

# The Prisament Paper

## ANNOUNCEMENTS

- Oil prices crashed and went into negative territory for the first time ever, due in part to severely reduced demand during the Covid-19 lockdown. *See photos, page 3 ;-)*
- Earth Day was celebrated on April 22.
- The U.S.N.S. Comfort hospital ship (*whose arrival was reported in Prisament Paper Issue 4!*) left New York due to no longer being needed. It only treated 179 patients in 3 weeks.

## THE MARBLE UNIVERSE

by Elena Prisament

Reflections

I have a marble in my bedroom. It looks like the universe - dark and shimmery and smattered with stars. When I'm feeling upset, I look at it to remember and realize:

A tiny dot in this small marble I'm holding - so small I can't even see it - is our planet Earth. Our entire planet of worries and history and war and peace and people isn't even visible when looking at the entire universe. Whatever happens to me, whatever I do, won't stop or cause the Sun to explode. None of us in the long run can or will change anything in the big picture. The stars will be born and die, galaxies will form, and if you look at the big picture, all of our worries are miniscule. When I look at that marble I'm comforted by those thoughts, and I think life is really just to live! Just live it for your own joy, because everything is okay, no matter what ends up happening to us or our planet.

And when I look at that marble, I feel more freed, and like I'm looking down at the entire universe. So it's a moment of awe when I realize, every time for the first time... How many marbles would fit in my room? In my house? In the planet? Billions. Trillions. More. And like I said before, our planet isn't even a dot on the entire spectrum!

So I'm happy, because there's no point in being sad. And I'm living, because I'm alive. And I'm less than a dot inside of less than a dot inside of a marble inside of a less than a dot inside of the world: So there might be wars, we might tear each other apart, there might be hunger and poverty and sadness, but if you look at the sky, it doesn't really matter. It will be okay, and the universe will carry on.

So I smile, and put my marble away, and can you believe it?

I get to live in this world.

4/25/2020

## "GO GET A CAT"

by Barbara Rocah

I love dogs  
Most dogs love me  
But now-----

There's Finley, my son's dog:



Half yellow Labrador,  
Half I don't know what.  
For a long time I was his best friend.  
Big old Finley would try and crawl into my lap, or play ball endlessly.  
And now he barks, bristles, howls  
As soon as I appear in the doorway  
He cocks his head as if to say "what's that"  
It's my cane, Finley thinks I have a third leg.

And then there is Ace, my daughter's dog:



A border collie (we think)  
As a puppy he barked at everyone-  
Now it's just me.

"Ace it's Grandma, stop barking."  
"No!" backing off on his haunches, looking at me straight in the eye, growling.  
"Ace, its Grandma" my daughter scolded him.  
He walked off in a huff, growling to himself,  
Turning to eye me with a warning scowl and a soft "horumph."  
Later of course I was his best friend.  
Until I went upstairs into my room and he barked and barked outside my door and the growling started again.  
I asked him "is it my glasses, or my third leg that's confusing you?"

And then there's the English bull dog:



A stranger's dog  
Just a puppy  
But he looked 100 years old  
Close to the ground, fat short round legs, ugly face with a tooth hanging outside his mouth.  
On the street he just stared at me  
"What are you?"  
I stopped, said "Hello", held out my hand

Continued on Page 3 ...

## "ORI AND THE WILL OF WISPS" PROVIDES VIDEO GAME MAGIC

by Clayton Prisament

"Ori and the Will of the Wisps" is a sequel to the game "Ori and the Blind Forest." Both games were developed by Moon Studios and Xbox Game Studios.

"Ori and the Will of the Wisps" is not your standard side scroller game (except for the fact that the goal of the game is to beat it). It has a unique style of game play that tests your speed, battling skills, and your ability to solve puzzles. Ori, your avatar in the game, learns unique skills such as "bashing" (the ability to freeze time and change his direction midair or even deflect projectiles), and "grappling" (the ability to use a lasso like rope to pull Ori up to certain types of flowers, vines or even enemies - if you have the upgrade).

Ori is a creature called a light wisp, and gains his necessary abilities and weapons by absorbing the light from special trees. In the land of Niwen you will encounter travelers and animals who you can buy maps, upgrades, and even new abilities from.

