



Highly Commended

Crystal Investigation

Year 5-6

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**St John's Grammar School -
Junior School**



15/5

Making a solution.

stirring 200 ML with 22 grams of alum.

I also ~~put~~ glued the seed crystal on the fishing line. ~~First~~

~~First~~

First, I microwaved the jar with the seed

My Investigation Question:

My Investigation question is to grow a good crystal suspended on a piece of string

22/5 My seed crystal fell off its string.

1:00

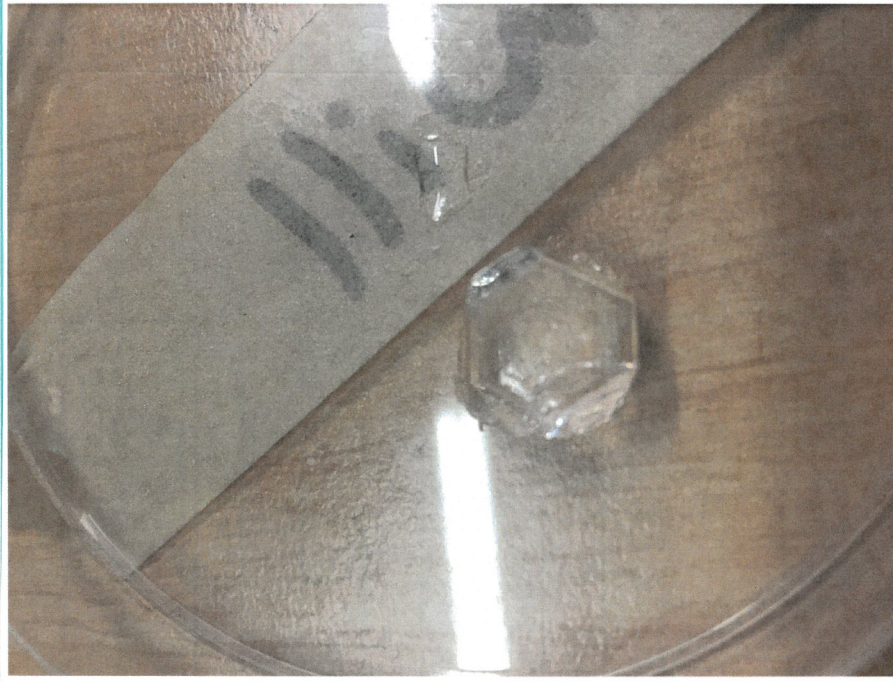
I can see my seed crystal surrounded by tiny crystals. If I shake it, then the tiny crystals won't move. There are billions of tiny crystals. When I took out my seed crystal, I noticed and felt that all the billions of crystals turned into one big one! It turned out the big crystal was the alum so we will microwave in and reglue the seed crystal on the fishing line.

First, I microwaved the jar and stirred the jar. Then we have to microwave it again and stir it. Thirdly, we glued the ~~seed~~ seed crystal on the string on the fishing line and waited to next week. ١١. ١١. ١١.

Date/Time

29/5

1:00pm



Crystal Characteristics.

The length is
1.7 cm

It looks like
it's a bit cloudy
with a little
bits of ~~for~~ same
growing seed crystal
It also has some
sharp and some
chunky.

Signe

[Signature]

29/5

Mg Seed crystal keeps on falling off.

I think the solution of the seed crystal not falling off is to change the fishing line. Also that the ~~glue~~ alum is back and might off dissolved the glue and the seed crystal fell off. There.

The change should be that the fishing line should be longer because the seed crystal is on the surface. Firstly, we changed the string because my question is what can hold the seed crystal because mine keeps on falling off.

While we was changing the string, we microwaved and stirred it until the alum was the dissolved.

Then we super glue the seed crystal on the plastic string.

