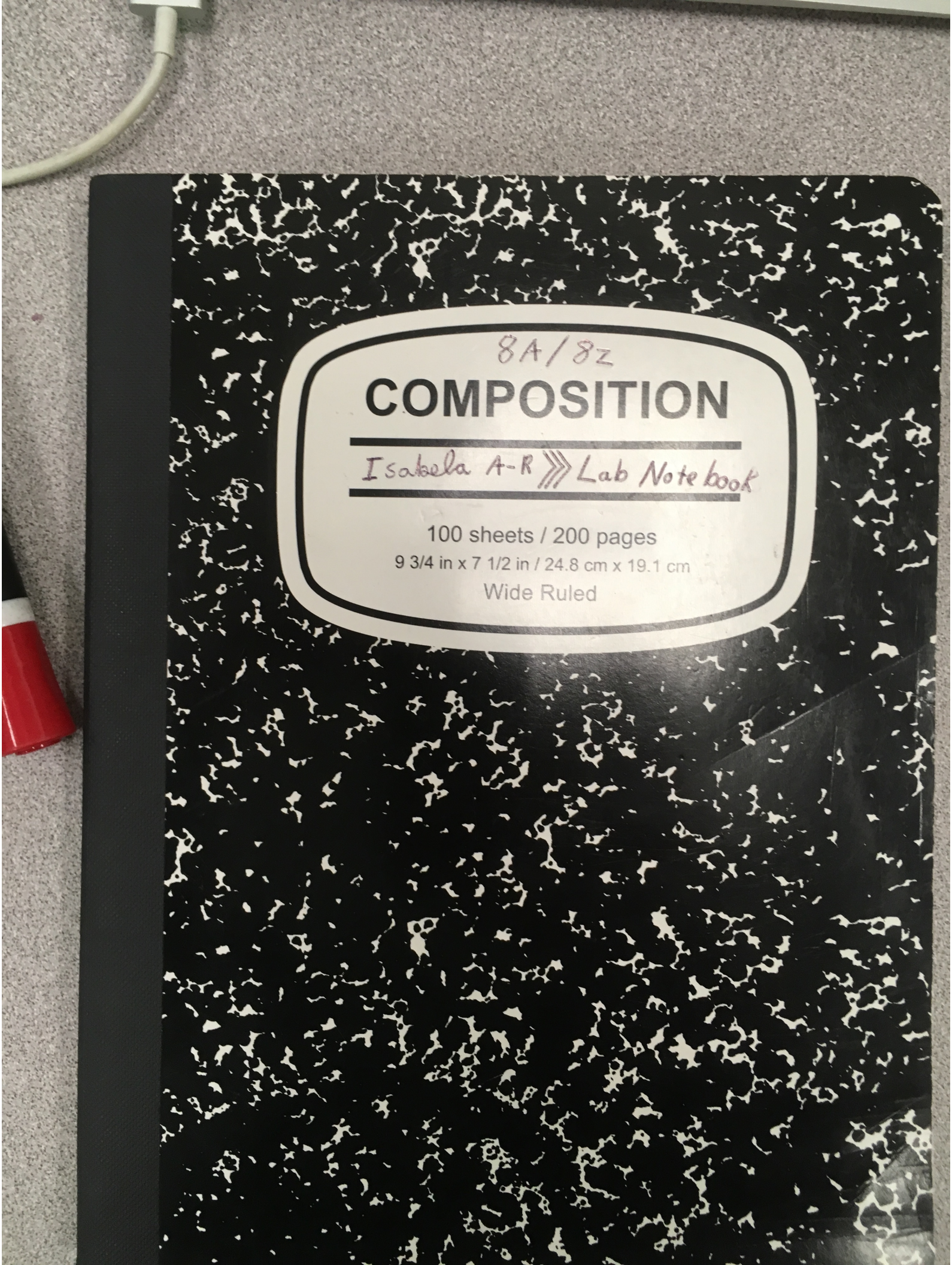

8A/8Z
COMPOSITION
Isabela A-R Lab Notebook
100 sheets / 200 pages
9 3/4 in x 7 1/2 in / 24.8 cm x 19.1 cm
Wide Ruled

eptember 15th
017
Isabela

Tree observation sheet

Name: Isabela

Location: Boston

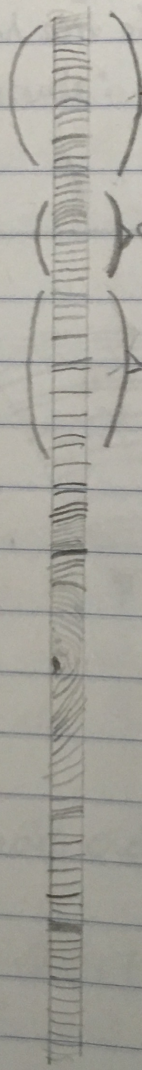
Species: cedar

Collection date: 8/10/17

Latitude and longitude: 42.291483, -71.114361

Tree age: 70 years

Drawing:



Notes

- Inferences that may have changed growth pattern
- Amount of rainfall
- Temperature
- insects & other parasites
- shading by other trees
- human impact

8

: cedar
70 years

that may
growth
ern
rainfall
er
other
mpact

Summery of tree Reading H/W

The tree has lots of different lays for example, the bark, phloem, cambium, Sapwood and heartwood. The ~~tree~~ rings inside a tree shows the trees growth through the years. Rings that are close together can show that the tree has not grown allot for the past years. This could be because of a draught, disease or not enough sunlight.

My Story

My tree ~~had~~ resently has been growing at a consisdant pace, this is maybe because there hadn't been alot of major draughts. This went on for about 5 - 8 years. Longer ago my tree didn't grow so well, this could have happened because of a draught, disease or limited sunlight. Even longer ago my tree was doing very well, with a steady growth rate as well as ~~a~~ large ring pattern.

My Photo Log for Hillside Pond Investigation

Album title "Hillside Pond Investigation"

Time:	Location:	What & Why:
9.29 am	A	The quadrat, so we can see the landscape of our quadrat, this can help us identify the tree species later
9.50	A	A leaf, the leaf of our tree in our quadrat so we can remember the species of tree.
9.47	A	A picture of the ground, to help us remember the different ~~grounds~~ grasses on the ground.
9:33	A	A picture of sap coming out the tree, this helped us to infer the state of the tree, it was rotten.
10:35	A	Shows the canopy of the area in and around our quadrat

Notes on Quadrat

Tempreture: 14°f
Preciption: 0%
Visability: 10 miles
humidity: 62%
Pressure: 29.71 inches
clouds = clear.
Slope: -3°
Wind: NW
Gust: 15 MPH

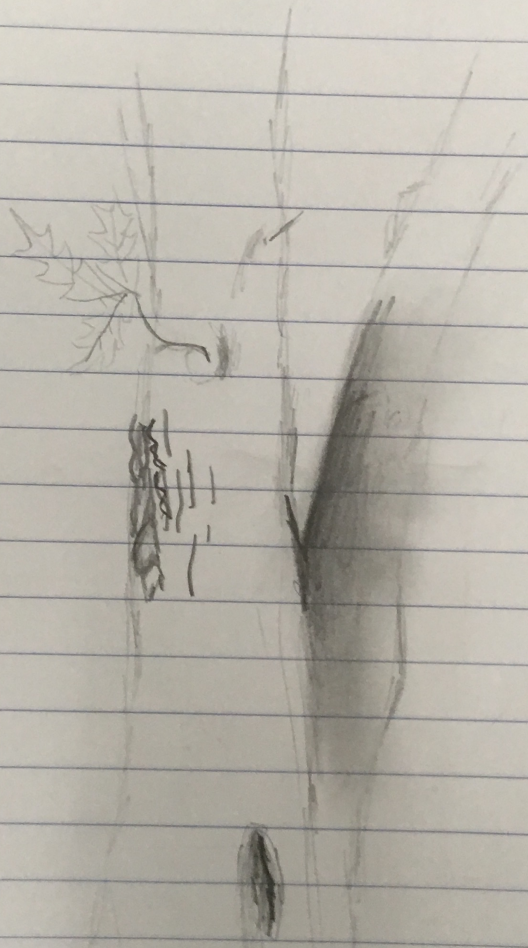
} Time = 9:37 / September 28th 2014

Biodyvesity:
- No water, very dry.
- Small tufts of grass.
- 1 small oak tree. / small dyameter
- lots of dead leafs. - from various trees
- small green plants.
- brocken off branches
- moss
- Pine trees surrounding ~~it~~ it and ~~cedar~~ sweet birch and cedar
- Oak tree light around 30ft tall. Pine is around half