When the Spirit Willow (The Tree of Life) died, decay started spreading throughout the land. Ori, being the last of its kind, sets out to find the 5 lost light spirits so that they can restore the Willow. Throughout this journey you will tread through treacherous deserts, swim through gorgeous pools, seek light in fatal darkness, and climb high to the peaks of mountains. You will fight huge boss battles, run thrilling escapes and help the Moki's and other kind animals by delivering goods or doing favors.

During the game you will encounter two kinds of shrines: Combat shrines and speed trail shrines. Combat shrines are a set of 4 waves of enemies which you must defeat in order to earn an extra spirit shad slot (an upgrade slot). The speed trails test your speed compared to a certain crazy fast time limit. If you exceed the time limit before reaching

Continued on Page 3 ...



PHOTO: EVELYN PRISAMENT

### The Magic Kingdom

Clayton plays while Lucas navigates in "Ori and the Will of the Wisps," part of the brothers' quarantine entertainment (though they'd probably be playing it anyway.)

Fiction

## CHAIN STORY INSTALLMENT 5

Continued by Elena Prisament

**Email us to submit a continuation for the next issue! The only rule is you can't end the story.**

"We've found Acorn. She's with us. No...she didn't recognize us. Presumably she has no memory of project Serra or anyone else in the cohort."

My eyes widened at the words. I'd heard them before. But not from the agents, or anyone I knew. Then who...

My mind suddenly seemed to hit a block. As in, my thoughts scattered, and my mind literally refused to think in that direction anymore. That happened sometimes, ever since my mom died. I always assumed it was a strange coping method of mine, and I knew better than to push at the wall. My mental blocks never budged.

Instead, I decided to pay more attention to my instincts.

They all told me to run away screaming.

This unsettled me even more, but I kept my best poker face on. The agents were both continuously speaking into their earpieces, or maybe each other, but had lowered their volume significantly so I couldn't understand a word. They weren't paying any attention to me at all. I slowly reached my arm to the side of the car and gently pulled at the handle. It didn't move. I pulled a little harder, and tried to twist open the lock lever. It didn't work either. And then the truth hit me - I was locked in.

Of course, I told myself, taking deep breaths to fight the rising panic. They're FBI agents. Who knows what kind of people they've carried in this car? Besides, we're in the middle of the street. It makes sense that it would be locked.

But I couldn't quite shake the feeling that there was something very wrong with the situation. I noticed we were exiting the city, and entering the beginning of the suburbs. Where were we going? Then the car jerked, making a sudden left off the empty street, right into the forest. I gasped and grabbed the side of the car. It began speeding, so fast that I got lightheaded and had to close my eyes. And then it stopped just as suddenly.

"We're here, A... Sophia. You may get out of the car." Said the older agent, who had been driving, holding the door for me. I complied, and opened my eyes and mouth to reprimand him on his harsh driving, but was stopped short by the grand and imposing sight of the building in front of us. It was enormous, easily triple the size of my office building, and completely embedded into a cliff that was rising majestically overhead. The building had iron and steel and another gleaming white metal I didn't recognize holding it together. However, the most striking part of the structure was that it was made almost entirely of glass, and all of it tinted. How had I never seen this before?

"Welcome to the Serra base," The younger officer said, smiling. I didn't trust that smile. "Come on inside with us.

There's more in this installment!- Continued on Page 3 ...

## WOLFRAM GETS US CLOSER TO A FUNDAMENTAL THEORY OF PHYSICS... MAYBE

by Gregory Prisament

Stephen Wolfram is an outsider to the theoretical physics community, but claims to have discovered a mathematical model that could lead to a fundamental theory of Physics. On April 14th he announced his findings and founded the Wolfram Physics Project to continue investigating his ideas. Here's some background and an assessment of his claims.

### Who is Stephen Wolfram?

Stephen Wolfram is best known for his "Mathematica" software which is widely used by mathematicians and scientists. In 2002 he made waves with his 1200 page book "A New Kind of Science" that argues for using the scientific method to empirically study and classify simple computer programs. He shows how simple rules can lead to emergent complex behaviours.