Date/Time

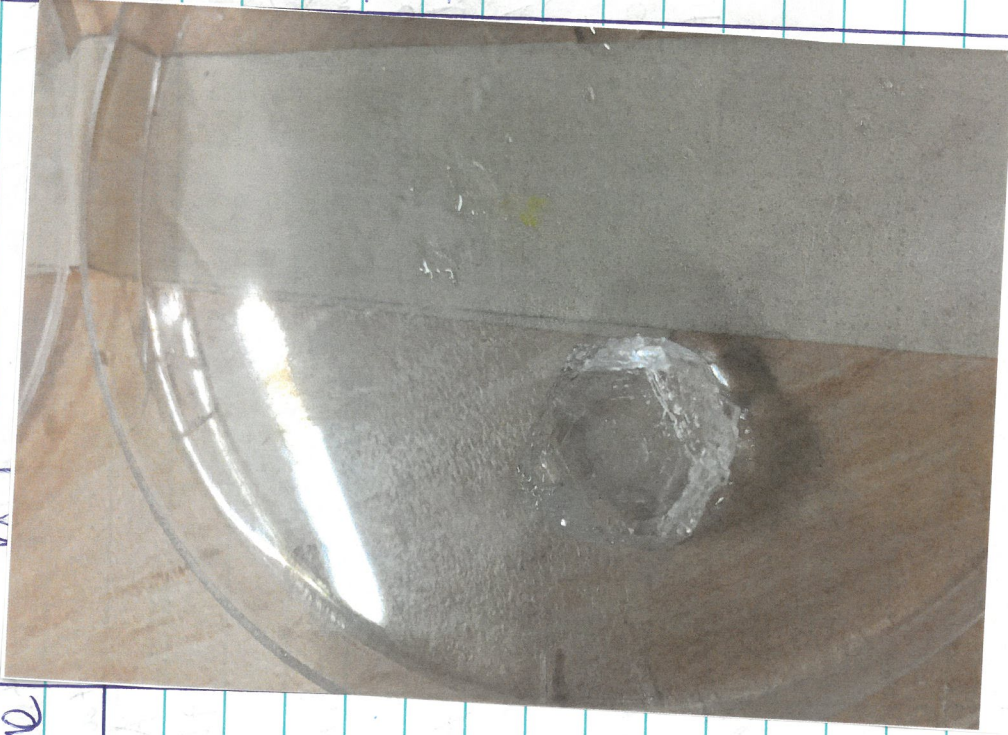
15/16

Crystal
Characteristics

Bits of alum
on the side.

Cloudy inside
1.9 cm

There are also
two major flat
edges.