Tree:
2 oak - one in Quadrat one outside
1 pine -
Sweet / black birch - } around Quadrat
- Cedar

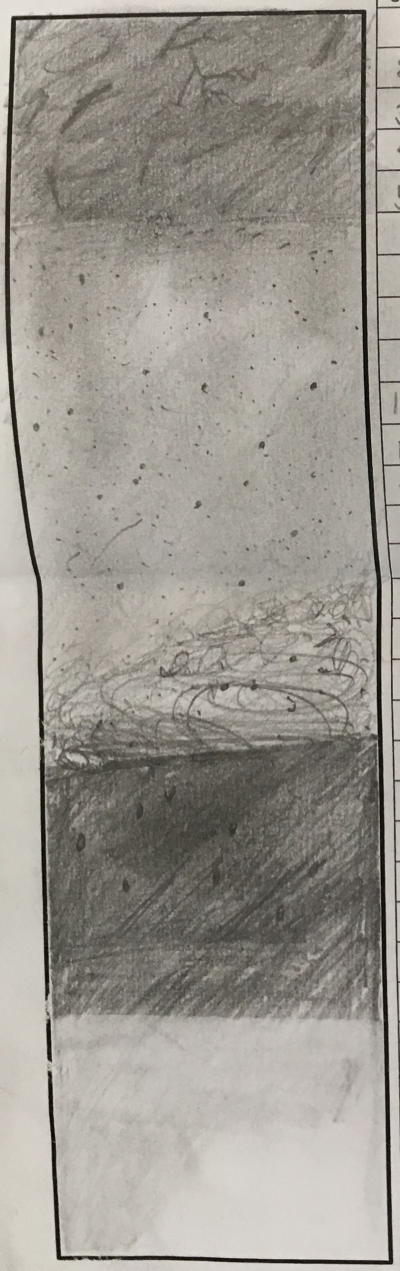
kember 28th
2017

d cedar
round half.



15

Date: 10/4/17	Name: ~~Bobo~~ Isabela A-Re	
Sample Location:	Latitude: 42° 13' 8" N	Longitude: 71° 5' 11" W
Core Length: 23cm		



cm	Color	Texture	Observations
1–5	7.5 yr 2.5/3	loosely packed with organic material	grass and roots small leaves (took sample)
6–13	7.5 yr 4/2	Tightly packed with small sand grains visable	small sand grains visable
14–18	7.5 yr 2.5/2	loosly packed	very crumbaly with sand.
19–23	7.5 yr 2.5/2	Tightly packed smooth	no sand cool colour/dark Compacted (took sample)

Drawing

Tree Core Observations Sheet

Your Name: Isabela Collection Date: 9/28/17	Location: In Quadrat Latitude and Longitude: 42° 13' 9" N, 71° 5' 10" W	Species of Tree: Oak
Photo of Core:	Drawing of Core:	Estimate of Tree Age: 69 years
Bark end → Core length: _ cm	10cm 12 years of very little growing more growth here several years of very, very little growth good growth lots of growth for for a long time.	Notes and other observations about this tree: The tree rings are very hard to see so the age estimate may not be as exact. The tree core is very brittle, maybe because its rotten

October 11th 2017 ALL about diatoms!

- The cell wall of a diatom is silica, which is a transparent ~~pe~~ impervious matirial, since it is impervious the diatom has evoked with perforations in the cell wall to allow nutrients.

- They can be found in ~~over~~ almost every area where there is water making diatoms the base of ~~a~~ aquatic food web.

- Diatoms are in the protist ~~kand~~ kingdom, and are in the class of Bacillariophyta. There is estimated 20,000 - 2 million species of diatoms, this is a large range because diatoms are still being researched.

- Diatoms are microspopic, cells range in ~~a~~ size from about 2 microns to 500 microns (0.5mm). ~~scientist use light microscops~~. When under a light microscope they appear transparent, but with a scanning electron microscope, they appear opaque.

- Diatoms live in aquatic and semi-aquatic habitats. They live as free floating cells in the plankton ~~of pond~~, ~~t~~ of body's of water. They have adaptations to allow them to remain suspended in water, these adaptations allow them to float and link long chains.

- Some diatom species grow attached to surfaces. ~~They~~ may. Many of these species are shaped in such a way to aid attachment. They may be arched or curved to fit to the stems and aquatic moss.

