

Nick and Tesla's Special Effects Spectacular Educator's Guide

About the Book

What do a pair of kid inventors with a knack for science and electronics do when Hollywood comes to town? Why save the day, of course!

In *Nick and Tesla's Special Effects Spectacular*, 11-year-old siblings Nick and Tesla Holt find themselves on the set of a big-budget superhero movie. But someone's sabotaging the onscreen debut of their favorite comic book hero, so the brother and sister sleuths must crack the case with the help of a fresh assortment of homemade special-effects gadgets. This cinematic saga features instructions for all-new movie magic projects that kids can build themselves, such as camera gear, stunt dummies, make-up magic, and more. Science and electronics have never been so much fun!

"How do you connect students interested in STEM (science, technology, engineering, mathematics) with fiction reading? Look for science adventures. Get started with the Nick and Tesla series. Each book contains an engaging adventure revolving around a 'build-it-yourself' science project."—*Teacher Librarian*

"Real project blueprints are included along with this tale of 11-year-old siblings who create outrageous contraptions and top-secret gadgets."—*Los Angeles Times*

About the Authors

"**Science Bob**" Pflugfelder is an elementary school teacher based in Newton, Massachusetts. He has made many television appearances on *Jimmy Kimmel Live*, *The Dr. Oz Show*, and *Live With Kelly and Michael*, among other media outlets.

Steve Hockensmith is the author of a *New York Times* best seller (*Price and Prejudice and Zombies: Dawn of the Dreadfuls*) and an Edgar Award nominee (*Holmes on the Range*).

Prereading Activities/Topics

1. The names of our two main characters are Nick and Tesla, an obvious reference to Nikola Tesla, an inventor and engineer best known for his work with electricity and electromagnetic energy. Teachers may wish to have students predict the significance of the characters' names, given the novel's title and relevant information about Nikola Tesla.
2. The genre of the novel is mystery. Teachers may wish to discuss traits of an effective mystery (problem or question, suspense, answer or resolution) and use a basic plot chart to identify the "parts" of the plot in which each trait is emphasized (introduce

problem in exposition/intro; suspense increases in rising action to the climax; answer to the problem in resolution of plot).

Chapter Questions

Teachers may wish to use these chapter questions to check for comprehension either on an individual basis or through group (large or small) discussion. The questions range from those using basic recall skills to the more complex, inferential questions.

CHAPTER ONE

1. Why does Tesla freeze Nick's computer screen?
2. Contrast Nick and Tesla's reactions to their parents' disappearance, using evidence from the text.
3. Describe the relationship between Silas and his younger sister, Elesha, using evidence from the text.

CHAPTER TWO

1. Describe the difference between Silas's behavior toward Aunt Zoe and that of the other kids, citing evidence from the text.
2. Why might the citizens of Half Moon Bay not want the movie to be filmed in their town?

CHAPTER THREE

1. Why are the kids surprised to learn who the protestors are?
2. What do the protestors seem to dislike about the new Metalman movie?
3. Define "slang." Identify at least two specific examples of slang in the chapter. What is the purpose of this type of language?
4. Contrast Silas's and Aunt Zoe's reactions to seeing Metalman on set. What might account for the differences in the way they respond to him?

CHAPTER FOUR

1. What does Damon Wilder, the actor cast as Metalman, seem to disagree with the director about? What compromise do they reach?
2. Citing evidence from the chapter, how would you describe the mood on set? What might account for this atmosphere?
3. How does Silas's opinion about Wilder change in this chapter? How do you know?
4. Silas says to Tesla, "You could find a mystery just going to the fridge for a Coke" (66). What does he mean?

CHAPTER FIVE

1. What causes Damon Wilder to fall to the ground?
2. Describe Ashkinos's behavior after it becomes clear that Wilder is now unable to perform the scene. Does his behavior surprise you? Why or why not?

CHAPTER SIX

1. Who is the only adult that appears to be truly worried about Wilder? What is his job?
2. How do Nick and Tesla learn that the itching powder incident is not the first hold-up in production?
3. According to Nick and Tesla, who are the three people who had the opportunity to put the itching powder in the Metalman costume?
4. By the end of the chapter, who becomes Nick and Tesla's main suspect? Do you agree with their suspicion? Why or why not?

CHAPTER SEVEN

1. Is Tesla's plan to get the suspected canister of itching powder successful?
2. Why are movie studios opting to use computer-generated imagery instead of practical effects, according to Matt?
3. What new information about Damon Wilder do Tesla and DeMarco learn by talking to the protestors?
4. Why does Matt Gore become Tesla's number one suspect for sabotaging the movie?

