

**It is  
All In  
The Family  
Canons**

It was one question on a Massachusetts 4th graders' achievement test that led to the Family Canon:

**A mineral sample is tested with a metal file. Which property of a mineral is most likely tested in this way?**

- a. color
- b. cleavage
- c. luster
- d. hardness

I knew how the question got there. A test-writer was given a standard and asked to write several versions for use in different test administrations. (Any of us can do it, and it should be something that anyone taking this test should learn how to do.) This is it:

**Grades 3-5 Earth and Space Science Standards**

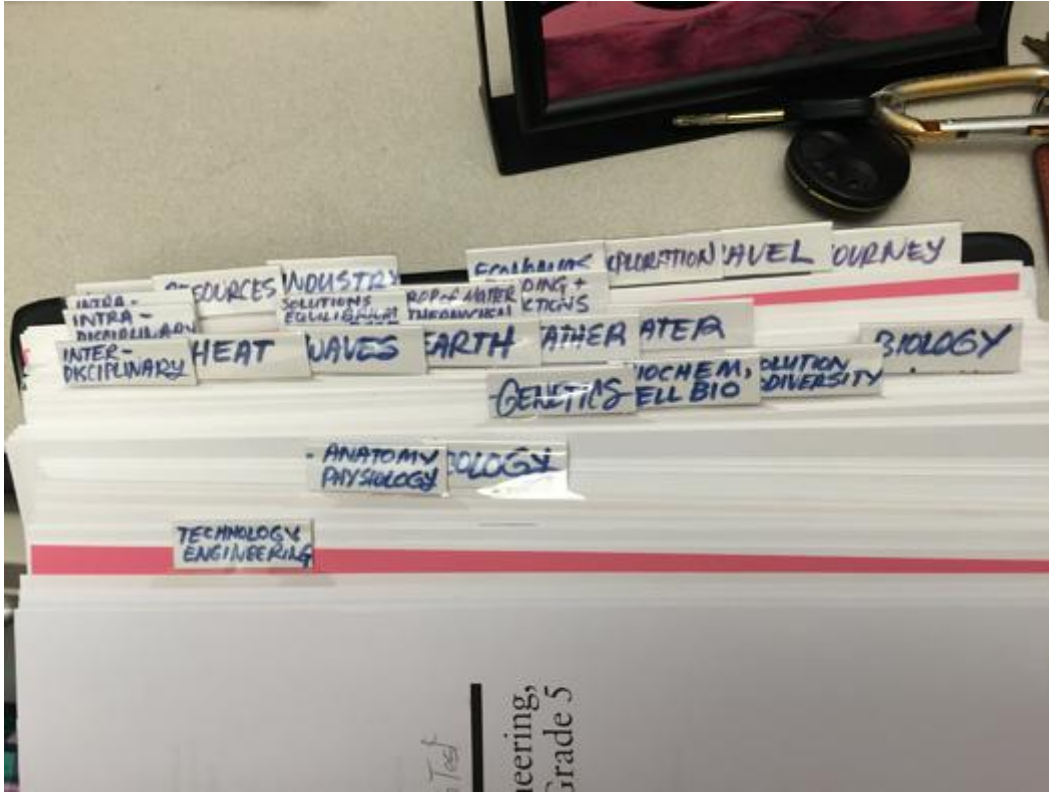
Identify the physical properties of minerals (hardness, color, luster, cleavage, & streak), & explain how minerals can be tested for these different physical properties.

But no make how you cleaved it, Massachusetts fourth graders were getting this right around 37% of time. Was it a fair question? Was it reasonable to expect that double that number should get it right? We are all surrounded by rocks, after all, one of only three things of which the earth consists (water, rocks, and soil, according to a preK standard one should know before this one).

I knew what was meant by color and hardness, but I had to think about the other two. Luster? Unbidden to my mind's eye came an opal, and I cringed at the thought of taking a file to it. I extrapolated: the answer was hardness.

Opal is huge in one part of my family's story. And, don't most of us have at least one a family story about the earth's surface? (We came from over there, south of here, back east, 24 hours away by plane. Thus, the Family Canon, that body of remembered experiences shared through tales, images, and sometimes things, that we identify with as ours, the we to whom they happened (and that confer family status on them what does, as my Aunt Anne would say).

Why did my image of opals let me ace the question? Could other family stories help on others? Starting with my family story about opals, and adding more family stories, I experimented and came up with notebooks of standards, frameworks, and test questions from the MCAS/state, Common Core/federal and PISA/international that we were more likely to know. Here it is:



You can see this notebook just below the window, and on the left side of my desk.  
(My office is full of resources on everyone's family stories.)



Here are two shots of one of its shelves on rocks, such as opals:



The Family Canon came to have five parts, in no order:

**Of whom did and does the family consist?**

**Where were and are the family?**

**What things did or does did the family do and have?**

**What stories and images does the family tell and see?**

**Who remembers and tells and shows and has any stuff?**

**Of whom did and does this opal-story-telling family consist?**

Me, my cousins, and their children learned this family story from our mothers, who were told it at bedtime by their Grandmother Annie. Annie-to-be was in utero when her mother Louise and father Amos set out from New Bedford on a whaling ship that he 'mastered.' Annie was born in Pita, Peru when Louise was put to shore to birth her while the ship hunted off its coast.<sup>1</sup> Annie sailed at 6 months (never on land for her first two years) and for the next fourteen years thereafter. This is Annie:



---

<sup>1</sup> Louise sailed with Amos for the first time on this trip, and for the 25 years thereafter. The trip before he had been held captive on Ponope Island in the South Pacific and she vowed never to let him sail without her. (This was at the bitter end of the civil war. The south had tracked the northern whaling fleet there, and burned three of its ships to the waterline, bartering with the king to hold three Masters captive. They were only freed when they were because the South lost the war.)

