

question	answer	page
Who is the author of The Fourteenth Goldfish?	Jennifer L. Holm	cover
Believe in the _____(what)?	possible	cover
Who said, 'You cannot teach a man anything; you can only help him discover it in himself'?	Galileo Galilei	epigraph
What was the name of Ellie's teacher?	Starlily	1
What did Ellie's teacher, Starlily, wear?	Rainbow tie-dyed dresses	1
Why did Starlily send her students home with a goldfish?	To teach them about the cycle of life.	1
Why was Goldie, Ellie's goldfish, unique?	She never died (as far as Ellie knew)	1
When did Ellie find Goldie floating upside down?	At the end of 5th grade	2
How old did Ellie think Goldie was?	Seven years old	2
How long did Ellie's original Goldie live?	Two weeks	2
How many goldfish did Ellie really own over the years?	thirteen	2
Why did Elie think their toilet kept clogging?	She thought it was haunted by all the fish that had been flushed down it.	4
Why wouldn't Ellie's mom let her get a dog?	They didn't have a big enough back yard.	4
What was the name of Ellie's babysitter?	Nicole	4
How many pieces were in the puzzle of New York City Ellie was working on?	One thousand	4
What did Ellie's babysitter, Nicole, aspire to do someday?	Appear on Broadway	5
What did Ellie's parents do for work?	Her mom was a high school drama teacher and her dad was an actor.	5
What did Ellie's parents wish she were passionate about?	The theater	5
Where did Ellie and her mom see her grandpa a few times a year?	At a Chinese restaurant	7

What did Ellie's grandpa always order at the Chinese restaurant?	Moo goo gai pan	7
What did Ellie's grandpa take from the Chinese restaurant?	Packets of soy sauce	7
What did Ellie's grandpa do for work?	He was a scientist	7
Where had Ellie's grandpa gone to college?	Harvard	7
What large city is in the Bay Area of California?	San Francisco	9
What was the name of Ellie's best friend?	Brianna	9
How was Ellie's room decorated?	With her and her best friend, Brianna's handprints	9
What did Brianna get involved in that took her away from Ellie?	volleyball	9
What was Ellie's mom's name?	Melissa	10
Where did Nicole get a job when she quit babysitting Ellie?	The ear-piercing place at the mall	10
What was the strangest thing about the teenaged boy that Ellie's mom told to come inside their house?	He was wearing black dress socks	12
How old was Ellie?	eleven	13
Where did Ellie's mom like to get clothes to wear on a daily basis?	The theater wardrobe closet at school	13
Who was the teenaged boy Ellie's mom brought into their house?	Ellie's grandpa (her mom's dad)	15
How did Ellie's grandpa turn thirteen?	He engineered a way to reverse senescence through cellular regeneration	17
What was Ellie's grandpa's name?	Melvin Herbert Sagarsky	17
What is calcium in milk important for?	Bone density	19
How many inches did Ellie's grandpa say he shrank in the last ten years?	Two inches	19
What was Melvin doing when he got picked up by the police?	Trespassing on private property - his own laboratory	19
Why was Ellie always the first person up in the morning?	She liked to cook breakfast	22

What kinds of Crazy-Mixed-up Pancakes had Ellie made?	S'mores version banana split version, pina colada version, and peanut butter cup	22-23
What is senescence?	The process of aging	23
What was <i>Turritopsis melvinus</i> ?	A species of jellyfish	23
Why did Melvin, Ellie's grandpa, use a jellyfish in his anti-aging experiments?	Jellyfish have regenerative abilities	23
What animal can be sliced in two, and each part will grow into a new one?	A planarian flatworm	24
What freshwater animal can regenerate body parts?	The hydra	24
What marine animal doesn't seem to experience senescence?	A sea anemone	24
What did Melvin say the <i>Turritopsis nutricula</i> could do?	Revert its body to the polyp stage - its younger self	24
Who discovered the huge <i>Turritopsis Melvinus</i> jellyfish and called Melvin?	An Australian diver in the Philippines	24
How big is the <i>T. nutricula</i> ?	A few millimeters	24
How big was the <i>T. nutricula</i> specimen the Australian diver sent to Melvin?	More than 300 millimeters	24
How big in diameter was the <i>T. nutricula</i> specimen the Australian diver sent to Melvin?	One foot	26
What happened after Ellie injected <i>Turritopsis melvinus</i> in adult mice?	They reverted to adolescence	26
Why didn't Melvin want to call his colleagues in the lab to have them help him with the <i>Turritopsis melvinus</i> ?	He thought they would take all the credit, and it was his discovery.	26
What was the name of the middle school secretary at Ellie's school?	Bernadette	28
Where did Melissa get the story she told to explain Melvin to everyone?	A play Ellie's dad wrote in college called Hamlet in Fresno.	28
Why did Melissa insist that her dad, Melvin, go to school with Ellie?	If someone discovered him, it would look like she was letting a truant kid live in her house and she would lose her job.	28