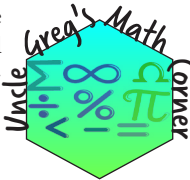
### What is a Fundamental Theory of Physics?

Physics is about asking "why". Why is the sky blue? Because blue light scatters more than other colors. Why does it scatter more? Because it has a shorter wavelength. Why do shorter wavelengths scatter more? Because scattering is inversely proportional to the fourth power of the wavelength. Why?.... you get the idea.

The deeper we go in asking "why" the more we realize that everything in the universe is governed by just a few basic rules. The rules of Quantum Mechanics explain the behaviour of subatomic particles. The rules of General Relativity explain gravity and the behaviour of more massive / energetic objects.

But we can keep asking "why". "Why are those the rules that govern the universe?". Are there even more basic rules that explain both Quantum Mechanics AND General Relativity? A fundamental theory of Physics explains the most basic axioms that physicists either just assume or have observed.

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On page 2: Fun Zone Special! Page 3: Poetry!



ARE YOU SMARTER THAN *THESE* FOURTH GRADERS?

Questions posed by Elena, Clayton and Lucas Prisament

Questions answered correctly by their cousins Aaron Anders and/or Conrad Prisament

Fun Zone EXTRA

Test your wealth of knowledge and find out if indeed you can be smarter than a fourth grader.

We interviewed our cousins in fourth grade, Aaron Anders and Conrad Prisament. Here are the questions they answered correctly. Can you answer them all too?

American Football (Aaron)

- Who owns the New England Patriots?
- Who won Super Ball 50?
- What team did Tom Brady move to after many years with the New England Patriots?
- Who was drafted from pick 1 to 5 in the draft that happened yesterday?

American History (Conrad)

- What tax led to the Boston Tea Party?
- What was the name of the secret revolutionary organization founded by Samuel Adams?
- Who was the commander in chief of the Continental Army?
- Where did the pilgrims form their first permanent settlement?
- What year did Columbus discover America?

Soccer (Aaron)

- What country is the Arsenal player Aubameyang from?
- Who is Manchester United Sponsor?
- What number is Neymar Junior at PSG?
- Who was the worst rating a player was rated in Fifa 20?

Math (Conrad)

- Please subtract  $9\frac{1}{2} - \%$ .
- If you divide a negative number by a negative number, is the quotient positive or negative?
- What does it mean for a number to be squared?
- Addition is to sum as multiplication is to \_\_\_\_
- What do you call a number whose only factors are 1 and itself?
- What is the sum of every number from 1 to 100 equal?

Covid 19 (Aaron)

- In which city was Covid-19 first identified?
- Which Scandanavian country has made headlines by keeping its economy relatively open despite Coronavirus?

Science (Conrad)

- What are the "building blocks" of all living things?
- Mention one step of the scientific method

International Geography (Aaron)

- What is the biggest city in South Africa by population?
- What is the most populated country in South America?
- What is the third most populated country in the world?
- In which country is the Suez Canal located?
- Which bodies of water does the Panama Canal

connect?

- Which US State is closest to Russia?
- What is the capital of Iceland?
- What is the westernmost and easternmost state in the US?
- Where are the Diomed Islands?
- How long is the flight between the American owned and the Russian owned Diomed islands?

Fortnite (Conrad)

- What is the currency used in this game?
- Who has the most duo wins in Fortnite?
- What is the name of the company that made Fortnite?What rifle shoots three times in a row?
- What is the most used material for building?
- What are the names of the three rarest types of weapons?
- When was Tilted Towers added to the game?
- When were the Skull Trooper and the Ghoul Trooper added to the game?

Politics (Aaron)

- What is the organization or agency that protects the President?
- After the President and Vice President, who is the next in the line of succession for the Presidency?
- If the President vetoes a bill what size majority is needed to overwrite it?