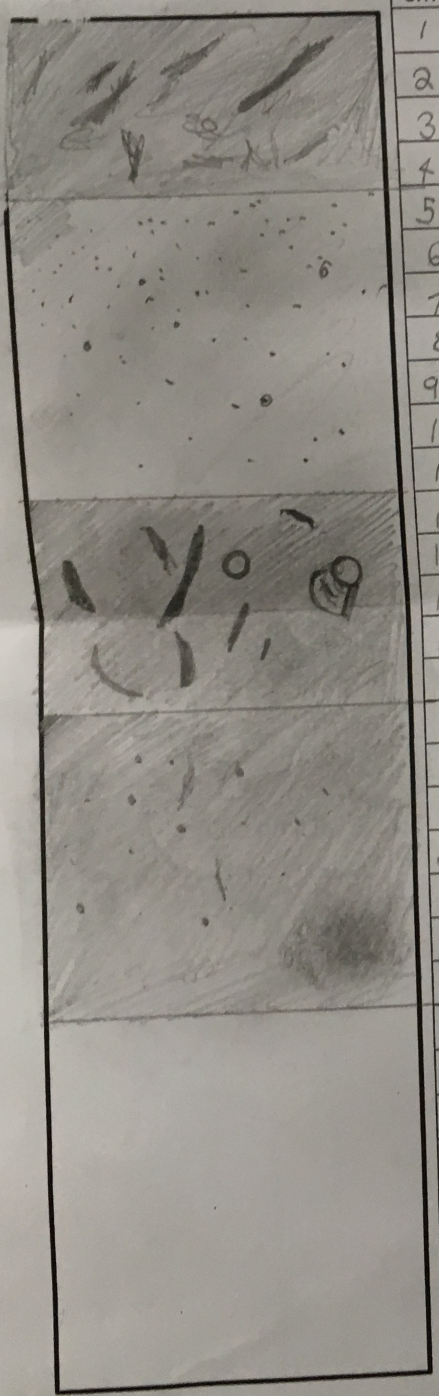
- Some diatom species for a ~~stalk~~ stalk which is attached to a surface. Some species form short stalks to resist waves or high flow rivers.

- Diatoms are affected by all elements in their habitat, including the chemistry and the climate, Therefor you can use diatoms to ~~see~~ compare the enviroments.