Who became Ellie's new babysitter after Nicole quit?	Melvin, her grandpa	28
What was Melissa's boyfriend's name?	Ben	30
What was the name of Ellie's lab partner in science?	Momo	31
What did Brianna do to herself that surprised Ellie and made her kind of sad?	She cut her hair	32
What did Brianna and Ellie make up a commercial about?	A corn dog	32
What upset Melvin at school?	The textbooks didn't mention him.	36
Who said that Sagarsky was a quack?	A goth kid named Raj	37
What was Ellie's full name?	Ellie Cruz	37
How did Ellie introduce her grandpa to people at school?	As her cousin Melvin	37
What did Raj's science teacher say about Melvin Sagarsky?	That he was just a charlatan looking for the fountain of youth and gave real scientists a bad name.	37
What kind of food did Melvin dislike?	Spicy food	38
What are the names of the two main characters in <i>Our Town</i> ?	Emily and George	38
What is the name of the town in the play, <i>Our Town</i> ?	Grover's Corners	40
Why did Ellie's mom like to do productions of <i>Our Town</i> ?	It had a big cast, so lots of kids could be in it.	40
What play did Ellie's dad play the part of Javert in?	Les Misérables	40
What play has a character named Jean Valjean?	Les Misérables	40
What was the name of Ellie's science teacher in first period?	Mr. Ham	43
What was the quirkiest part of Melvin's outfits at school?	He wore Ellie's ponytail holders	43
Where did Melvin Sagarsky have a virtual fan club?	Finland	43
How many members were in Melvin Sagarsky's fanclub in Finland?	Two hundred thirty one	45
Who developed the vaccine for polio?	Jonas Salk	45

What did Jonas Salk do that Ellie thought was kind of crazy?	He tested his vaccine on himself	45
Why did Melvin Sagarsky say scientists never gave up?	They wanted to solve the puzzles and they believed in the possible	47
What was printed on the backpack Melvin used to go to school?	kittens	49
What did Raj say about the articles Melvin showed him?	They had been published over 30 years ago	49
How did Melvin say you started working on a scientific problem?	With your eyes - observing	51
When does an apple start to die?	The minute you pick it from the tree.	51
What did Melvin tell Ellie about the seeds inside an apple?	They weren't dead or alive...they were dormant.	53
What did Melvin say was the most powerful tool a scientist had?	observation	53
Who is the father of modern science?	Galileo	53
What did Galileo observe about Jupiter?	It had moons orbiting it.	53
What did Galileo prove about the Earth?	It isn't the center of the universe	53
What did Melissa like to do before she went into production on a show?	Stock up on frozen food	53
Who was the physicist that ran the program that developed the atomic bomb?	Robert Oppenheimer	54
What was the name of the project Robert Oppenheimer ran during World War II?	The Manhattan Project	54
Where did Robert Oppenheimer test the atomic bomb?	In the desert in New Mexico	54
Where is the de Young Museum located?	San Francisco, California	57
Where did Robert Oppenheimer once teach?	University of California at Berkeley	57
What did Jonas Salk and Robert Oppenheimer have in common?	They were both involved in wars where science played an important part	57
Where were the atomic bombs dropped that ended World War II?	Japan	57