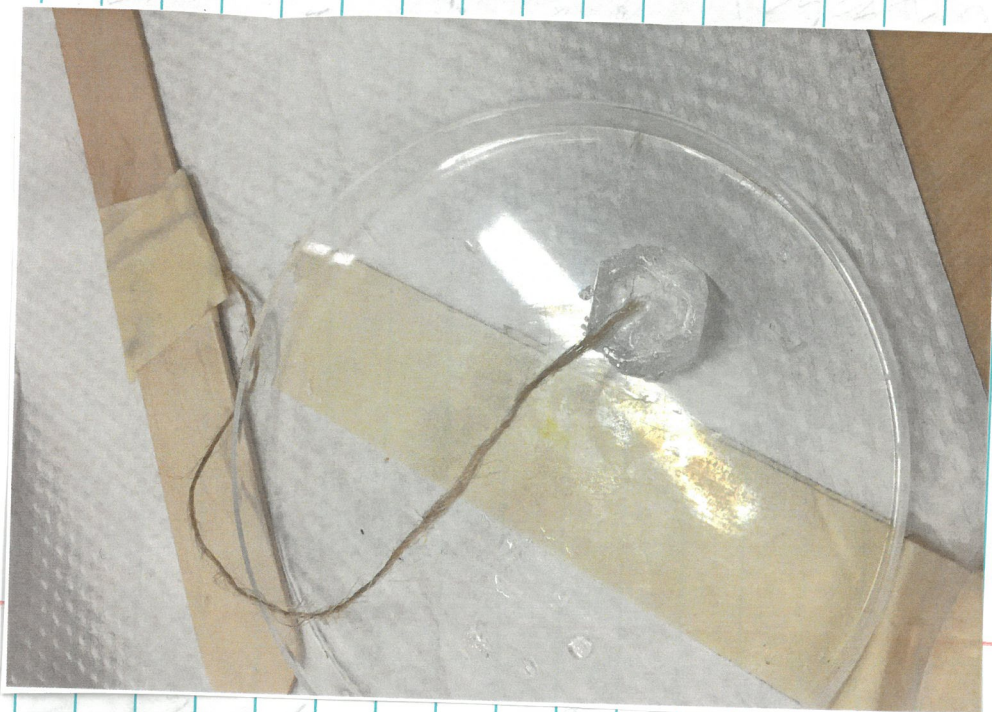
Signed

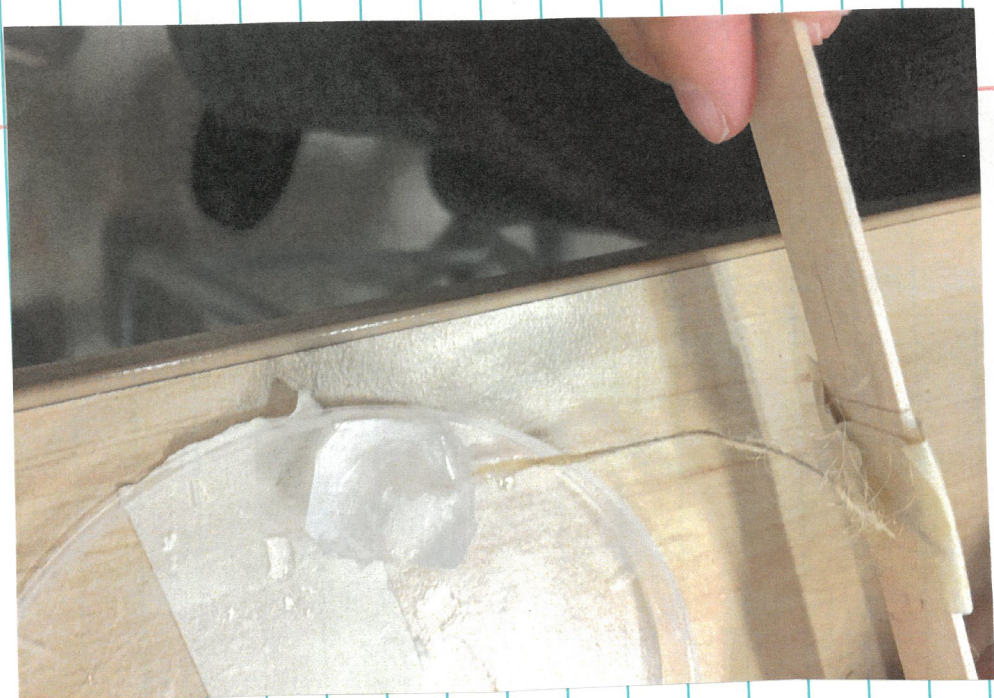
[Signature]

16 My seed crystal keeps on falling off.
The fishing line is ~~coming to a~~ covered with
tiny crystal.

I am still deciding my investigation but it might
be what can hold my seed crystal. We tried
fishing line and poly-string. We are going to try
jute string next.