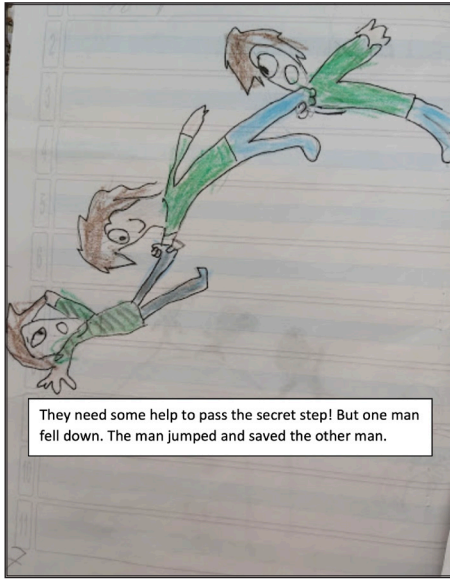
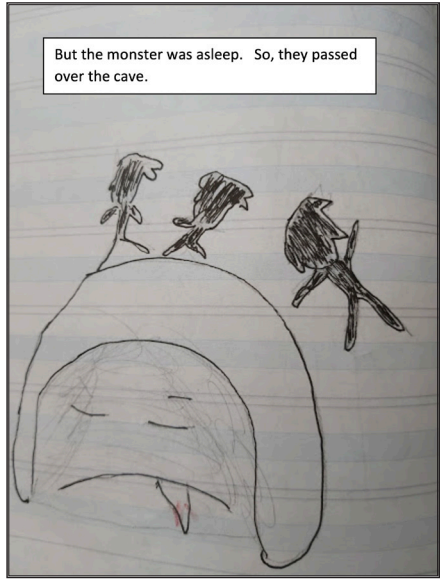
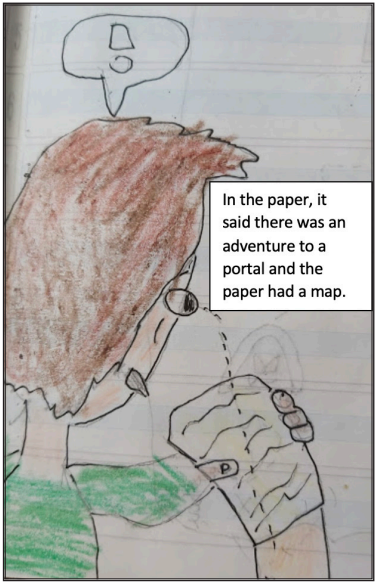
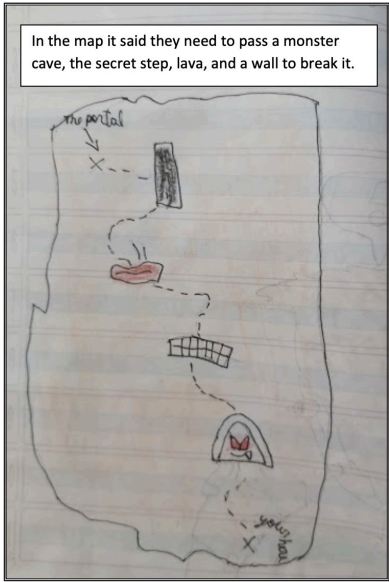
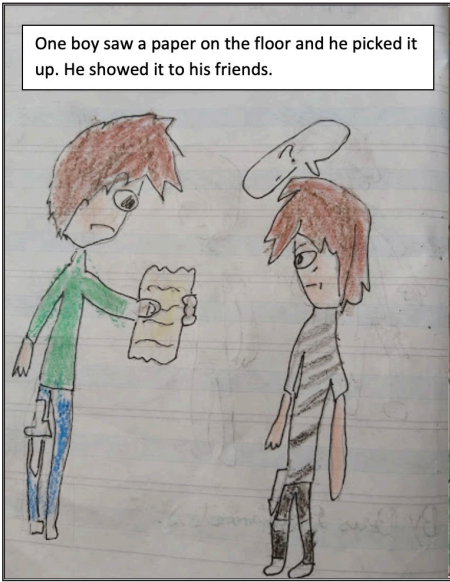
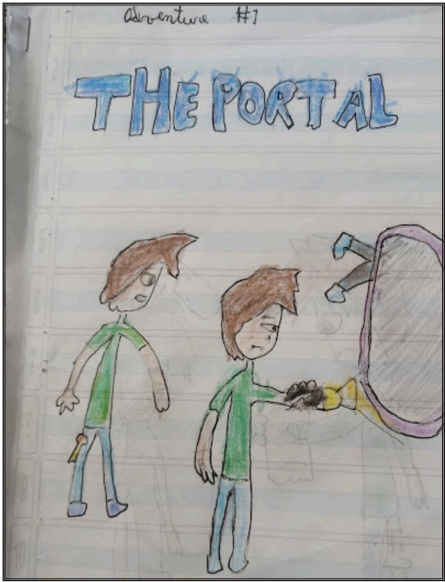
WORD SCRAMBLE!