What did Robert Oppenheimer say after they tested the atomic bomb?	We knew the world would not be the same; a few people laughed, a few people cried, most people were silent.	59
How old was Melvin in reality?	seventy-six	59
What did Melvin's fortune cookie fortune say?	You are going to have some new clothes.	60
Why did Melvin Sagarisky say he always tried to pass from the right lane?	He got more swing that way because of physics	62
What did Melissa do when she was a teenager that her dad still bugged her about?	She wrecked the Volkswagen	62
What was Ellie's grandmother's dream?	For her and Melvin to take a bus trip across the country, stopping in little towns and visiting the tourist places.	65
Why didn't Ellie's grandparents ever travel across the country together?	He was always too busy with work	65
How old was Ellie when her grandma died?	three	65
What was the one thing Ellie's grandma really liked?	A good pair of bedroom slippers	65
What did Melvin give his wife every year on their anniversary?	A new pair of slippers	65
What was the address of Melvin Sagarisky's lab?	Number 24	67
Why did Ellie have to go into the lab to get the T. melvinus instead of Melvin?	The guard would recognize him as the boy he had caught there earlier.	67
Why was Melvin proud of Ellie, even though she didn't get the T. melvinus from his lab?	She tried, and that's what counts.	68
What did Marie Curie win a Nobel prize for?	Her work on radiation	68
What did Melvin say when Ellie asked him if he thought she would ever win a Nobel prize?	Of course you will.	68

Why did Melvin ask his daughter, Melissa, if she was working for the circus?	She dyed her hair blue	71
What did Melissa always say when Ben rang the doorbell?	Tell Ben I'll be down in a minute.	71
What did Ben always bring when he and Ellie's mom had a date?	Brought flowers	71
What did Ben always say to Ellie when he came over?	How's it hanging?	71
What did Melissa say both times Ben asked her to marry him?	She wasn't ready.	71
Why wouldn't Melissa marry Ben?	She was afraid of making a mistake again.	71
What kind of films did Ellie like?	Scary ones	74
What are the things people take for granted when they're young that they lose in age?	Ability to walk, vision, hearing, and being able to go to the bathroom	74
Why did Melvin drink a cup of hot tea every day?	He said it was good for digestion.	78
What did Melvin want Melissa to do at night?	Put the trash out.	78
What was Melvin's and Ellie's usual meeting spot at school?	The flagpole in front of the school	78
What did the note say that Melvin stuck to Ellie's locker?	I'm in detention.	80
What kind of earring did Raj wear in his right ear?	An Egyptian ankh	81
What is the ankh the symbol of in Egyptian?	life	81
Why did the Egyptians leave the heart inside mummies but take out all the other organs?	They thought the heart did the thinking.	81
Why did Melvin get sent to detention?	He went to the bathroom without getting a pass.	81
What did Melvin tell Ellie about cooking?	It was science	86
Who discovered a way to kill bacteria in drinks?	Louis Pasteur	86

What is the process called in which drinks are heated at high temperatures to kill the bacteria?	pasteurization	86
Why did pulling out recipe cards from a recipe box make Ellie's mom feel better?	She liked looking at her mother's handwriting	86
What was Melvin's favorite meal?	Coq au Vin	87
What kind of gas flames do scientists use?	Bunsen burners	87
What did Melissa call Melvin's office?	The bathroom	90
Why did Raj believe Melvin about who he was?	He researched him on the Internet	90
What was the headline on the newspaper that showed Melvin Sagarsky at age 15?	Fresno Boy Wins Central Valley Science Fair	90
Why did Melvin hire Raj?	He had an older brother with a car	92
What things can be cylindrical, coiled, or spheres, and Ellie found them beautiful?	bacteria	94
What is the bacterium named after Louis Pasteur?	Pasteurella multocida	94
What is Escherichia coli?	A bacteria	94
Bacillus megaterium	A bacteria	94
What was Raj's brother's name?	Ananda	94
What did the billboard say for a biotech company with a photo of a bacterium Ellie recognized?	We are the future of medical research	97
What kind of bacterium was on the biotech company billboard?	Escherichia coli	97
What did Melissa's mom plant in front of the house where Melissa grew up?	lavender	99
What did Ellie's grandma wear in her hair?	chopsticks	99
What did Ellie remember people doing when her grandma was alive?	Shouting less and laughing more	99
What was inside the cookie jar shaped like a brown owl?	Packets of soy sauce	100
What was Ellie's grandma's first name?	Mona	102