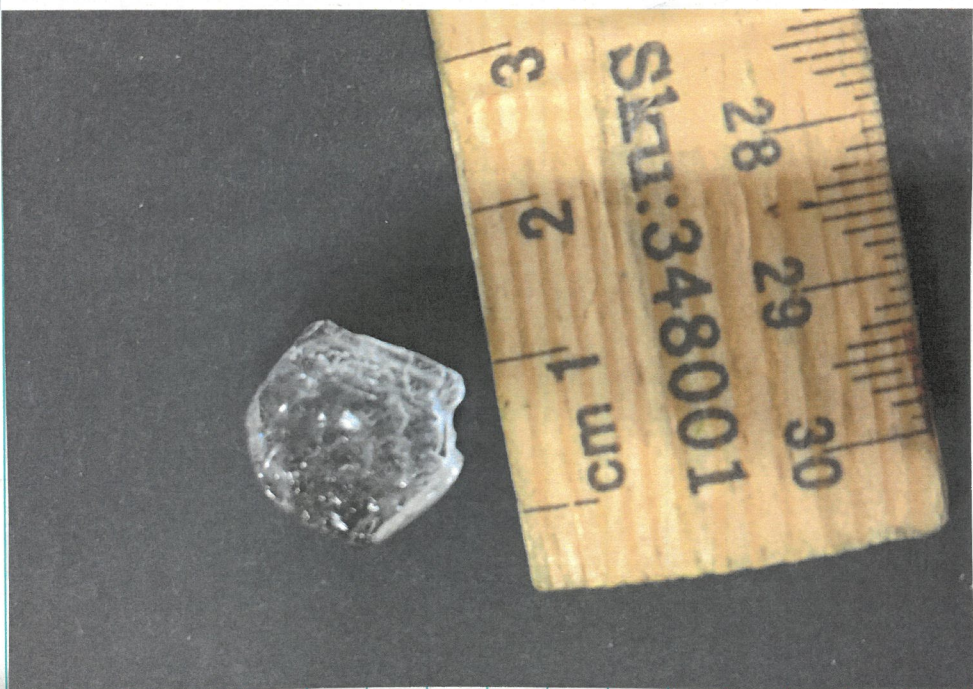
We also tried using a different type of
super glue called gorilla. Then we did the process
all again. Firstly we microwaved it and stirred it.
Also that the water has evaporated to 150 ml.
Some people think about putting the
seed crystal in when the water is cold so
the glue can stick on.
Then we put the seed crystal in.