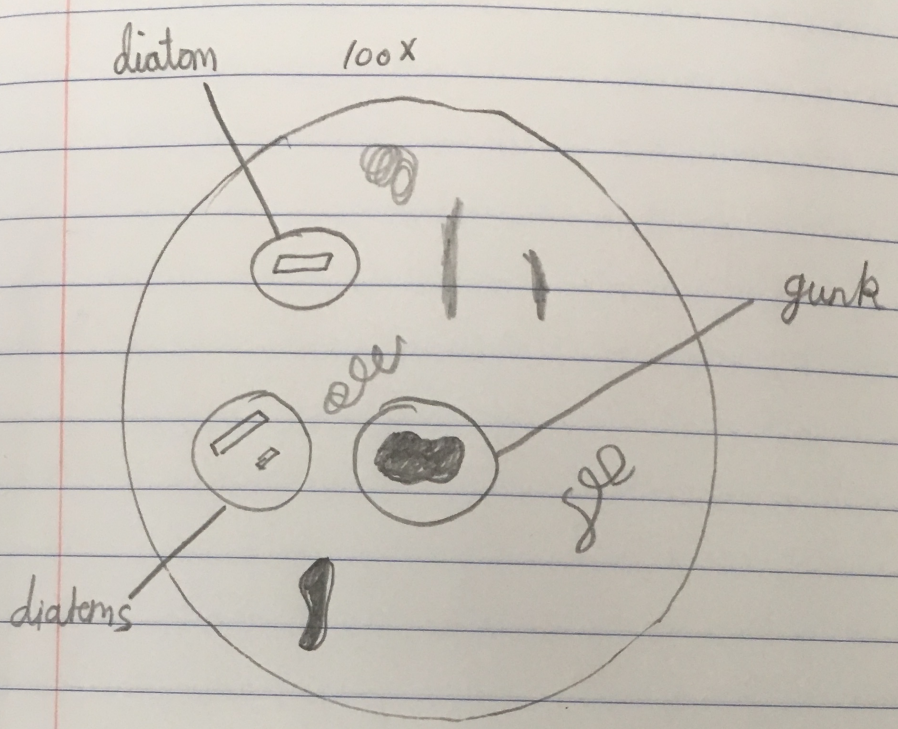
2017

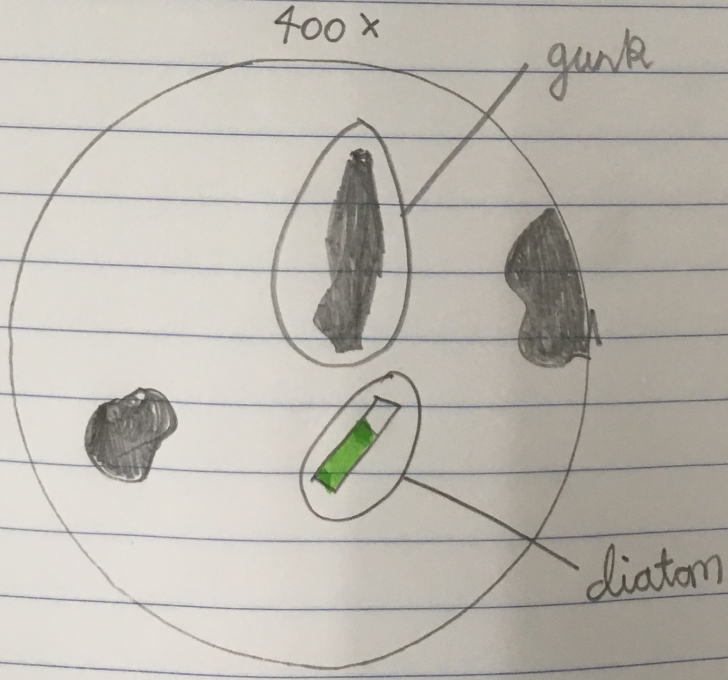
-

Date: 10/11/17	Name: Isabela	
Sample Location: Blue hills pond	Latitude: 42° 13' 8" N	Longitude: 71° 5" 11' W
Core Length: 23cm		