What did Ellie find underneath her grandpa's bed at the house where he and her grandma had lived?	Fuzzy pink bedroom slippers	102
Why did Melvin start to wear Ellie's mom's clothes?	He hated doing laundry	104
What book was on the reading list at school that outraged Melvin?	Catcher in the Rye	104
What is the name of the main character in the book, Catcher in the Rye?	Holden Caulfield	104
Who is the father of modern physics?	Isaac Newton	104
What is Newton's first law of motion?	An object at rest will stay at rest and an object in motion will stay in motion unless an external force acts upon it.	104
What did Raj suggest calling Melvin Sagar'sky's project?	The Burrito Project	107
What was the first name of the Australian diver who found T. melvinus?	Billy	109
What was the name of the guy in the flashy suit in Melvin's lab that kept telling him to move his stuff out of the lab?	Terrence	109
What does the bacteria in the stomach that helps digest food cause people to do?	Burp and fart	113
Where did Ben do his undergrad work?	Harvard	113
Where did Ben get his PhD?	MIT	114
What did Ben do for work?	He worked at a start-up company in Silicon Valley making video games.	114
Who did Melissa say Ellie and her grandfather were like together?	Rosencrantz and Guildenstern	117
What did Melissa do in Melvin's lab when he took her with him to work?	Washed test tubes	119
Why didn't Melissa like science?	She thought it was boring, without emotions, excitement or drama.	119

What did the sign say on Ellie's science teacher's table at the grocery store where people were protesting?	Abolish nuclear weapons now	121
What city in Japan was destroyed when the atomic bomb was dropped on it?	Hiroshima	121
Why did Mr. Ham believe that dropping the bomb on Hiroshima started the war?	We would always be waiting for the next bomb to drop.	121
Why did Melissa tell Melvin NOT to put the trash cans out at night?	They had raccoons that got into the trash	122
What did the town do to keep older kids off the streets on Halloween?	Had a dance at the youth center	124
What play production did Melissa have a hippie costume from?	Hair	124
What did Melissa dress up as for Halloween?	Little Bo Peep	126
What did Ben dress up as for Halloween?	A sheep	126
What did Ben's sign hanging on his chest say on Halloween?	I'm not lost. I just hate asking for directions.	126
What did Ellie dress up as for Halloween?	A mad scientist	126
What Halloween costumes worn by kids did Ellie like the best?	A boy dressed as Dorothy and a girl dressed as the Tin Man from The Wizard of Oz	126- 127
What did Raj wear for Halloween?	Green chino pants and a pink polo shirt with the collar turned up - a preppy	127
What kinds of dance lessons had Ellie taken?	Ballet, tap, and jazz	127
Who said 'When the age is in, the wit is out'?	William Shakespeare	131
Which play includes the line, 'When the age is in, the wit is out'?	Much Ado About Nothing	131
What did Raj give to Ellie for her birthday?	A burrito	133

What kind of food did Ellie request for her fourteenth birthday party?	French food	133
What dish did Ellie order at the French restaurant on her birthday?	Coq au vin	135
What was the best part of the meal at the French restaurant for Ellie's birthday?	A cheese cart with 20 kinds of cheese at the end	135
What did Ellie's mom and dad give her for her 14th birthday?	A gift card to a hair accessory store, a unicorn puzzle with 1,000 pieces, a cell phone with a pink glitter case	135
What did Ellie's grandpa give her for her 14th birthday?	A microscope	135
What did Ellie's dad do to pay bills when she was little?	Carpentry work and odd jobs	137
Why did Ellie's dad's hammer have teeth marks in the handle?	Ellie used to chew on it when she was a baby and was teething	137
What was Ellie's dad's name?	Jeremy	139
What was the name of the director of Les Misérables?	Francois	142
Why did Ellie's dad get mad when Melvin got sick after dinner?	He knew it wasn't food poisoning, but from drinking wine.	144
Why did they deactivate Melvin's key card at the lab?	The company had been sold and was moving to Malaysia	146
What things did Ellie and her grandpa Melvin look at through her new microscope?	A fern spore, a cotton fiber, a salt crystal, and a goldfish scale	146
What gave Ellie an idea of how to get T. melvinus from the lab?	The pizza delivery guy came to their house by mistake, and she remembered the lab assistants liked to eat pizza.	146
Who dressed up as a pizza delivery guy to get the T. melvinus from the lab?	Raj	147
What did Ellie see in her New York puzzle that gave her an idea to help them go to the lab to get T. melvinus?	Taxi cabs	149

