

## Mold Compounds Sandy's Destruction *Modified transcript with vocabulary*

Based on "Mold Compounds Sandy's Destruction" produced by Flora Lichtman, 1/25/2013

Mold Compounds Sandy's Destruction, Science Friday, 1/25/2013	Vocabulary
<p>FLORA LICHTMAN: Three months after Hurricane Sandy battered the East Coast, the Rockaways, a Queens neighborhood, is still in recovery. Homes and businesses near the sea were cleaved apart and remain seemingly untouched since the storm. And on this bitter cold day, hazmat-suited volunteers far outnumber anyone else on the streets.</p>	<p><b>batter</b> – pound heavily and repeatedly</p> <p><b>cleave</b> – split or cut in half</p>
<p>PETER CORLESS: First of all, the new normal ain't normal. Everybody is being made whole at a different speed. My name is Peter Corless, and I'm a former resident of Rockaway Beach.</p>	
<p>FLORA LICHTMAN: Corless is a community organizer here.</p>	
<p>PETER CORLESS: There's a lot of uncertainty in the scope of the disaster.</p>	<p><b>scope</b> – the full amount of the area or subject that is covered or affected</p>
<p>FLORA LICHTMAN: While this kind of destruction is hard to miss, there's also widespread destruction occurring right now, on the microscopic scale.</p>	<p><b>microscopic</b> – so small that it is only visible with a microscope</p>
<p>PETER CORLESS: Mold every shade of the rainbow has been growing in these homes. You can put heat back on, but that's just going to make the mold grow faster.</p>	
<p>FLORA LICHTMAN: At least for those with power and heat restored, mold has become a top concern for residents here, Corless and others told me.</p>	
<p>JOAN BENNETT: That's interesting. The reason I say that is, having experienced Katrina in New Orleans close up, mold wasn't on peoples' minds, and, ironically, there was vastly more mold in New Orleans...</p>	
<p>FLORA LICHTMAN: ...due in part to the warmer temperatures down South, Bennett says. Joan Bennett is a fungal geneticist whose New Orleans home molded after Katrina flooding.</p>	
<p>JOAN BENNETT: Nobody likes to lose their house, but to lose it to the life form that you have been studying all your life... My way of coping was, OK, I'm going to try to learn more about this.</p>	

FLORA LICHTMAN: So Bennett turned her home into a fungi collection site.	
JOAN BENNETT: In my home in New Orleans, the major fungi that I isolated were soil fungi, and I think they had been picked up as the flood waters swept across the city.	
FLORA LICHTMAN: Bennett, who has since moved to Rutgers, also sampled New Jersey homes after Sandy.	
JOAN BENNETT: What I'm finding from Sandy is a lot of <i>Penicillium</i> species, not the ones that make the famous antibiotic but species in that genus—they're blue-green molds. And also, molds that generally get called mildews—technical name is <i>Mucor</i> .	
FLORA LICHTMAN: These fungi thrive in damp, warm places, and they're not very picky eaters.	
JOAN BENNETT: Lots of molds are good at degrading cellulose, paper on gypsum board, paper in books, or cotton, [which] is a form of cellulose.	<p><b>cellulose</b> – the large molecule that forms the walls of cells in plants</p> <p><b>gypsum board</b> – drywall used to build interior walls</p>
FLORA LICHTMAN: And this is the challenge with mold remediation: Getting rid of mold requires getting rid of almost everything—and that's what volunteers are doing.	<b>remediation</b> – fixing, or making something better; recovering from loss or damage
CAITLIN GREIG: Mucking, gutting houses here in the Rockaways, pulling up floors, pulling out insulations—[all] to get the house down to bare studs basically, with no nails, no screws, nothing in them, so that people can then come in and check for mold.	<p><b>mucking</b> – removing wet or muddy materials from home</p> <p><b>gutting</b> – removing all portable material from home interior</p> <p><b>studs</b> – vertical wall support</p>
FLORA LICHTMAN: So far, Bennett hasn't found any signs of toxic black mold.	
CAITLIN GREIG: <i>Stachybotrys</i> likes it very wet. So, where you'll tend to find it is with a persistent leak.	<b>persistent</b> – continuing in spite of
FLORA LICHTMAN: But exposure to any mold in high quantities can pose health risks, says Ginger Chew of the CDC.	<b>exposure</b> – coming into contact with something

GINGER CHEW: In concentrations that are very high, there's the potential for respiratory health effects, regardless of the type of mold.	<b>respiratory</b> – affecting or being influenced by the lungs
FLORA LICHTMAN: Especially in children, asthmatics, and immunocompromised people. But exactly what levels of spore exposure are safe for what populations isn't well understood either, researchers say. The take-home point:	<b>immunocompromised</b> - when the immune system is not working properly to protect the body from infection
GINGER CHEW: When in doubt, throw it out.	
FLORA LICHTMAN: Which is what residents in this community are doing—mucking and gutting, throwing things out.	
PETER CORLESS: You can't see the devastation on the inside. You don't have a sense of how much damage there's still yet to repair, and there's a tremendous amount.	
FLORA LICHTMAN: For Science Friday, I'm Flora Lichtman.	

**Key Ideas and Details:** CCSS.ELA-Literacy Reading Informational Text Sample Questions (grade 6 standards are presented)

[CCSS.ELA-Literacy.RI.6.2](#) Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

- What natural disaster occurred that caused damage to these homes? What forces or processes caused the homes' damage?
- Why does damage continue, even after the hurricane is over?
- Mold occurs naturally in the environment, so why is it harmful in a home?