

We might not be rocket scientists, or how high our baking-soda-and-vinegar rocket didn't go (with video footage)

When I saw a rocket-building kit on a Christmas shopping trip, I knew we had to put it under our tree. It was only \$10, and the box said it could go up to 100 feet! So John and Leo built it, and on a chilly day we walked to a field to set it off.



The fuel: Baking soda and white vinegar.

The scientists: Our 7-year-old and his father.



The goal: The moon, of course. We could even see it in the sky.



OK, so we knew we wouldn't reach the moon. But this was a rocket. Surely it would go really high.

Leo helped John put the baking soda and vinegar inside.



Then John set it out in the field as the boys and I stayed far away.

We waited. And waited. And waited.

"How long will it take?"

"It says to wait 30 seconds."

“Oh, OK.”

“But it’s been much more than 30 seconds.”

“Let’s just wait a little longer.”



Finally John went over and shook it a little and stepped away. It shot about six inches up—maybe a foot—and fell over.

We emptied everything out, rinsed the whole rocket with a bottle of water, and started again.

This time—now please don’t be shocked—nothing happened. John went over to look at the rocket. He picked it up, and as he lifted it, the plug on the bottom flew out of the base and sailed through the air.

It didn’t go 100 feet, but it was still entertaining. The boys laughed and ran off to climb on the playground equipment nearby—as John grumbled about how well Estes rockets work.



Any day with a playground visit is a success, right?



As we were walking home, I said to the boys, “So what did we learn today?”

“To trust your parents,” said Daniel, our 5-year-old. I’m not sure how he learned that, but it sounds like a good lesson. “And not to let a rocket blow up in your face.”



We may have also learned that experiments don’t always work, that sometimes you spend hours on something and then it fails, and that expectations don’t always match reality.

As in this case, for example.

We also learned that you have to keep trying.

So we set the rocket up again yesterday—this time in our yard, since we no longer believed it would go far. And, along with several other failures, we saw one regal rocket flight of about 15 feet.

But if you want to see science in action, you should really watch this. (Turn your sound down so you don't hear my scream.)

So we're starting small in this New Year. But that's OK. NASA didn't make it to the Moon on the first try either.