by Evelyn Prisament

Words inspired by Prisament Paper

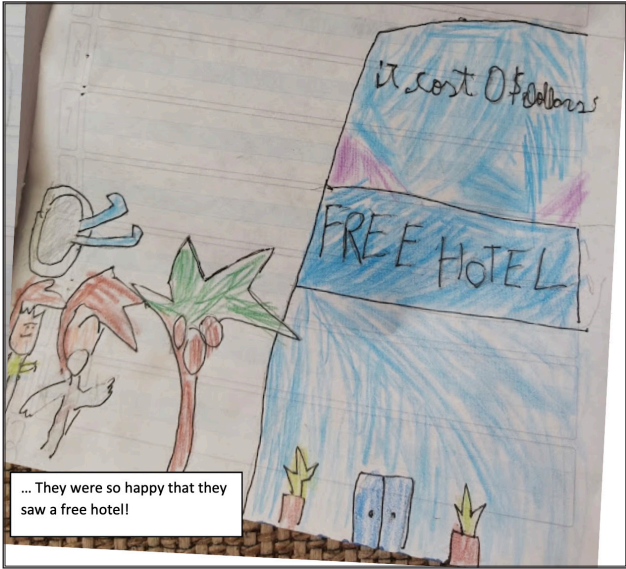
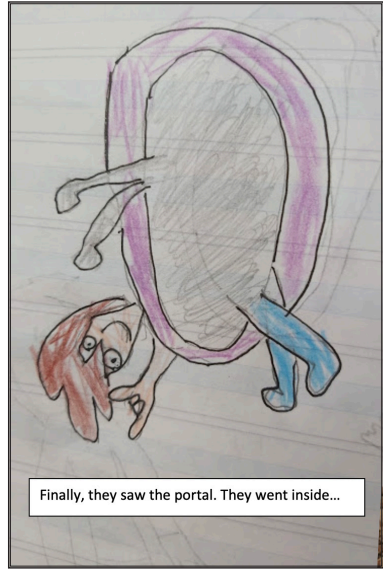
RUSEIEVN  
WDORL  
HSYPSIC  
MIOPSOTR  
EWEPRAPSN

The Portal by Boris Daniel Bustamante



They saw lava, but how could they get past it? The man got an idea. They jumped again.

There, they were in the wall but they were good because they had a man with an axe who broke it.



5	7	2	3
3	1	6	7
2	4	6	5
7	5	3	2

5	9	2	1
3	1	4	9
2	2	8	5
7	5	3	2

Two Solutions to Last Week's "Magic Number 17" Puzzle

Congratulations to our friend Katelyn Battacharia who discovered the second solution!



## CHAIN STORY INSTALLMENT 5

By Elena Prisament, from Page 1 ...

The commander would like to speak with you.”

My foreboding feeling intensified. I gave the agents a false apologetic look and a smile of my own. “I’m so sorry, but I just remembered I have an urgent appointment with a colleague... We’re working on a project, and it’s due tomorrow morning. I can’t believe I forgot! It’s really important, so I kind of need to go. But I’d love to speak to the commander sometime when I’m free... You know where to find me!” I made myself a promise to move out of my apartment as soon as I got the chance. “Thanks for the ride, goodbye!” I began to walk away from them, and then realized I had no idea where I was. Oh no. That was never a good sign in movies. I turned around, planning to ask the agents for directions, and then realized only the older one was there. I felt something cold press into my back.

I froze as I realized what had happened.