CHAPTER EIGHT

1. What does the canister marked KA-BLAM really contain? How do the kids know?
2. What do the sentences "Tesla didn't even have to say it. They were going back." (133) reveal Nick and Tesla's friendship with Silas and DeMarco?
3. How might the kids use Silas's Bald Eagle stunt dummy as an excuse to get back on the movie set?

CHAPTER NINE

1. How do the kids plan to get onto the set undetected?
2. How is the interior of Damon's trailer different from what one might expect?
3. What promise does Tesla make to her brother Nick about their parents? How does Tesla justify spending her time on Aunt Zoe's movie's problems instead of looking for her parents?
4. What is an "exothermic reaction" (151)? How does the conversation between Nick, Silas, and Tesla help you define this term?
5. What do the protestors hope to accomplish? Do you think their protest is justified? Citing evidence from the text, explain your answer.

CHAPTER TEN

1. What script changes does Damon Wilder suggest to the writer? What situations does Wilder refer to that the kids find strange?
2. How do Wilder and Wiltrout suggest the production of the movie be improved? How does DeMarco react to their suggestion?
3. What happens in the trailer that nearly leads to the kids being caught?

CHAPTER ELEVEN

1. Who is the kids' second suspect? What motive does this suspect have to sabotage the movie?
2. Why does Tesla feel insulted when Silas criticizes her logic?

CHAPTER TWELVE

1. While his friends are worried that they have been caught, Silas is thinking about something else. What is it? What does this tell you about Silas?
2. What does Nick think will happen to them? How do you know? How sure is he that this will truly happen?
3. Silas calls the actors playing zombies "extras," but some of the actors are offended by this word. What do they prefer to be called? What is the difference between these terms?
4. What is a pay-or-play contract, and how does the possibility of Damon Wilder having one affect the production of the movie?

CHAPTER THIRTEEN

1. An allusion is a reference the writer makes to something he assumes the audience already knows. An example of an allusion is: "I'm melting," DeMarco groaned. "Mellllllting." (206). What movie is DeMarco's statement an allusion to? Explain why this reference is appropriate here.
2. What are Nick and Tesla looking for at this point in the story? Why?
3. A pun is a play on words. One example is the headline "Artisanal Toast Raises Dough" (209). Explain what this headline means.
4. The Teamster discovers Nick and Tesla outside Damon Wilder's trailer and chooses to leave them alone. What does this reveal about the Teamster's feelings toward Damon Wilder?
5. What is Tesla really afraid of? How does she overcome this fear?
6. Do you agree with Nick when he says "it's possible to be worried about something and still try to do something about it" (214)? Why or why not? Cite a personal example to support your answer.

CHAPTER FOURTEEN

1. Tesla is intelligent; in fact, she's smarter than the security guard, Dalasia. Cite three specific instances from the text that show this.
2. Why is the script compared to a "bright white diamond" (221)?

CHAPTER FIFTEEN

1. Who is the saboteur of the movie?
2. How does Cash Ashkinos truly feel about Aunt Zoe? Cite evidence from the text.
3. What does Tesla mean when she says that luck might not be the reason that security took so long to arrive at the old theater?
4. Explain the significance of the cast and crew applauding for Nick, Tesla, and their friends but NOT applauding for the exit of Damon Wilder and Jack Wiltrout.
5. What is the purpose of the last scene of the novel?

Targeted Vocabulary

Vocabulary instruction is often subjective; the methods for vocabulary instruction are varied. The targeted list is organized by chapter, and the chapter lists are all related by concept. Some, for example, focus on characterization. Others focus on setting. Teachers can pick and choose, add and/or delete words based upon their students' level and the teacher's school/district protocol for vocabulary instruction.

CHAPTER ONE

flickered (6)
endeavor (7)
prone (7)
bulbous (8)
obsessively (8)
prototype (9)
mirthlessly (10)
tormenting (11)
distract (12)
wallowing (13)
unkempt (16)
plummeted (17)
precariously (17)
tyrant (18)
stunned (19)
ominous (19–20)
aggression (21)
quivering (21)
shimmied (22)

CHAPTER FOUR

tromping (57)
clenched (58)
intoned (58)
gravely (58)
reluctance (59)
lingering (60)
smirk (60)
smarmy (61)
limbo (61)
raison d'être (62)

CHAPTER TWO

classy (33)
cumbersome (34)
meandering (34)
trudged (35)
glumly (35)
retorted (36)
ignored (39)
budget (41)
compromises (41)
visionary (42)
collaborative (42)

CHAPTER FIVE

grouched (74)
fruitlessly (74)
wailed (74)
annoyed (75)
quizzical (76)
craning (76)
gleefully (77)
resigned (79)
scoffed (81)

CHAPTER THREE

protestors (44)
miserably (44)
vigorously (44)
grunt (47)
grim (49)
jaunty (49)
maniacally (51)
craggy (54)
peered (55)
dismay (56)