Thu
15/6
1:00 pm

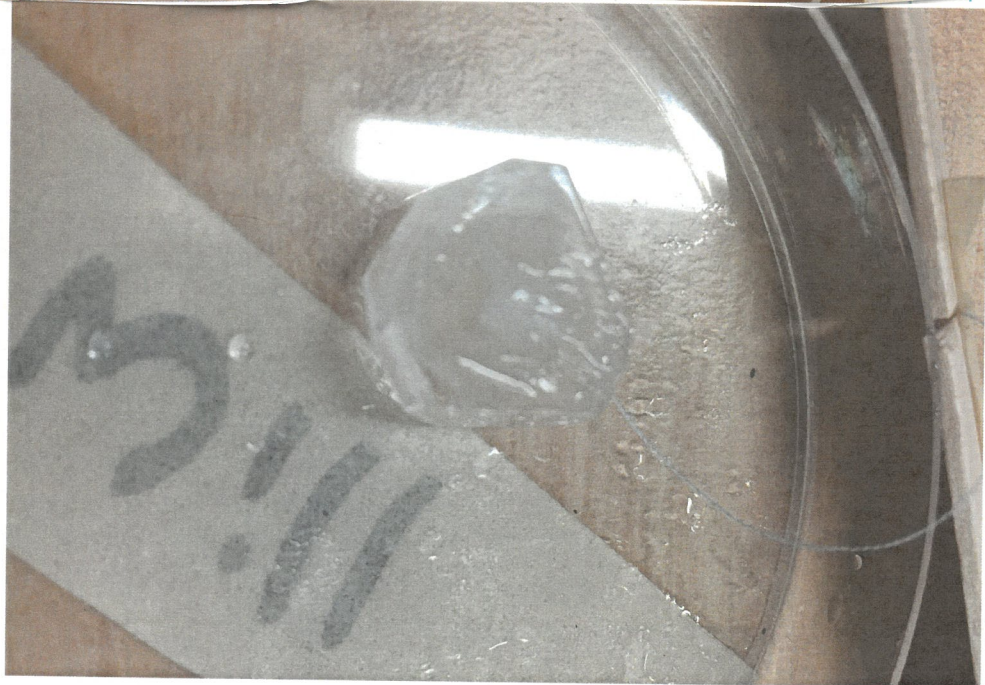
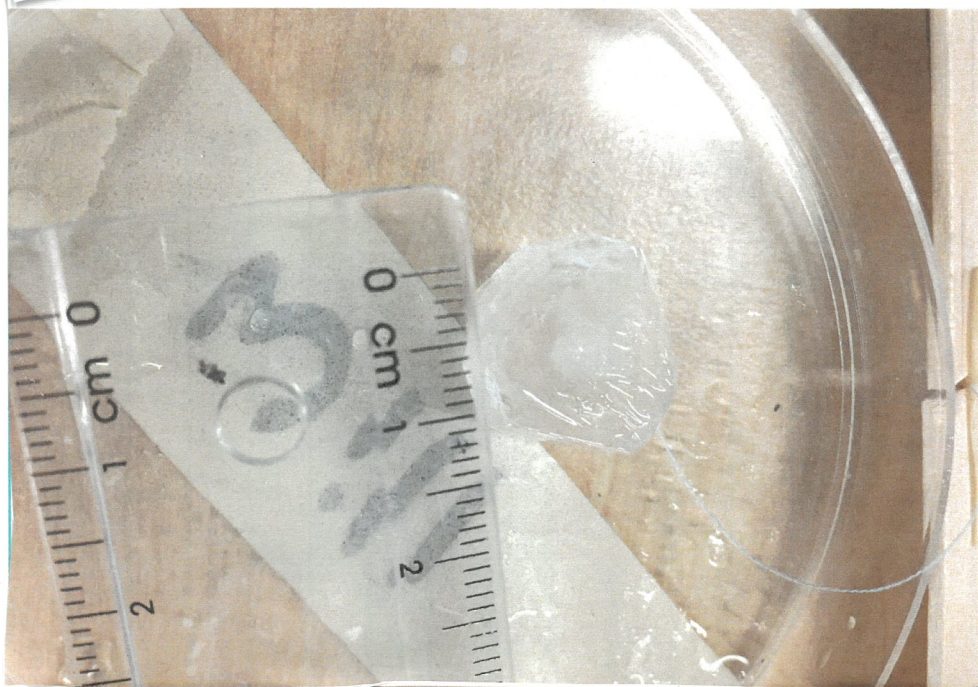
My seed crystal has finally stayed on its line but ~~the~~ a bug was in the jar. I used some tweezers to get the bug out but still no crystals. So, we did ~~the~~ procedure again. First, we microwave it. While it was microwaved, I measured it and it was 2.5 cm. Somehow, while I was measuring the seed crystal, the bug crawled to the seed crystal. Maybe, the bugs are attracted to the seed crystal. Now the bug is done crawling up & I am going to stop it. My science teacher Mrs Stacy added 4 more crystals. ~~the~~ I looked at my big seed crystal and it's a bit cloudy in it and has some really flat sites. Some side has bits of alum and patches of them too. Mrs Stacy has suggest of filling the water back to 150 ml because the water has evaporated to 140 ml. So, we did it. Now we put the seed crystal in.