“You’re coming with us, *Sophia*.” The younger one, who had somehow gotten behind me without me noticing, put a hint of sarcasm into my name. “I don’t want to have to use this.” He nudged me with the gun. “Come on.”

I attempted to catch my breath and nodded. As if I had a choice. How did I get myself into this?

The officers led me into and through the building. The inside was much like the outside - metal and glass, impeccably clean. We soon entered a large, circular room with a domed ceiling, with a mirror right across from us.

The younger officer looked at his watch and put his gun away, to my immense relief. “We have 10 minutes to wait.” He told the older one.

The other officer nodded at the young one, then grinned at me. “Well, in the meantime, I’m sure you have a lot of questions...”

I nodded quickly, partly because it was the truth, and mostly because I was afraid.

The agent chuckled. “Well, let me give you some answers.” Faster than I could react, the officer reached over to my right hand and yanked at the skin. I gasped, expecting an intense pain. Instead, it just felt like ripping off a band-aid, or a piece of tape. I looked down at the back of my hand. By taking off a fake skin cover I didn’t know I had, the officer had revealed a dark blue symbol on my skin. It was a fancy letter “S” with curlicues.

The younger agent smiled slyly at me and pointed at my hand. “You are not Sophia,” he said.

I looked at him, not understanding.

Then I looked behind him, and I did.

What I had thought was a mirror was actually a panel of glass. And trapped behind it was a girl, sitting down, who looked exactly like my reflection...

She stood up and glared at me and the officers spitefully.

“I am,” she said.

To be continued... By YOU!

## WOLFRAM GETS US CLOSER TO A FUNDAMENTAL THEORY OF PHYSICS... MAYBE

By Gregory Prisament, from Page 1 ...

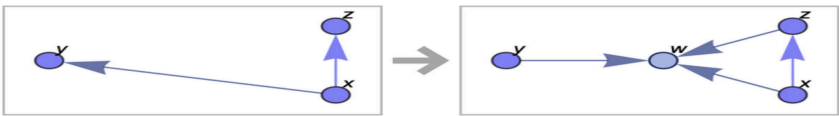
### What is the model that Wolfram Discovered?

In VOL. I Issue 6, Noah taught us about graphs. As a refresher: “Graphs in computer science are networks with nodes and edges that connect them.”

Wolfram describes how we can write down simple rules to transform one graph into another. These rules are kind of like “find and replace” in Microsoft Word, but are applied to graphs (or more generally, hypergraphs) instead of english sentences. When these rules are applied over and over again repeatedly, unexpected properties can emerge.

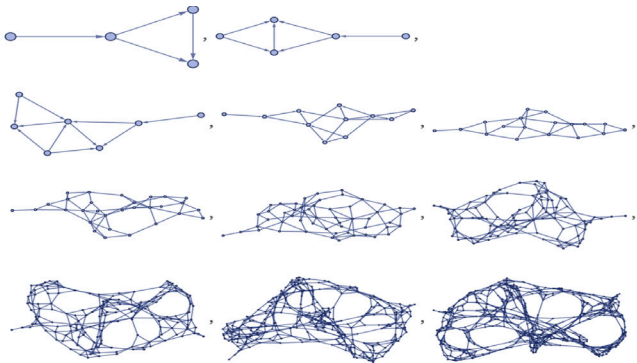
For example, we can start with the graph on the left and apply a rule that turns it into the graph on the right:

The rule can be written down as:  $\{\{x, y\}, \{x, z\}\} \rightarrow \{\{x, z\}, \{x, w\}, \{y, w\}, \{z, w\}\}$



If we apply this rule repeatedly, we get the following sequence:

Wolfram shows how rules like these can produce structures very similar to the curved spacetime caused by gravity. He goes on to derive things like the equations of Special Relativity and the Speed of Light. He shows how behaviour resembling quantum entanglement can emerge.



### What’s my take?

Wolfram has certainly shown something interesting that is worth investigating further. I would not be surprised if it leads to some new results. My mathematician friend Ben Elias points out that someone has almost certainly studied these types of systems before. But Wolfram is probably the first to propose a deep connection with Physics and to push for these

ideas to go “mainstream”.

