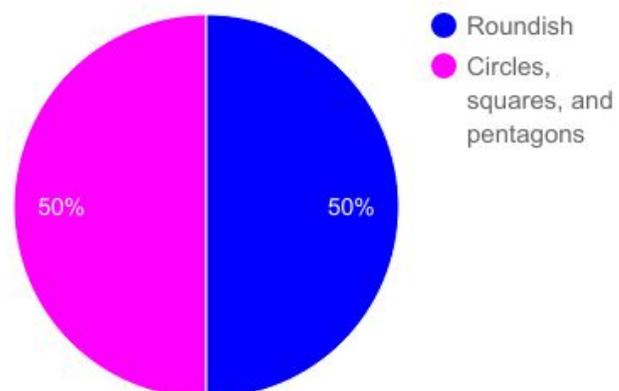
Pattern of Slides



Cells



Shape of Slides



Conclusion

All living things are made of cells. Living things are made of cells because the only two slides that had cells were slides that were living. On the graph it shows that the Basswood Stem had cell walls & nuclei (multiple nucleus), Cucurbits Stem C. S. had cell walls while the other two were non living slides and they didn't have any cells. Living things have either one cell (unicellular) or many different numbers and types of cells (multicellular). A plant is made of cells because it is living. It has organ systems called the shoot system and the root system. The shoot system is above ground were as the root system is below. The slides Basswood Stem and Cucurbits Stem C. S. are part of a stem and they would be in the shoot system. Because cells make up tissues, tissues make up organs, and organs make up organ systems, and organ systems make up the plant, the plant would be made up of interacting systems. In conclusion, living things are made of cells.

References

1. <https://s-media-cache-ak0.pinimg.com/originals/f5/5e/49/f55e49a980c4455bea7fefc1b207ba10.png>
2. <https://www.brainpop.com/games/virtuallabsusingthemicroscope/>
3. <http://www1.udel.edu/biology/ketcham/microscope/scope.html>
4. <http://www.purposegames.com/game/microscope-labeling>
5. https://drive.google.com/drive/folders/0B0pPPfUSEhlgMFdTb1VWYjUxMEE?usp=s_haring
6. <http://managementhelp.org/businesswriting/how-to-write-procedures.htm>
7. https://www.google.com/search?q=plant+cell+to+organ+system&rlz=1CASMAl_e_nUS707US708&espy=2&biw=1366&bih=678&source=lnms&tbn=isch&sa=X&ved=0ahUKEwiEtLyR_7rSAhUBDsAKHTnyCWkQ_AUIBigB&safe=active&ssui=on#imgre=SFKqloZLEUh0xM:
8. <https://discoveringmonsters.wikispaces.com/1-+Cells%2C+Tissues%2C+Organs%2C+Organ+Systems>