After they successfully got the T. melvinus from the lab, what did Melvin, Ellie, and Raj eat at the Chinese restaurant to celebrate?	jellyfish	151
What did Raj say the jellyfish tasted like?	Rubber bands	152
What toast did Ellie propose with Melvin and Raj at the Chinese restaurant?	To the possible	152
What physical characteristic did Ellie share with Marie Curie?	Frizzy hair	156
What did Marie Curie's experiments bring her, in addition to the Nobel prize?	Death---the radiation poisoned her	156
Who got a crush on Melvin?	Brianna, Ellie's friend	157
What monster movies did Ellie watch on TV?	Creature from the Black Lagoon, The Mummy, and Dracula	161
Where did Raj invite Ellie to go with him?	To an Egyptian exhibition at the de Young Museum in San Francisco.	163
In what park is the California Academy of Sciences?	Golden Gate Park	164
What did Egyptians put a dead person's belongings inside along with their body?	A sarcophagus	164
What was the most disturbing thing to Ellie about the mummy at the museum?	The hair	164
What did they do with Mona Sagarsky's body after she died?	She was cremated and they scattered her ashes in the San Francisco Bay	164
Why did the Egyptians put a dead person's stuff in the sarcophagus with their body?	They thought their spirit could come back into the body if it was preserved.	166
What did one estimate put the final death toll from the atomic bomb at Hiroshima?	185,000	168
How did Ellie visualize the number of people that died when the atomic bomb was dropped on Hiroshima?	The number was equal to about 200 middle schools (with 900 kids each)	168

What question did Ellie ask her grandpa about what the textbooks would write about them?	If Melvin Sagarsky and Ellie Cruz changed the world; or ruined it.	170
What scientist did Ellie finally realize her grandpa Melvin was like?	Marie Curie, poisoning everything	170
What did Ellie realize Starlilly was trying to teach them?	Endings are sad, but beginnings are exciting - the cycle of life means moving forward, not backward	171
How did Ellie see her mom not moving forward?	She wouldn't move forward with Ben, even though he was perfect for her, because she was afraid of making a mistake.	171
How did Ellie get people to come see her mom's production of Our Town?	She handed out free tickets at school	175
Who invited Ellie to go out for frozen yogurt after the Our Town play?	Momo	176
What sport did Momo's brother play?	soccer	176
What did the character of Emily in the play, Our Town, say made life precious?	The fact that it doesn't last forever.	176
What book did Melvin say he misjudged?	Catcher in the Rye	179
What would a scientist do if they found mold on their cheese?	Look at it under a microscope	179
What did Melvin finally realize is human's greatest responsibility?	To be good ancestors	181
What did Ellie want her grandpa to find a cure for and win a Nobel prize for?	acne	181
What did Melvin finally do with T. melvinus?	He flushed it down the toilet	181
What did Ellie give to Melvin as a going-away present before he left on a cross-country bus ride?	Her collection of ponytail holders	184
Who was the fourteenth goldfish?	Melvin Sagarsky - Ellie's grandpa	184
How did Ellie and her dad paint her room?	Deep sea blue and glow-in-the-dark jellyfish	186

Who shared Ellie's love of monster movies?	Momo	186
What was Ellie's and Momo's favorite monster movie?	Them!	186
What scary movie is about ants that turn into monsters after being exposed to radiation?	Them!	186
Where did Melissa and Ben have their wedding ceremony?	At City Hall	186
What did Melissa say when the judge that married her and Ben said he loved happy endings?	It wasn't an ending, it was a happy beginning	187
How much did Ellie pay to become the 232nd member of the Official Melvin Sagarsky Fan Club?	\$20	187
Where was the Official Melvin Sagarsky Fan Club headquarters?	Helsinki, Finland	187
What started arriving in the mail for Ellie from Melvin's cross-country bus trip?	Slippers and postcards	187
Where were the alligator slippers from?	St. Augustine, Florida	187
What was pictured on the postcard Melvin sent to Ellie from St. Augustine, Florida?	The fountain of youth	187
What book did Ellie send to Melvin that was written by the author of <i>Catcher in the Rye</i> ?	Franny and Zooey	187
What was the picture of in the Egyptian puzzle Raj got for Ellie?	Pyramids and King Tut's sarcophagus	189
What did the label say on the package Nicole found on Ellie's front porch?	Contains Dry Ice	189
What was in the box sent by Billy from the Philippines?	A jellyfish even stranger than the last one	189