That said, he is making a bold claim that this work will lead to a fundamental theory of Physics. At best, this claim is over exaggerated. At worst, it is a misleading marketing gimmick for his software company. He has given us a novel computational tool and shown how it can produce some physics-like results. But there is a pretty big gap between that and actually providing a fundamental theory. It is like someone giving you a hammer and saying “You can build a skyscraper with this!”. If hammers hadn’t been invented yet, that would be interesting, but it still doesn’t get you an actual skyscraper.



### Hittin' the Street

Due to the Covid-19 lockdowns our suburban streets have become nearly deserted of cars. Elena, Clayton and Lucas take advantage of this during a recent walk to Grandma’s house.

## VICTORY GARDEN

by Rozanne Prisament

Poetry

Attempts at spring have failed-  
Much wasted energy forcing through tepid soil  
Only to be whacked by a rogue frost.

Hypothermic croci signal a deathbed warning to the forsythia:  
“Wait...not yet....patience!”  
Perhaps too late for emerging tulips  
Still hoping for a Pyrrhic victory.

Only the daffodils are undaunted  
Growing straight and strong, oblivious to all threats  
Daring adversity. Who said nothing can stop  
A daffodil intent on it’s mission?

Just sit quietly in the sunshine  
Among the thwarted blossoms, the decayed promises,  
The enemies of anemones, the spikes of golden resistance.  
Just sit and wait. No action is necessary--  
Nothing can suppress what’s coming...

## "GO GET A CAT"

By Barbara Rocah, from Page 1 ...

He continued to stare.  
“Well you look funny too” I said.  
More staring.  
I reached out to pet him,  
He shied away.  
I say to myself consolingly “It’s my third leg, my glasses, my being old and bent.”

And then there are the poodle twins:



They live in a brownstone on Elm St.  
One black one white, frisky, alert to everything.  
I meet them on the street, the black one comes up to me.  
“Hi Mike” I say, holding out my hand.  
He jumps around my legs, barking playfully, but won’t let me touch him  
I say to myself “It’s my third leg, my glasses, my being old and bent, my cracking voice.”

And his twin Joey  
Stands aside and stares at me, no barking, just casing me out,  
Won’t even smell me.  
“What’s wrong Joey?” I ask  
He looks away and then stares again, “What are you?”

Once again I add to my list to explain their confusion: “It’s my third leg, my glasses, my being old and bent, my cracking voice, my hunger for recognition in this isolation.”

They know, they all know  
My daughter says “Mom, go get a cat!”

## "ORI AND THE WILL OF WISPS" PROVIDES VIDEO GAME MAGIC

By Clayton Prisament, from Page 1 ...

the finish line then, well, you lose. If you do get there in time, though, you earn a handsome reward!

Ori has an array of abilities and weapons that you can choose from. At the beginning, Ori’s first weapon will be a torch. Later you will find your first tree which Ori gains the spirit blade from. Ori has a certain amount of energy that allows him to use attacks and abilities such as regenerate (Which transforms 1 energy point into 3 life points) Then later Ori discovers the bow, etc.. Below is a list of the attacks Ori can get.



1. Spirit blade: a swift blade that deals small amounts of damage.
2. Bow of light: A bow that is weaker than the spirit blade but as fast and longer range.
3. Smash: An immensely powerful blow from a hammer. Slow.
4. Spike: A fast-powerful bolt. Eats away at your energy.
5. Ignite: Makes an explosion around you that burns energy
6. Flash: Makes a bubble around you that drains enemies.
7. Sentry: Makes a butterfly that helps attack nearby enemies
8. Spirit star: A boomerang

Ori and the will of wisps is a game loaded with fun adventures puzzles and mildly infuriating boss battles. Many people do not consider videogames as art, but this game is art, pure art. I would recommend this game to anybody at home most of the day because of a virus and does not know what to do (or does, it does not matter). Ori and the will of wisp provides a perfect showing that the bad guys are bad for a reason and can still have a heart. It provides a perfect blend of side scrolling action to solving puzzles, and like I said earlier, if you by any chance are in quarantine right now I recommend this game to you.