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19/6
1:00

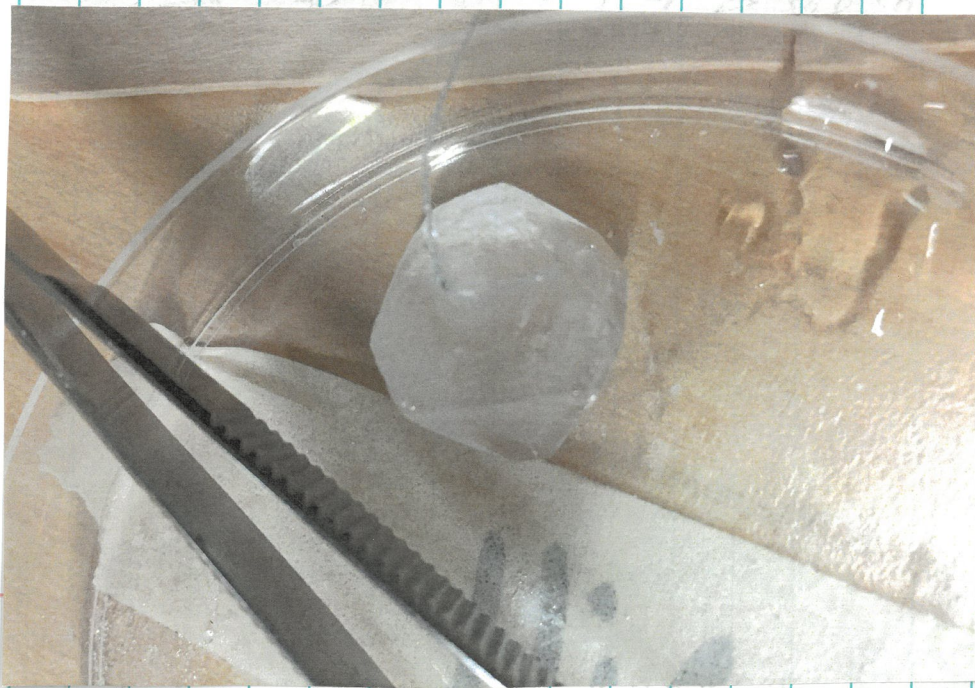
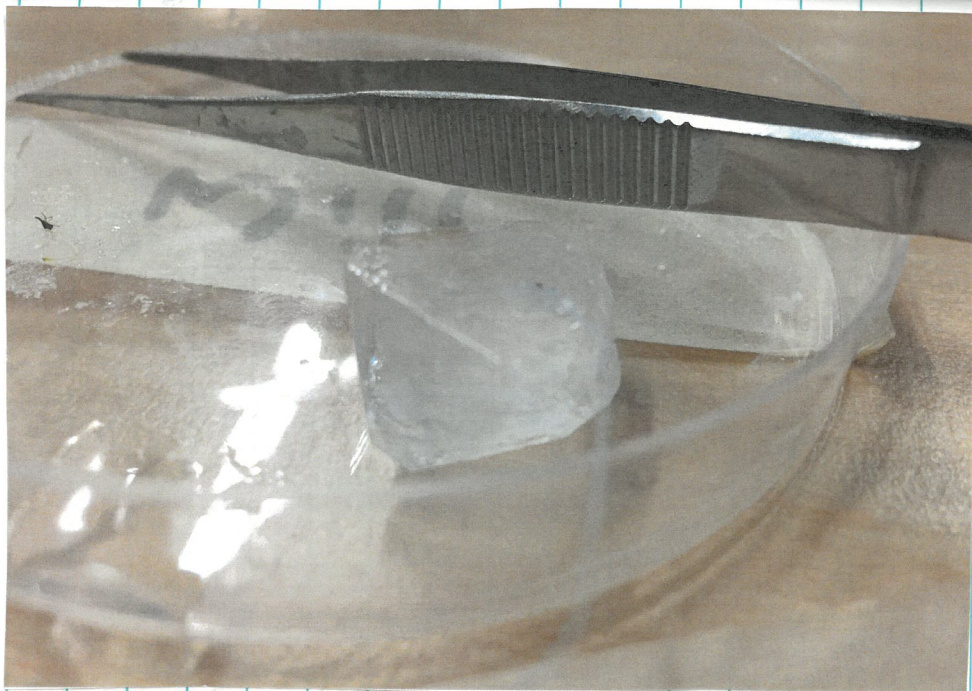
At My seed crystal fell off. But it's gotten clearer and smaller. Also that some of the glue is on the string. There's no alum so we do not have to do the same old process. Our supervisor Mrs Mrs Stacy thinks we should change the string to cotton thread. So we did it. While I was taking off Mrs Stacy cut a bit off the peepstick and will stabilize it. While the string was glueing it on the seed crystal, I wrote what it's look like. It has straight edges and is smaller and clearer. Then when it dries, we put it in.



I think that cotton threads work. Or maybe its the cut in the popstick. ~~the side was a bug~~ Since the crystals stayed on. In side the jar was a few bugs and tiny crystals. They were bigger than alum. The big crystal was foggy but the sides were strait. Apart from the face that had glue on it. The length of my crystal is 1.7 cm. I did the process again of microwaving it a first. While it was microwaving, the jar I got a red popstick. Then I stirred it. I had to change popstick because the red popstick made the water turn red. The water have also evaporated to 142 ml. I will put a fabric on top of the jar to keep bugs out. I also put the crystal in. I also added water intill it was 150 ml to make the red water fainter.

26/6

1:00 PM



27/7

~~Yuck~~

Over the holidays, my crystal stayed on the fishing line. Although the crystal stayed on, the were bugs and molds in the water. The molds were sticky and white but it wasn't transparent. My crystal seems to grow in height. It's ~~not~~ is transparent but blurry and white. All the sides were smooth but the one with the line stuck to it is a bit bumpy. It also got more tiny crystal. I measured it and it was 1.8 cm.

Dissection

One of my problems was keeping my crystal on the string.

Hypothesis conclusion

conclusion

My ~~hypothesis~~ is growing a good crystal sus pedded on a string. It was successful for the last half of the nine weeks because for the first half, the crystal kept on falling off the string.

Acknowledgments

My teacher Mrs Stacey because she helped me grow ~~my~~ a crystal. She helped me tell what to do and what to write. Finally Mrs Stacey helped me by providing the equipment and resources to use.