**Where were and are this opal-story-telling family?**

Annie's time asea was during the death throes of the slaughter, when they went farther and farther to find the decimated whale-stock – around both horns and in to the furthest reaches of the South Pacific and Northern Atlantic. Perhaps one gets a sense of why she hated every minute of this time (and told such amazing bed-time stories) from this image of The Niger, the most painted and photographed of the ships that Amos mastered:



**What things did or does this opal-story-telling family do and have?**

What I knew about opals was that we had them for a very short time, that they are at the bottom of the South Pacific, somewhere on Amos and Louise's last sail between Australia and New Bedford. We did have a few objects, one of which we were allowed to handle. It was made for Annie by a crew member even more trapped than she:



**Who in this opal-story-telling-family remembers and tells and shows?**

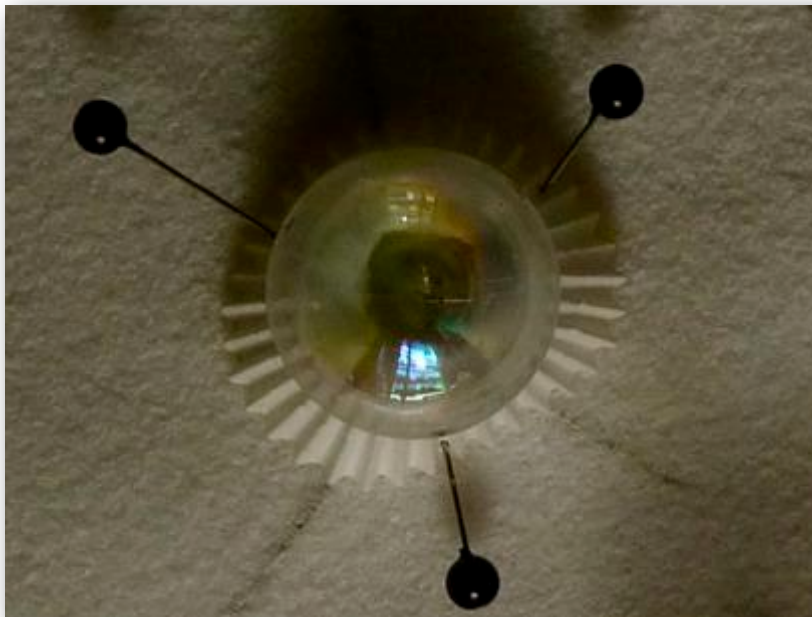
Annie despised every minute of her time at sea, and turned her back on it ever after. She refused to float on anything, ever (not even the Swanboats, to which she took my mother and aunts). She would never speak of it with the family but she would tell my mother and sisters – and only them - bedtime stories. Here is the opal bed-time story the best I understand it:

It was Annie's father and mother's last voyage after 25 years. With his whole life savings, Amos had purchased many beautiful black opals in Australia, from where the vast majority of opals came. He planned to sell them in New England, where they were very rare, and make enough money so that he could retire without having to work (even such successful whaling captains make very little money). The opals were hidden in a little cask in Amos and Louise's tiny dark cabin so that the crew would not find out about them. For, the crew believed they doomed the ship

and all on it to a watery death. But the crew heard they were there. (Everyone knew everything, crowded together on such a small boat, gone for so many years at a time.) The word spread like the fire at the heart of the black opals, and the men silently gathered before the master, their long cutting tools and spikes and oars in their hands. The sails flapped like thunder, the boat plunged and reared like a run-away horse. They made their demand. He refused it. They didn't need to make clear his fate. We do not know what happened next, but we do know that he deep-sixed the opals into the sea, shook out the box in front of them, and stayed in command. The family knew nothing of wealth after that. My great-grandfather and mother built a saw-mill and worked until they died. Our dreams of wealth took the form of that cask of opals, and of those opals sinking and swirling deeper and deeper until their light snuffed out.

### **Who remembers and tells and shows?**

As it happens I am the one in this vestige of the family who remembers the most of what my Aunt Anne – who remembered the most – told us. I have made around 350 pieces of art, written many stories and essays, and show and tell about them to family, some people I know, and some students I teach. Here are a few of my images of the lost opals, the likes of which came unbidden to my mind's eye when asked about minerals and their luster, cleavage, color, streak and hardness:









And here are standardized questions I wrote about the concept that water, rock, and soil, make up the earth's surface. These can be written from experience. For instance, the first is taken from inside the office you've seen, above. The second is from a week's vacation in the Adirondacks, and the third has me in it.

<b>Water, rock, and soil make up the earth's natural surface.</b>	
	<p>What things are the most visible?</p> <ul style="list-style-type: none"><li>A. water and rocks</li><li>B. soil and rocks</li><li>C. living things and rocks</li><li>D. living things and soil</li></ul> <p>(from right outside my Resource Center window)</p>

**Water, rock, and soil make up the earth's natural surface.**



What things are visible?

- A. water and rocks
- B. water, living things, and rocks
- C. living things and water
- D. all of the above

**Water, rock, and soil make up the earth's natural surface.**



What do you think is in the middle of the water?

- A. a rock
- B. a living thing
- C. a clump of soil
- D. just water