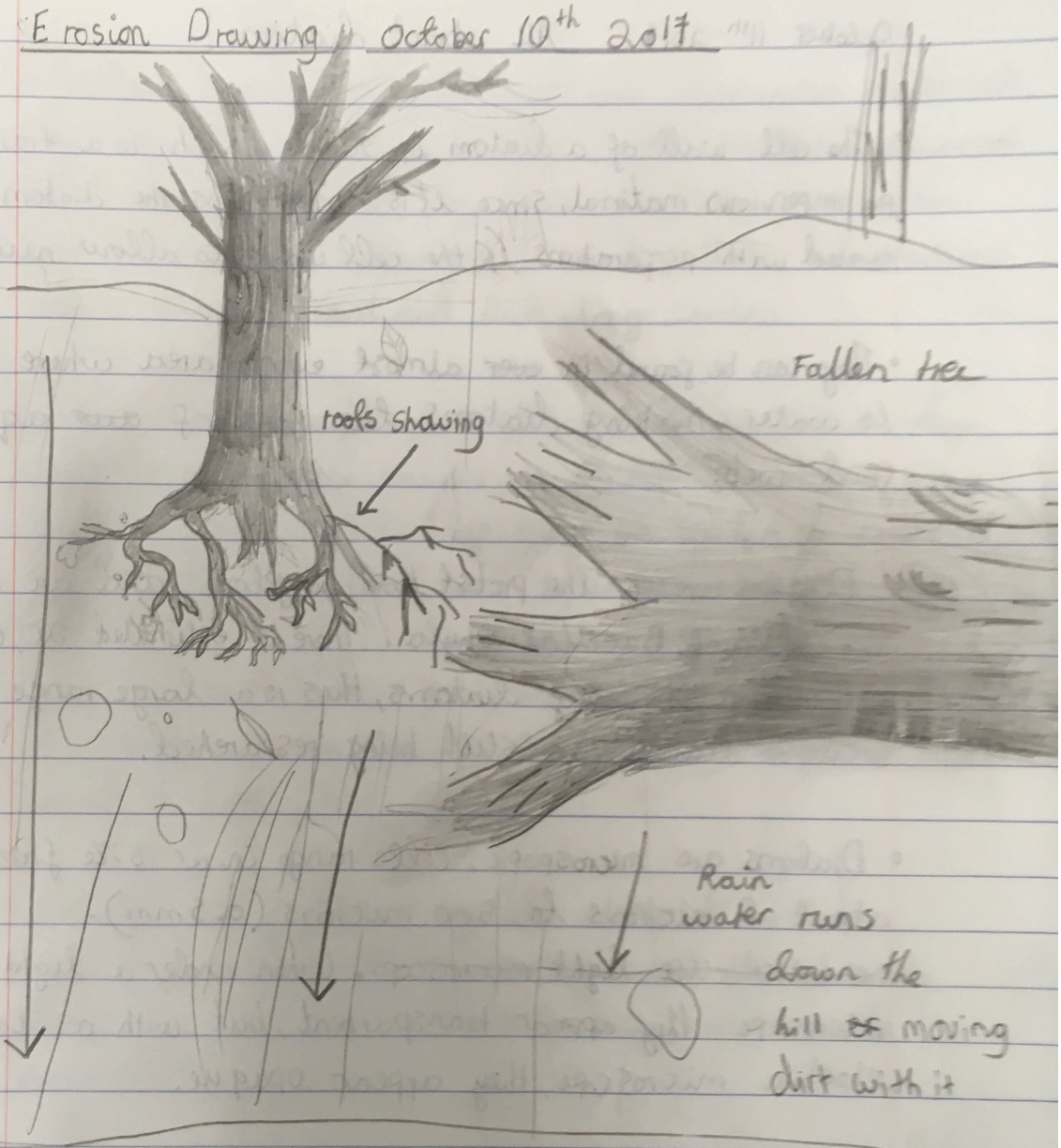


cm	Color	Texture	Observations
1	7.5yr 4/2	very loose	• ~~ve~~ Lots of roots and sticks
2			
3			
4			
5	7.5yr 5/2	sandy more compact	• Some sand less debree.
6			
7			
8			
9			
10			
11			
12	7.5yr 2.5/2	large pieces of wood	• charcol colour • large pieces of wood
13			
14			
15			
16			
17	7.5yr 2.5/2	• Sand	• charcol colour • Some Sand • very compact
18			
19			
20			
21			
22			
23			


diatom
100x
gunk
diatoms

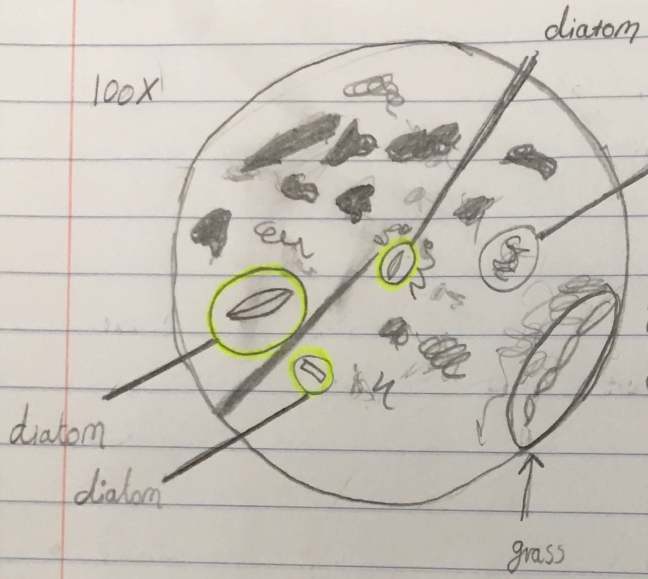

400x
gunk
diatom

Erosion Drawing // October 10th 2017

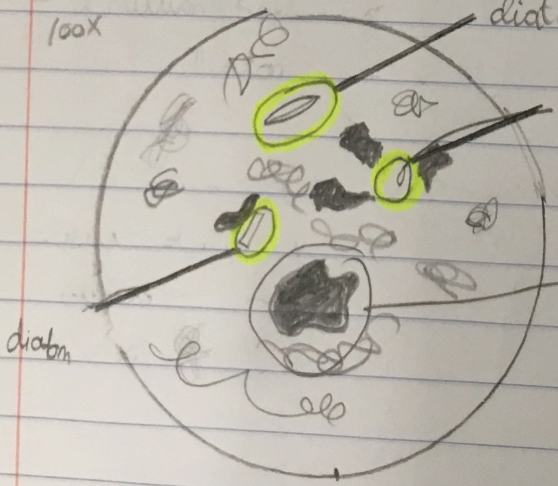


Diatoms

October 5th 2017



Top Sample – from Top layer of sediment core.



Top Sample from top layer of sediment core, different spot