CHAPTER SIX

taut (83)
incident (84)
salvage (85)
skeptically (85)
mull (86)
morphed (90)
waggling (91)

paraphernalia (62)
sidled (65)

CHAPTER FOUR

gaped (66)
sass (66)
mesmerized (68)
akimbo (69)
convulsion (70)

CHAPTER SEVEN

implicate (100)
profoundly (104)
rabble (105)
recognizable (107)
incredulous (109)
hurled (109)
motive (110)
meddle (113)
disembodied (113)
devious (116)
groped (119)

CHAPTER EIGHT

reflexively (121)
culprit (128)
blared (128)
trying (129)
grimaced (132)
sabotage (134)
decency (134)
spite (136)
imperceptibly (136)
pontificated (137)

CHAPTER NINE

swerved (145)
crackpot theories (146)
wincing (146)
gesturing (153)
disinterested (153)
wily (155)
commotion (156)
deserted (156)
rue (157)
infallible (157)
hovering (158)
resented (159)
sleekest (160)
gruff (160)

CHAPTER TEN

dismissively (165)
scowled (166)
ensued (167)
resumed (167)
distinctive (167)
immortal (168)
spectacle (170)
mode (170)
plea (170)
badmouthing (170)
confidently (171)
nimble (172)
pinwheeled (173)
cybernetically enhanced (174)
redeems (175)

CHAPTER ELEVEN

shambled (182)
hypothesize (184)
convince (184)
fluttering (185)
sarcastically (186)
mutely (187)
intrigued (187)
conceded (188)
smugly (188)
bellowing (188)
glaring (189)

CHAPTER TWELVE

culprit (190)
conservative (191)
statistician (191)
dumbfounded (191)
peripheral (194)
furrowed (197)
turnaround (197)

CHAPTER THIRTEEN

retrieve (205)
dub (205)
staggered (207)
bail (213)
anxiety (214)
wardrobe (216)
scanning (217)

CHAPTER FOURTEEN

overlooked (219)
pursuit (221)
outskirts (221)
careening (223)
perimeter (225)
peeping (225)
stride (227)

merits (198)

CHAPTER FIFTEEN

rendezvous (228)

squinted (229)

Dumpster diving (229)

vertical (229)

dingy (230)

fiddling (230)

bulky (230)

apprehensive (231)

warble (231)

saboteur (232)

fiasco (233)

vicious (233)

mortified (234)

emanating (234)

sputtered (235)

substantial (235)

emoting (235)

rippled (241)

accomplice (242)

humiliate (242)

antagonize (242)

startled (243)

drivel (243)

lamest (244)

resolute (245)

trudged (248)

Chapter Summaries

ONE

Nick and Tesla create a device to help their friend Silas take smoother videos.

TWO

DeMarco's aunt Zoe takes the kids to the set of a movie that she is part of and that is being filmed in downtown Half Moon Bay. When they arrive, they notice a group protesting the casting of the main character.

THREE

Silas is disappointed to learn that some of the scenes in the movie are not performed by live actors but are created using computer-generated imagery.

FOUR

The kids overhear the movie's star, Damon Wilder, and a writer named Jack Wiltrout offer suggestions to the director to improve the script and a particular scene. The director agrees to a compromise. During the take, Wilder falls to the ground in obvious pain.

FIVE

As Wilder screams in pain, the crew and other actors on set watch as the kids run to Wilder's aid, tearing off his costume. The director, Cash Ashkinos, appears almost happy and relieved that Wilder, afflicted with the reaction to itching powder doused inside his costume, is unable to perform the scene. Ashkinos calls for CGI to be used instead.

SIX

The executive producer appears on set, concerned not only about Wilder but also about the overall safety and security of the entire production, alluding to other "incidents." When Aunt Zoe leaves set in order to call the studio executives and reassure them, the kids follow Matt, the prop guy, as he removes the costume from the set. When Matt discovers the kids following him, he takes them to his prop trailer, where Nick and Tesla spy what they suspect is itching powder in a canister high on a shelf.

SEVEN

While returning with Silas's props from Aunt Zoe's car, Tesla and DeMarco learn how bad an actor Wilder is, and how mean he is to Matt, when a protestor shares a YouTube video of an on-set incident. When Matt explains to the kids why movie studios choose CGI over practical effects, Tesla realizes Matt has a motive for sabotaging the movie: to save his job. Back at Matt's trailer, Silas uses the animatronic arm to reach the suspicious canister, only to grab the wrong one.

EIGHT

Silas not only drops the canister he'd grabbed by mistake but also inadvertently knocks over the canister that the kids suspect contains itching powder. While Nick nabs the fallen canister and

hides it, everyone leaves the trailer after Tesla is reassured that Matt suspects nothing. The kids discover the container they thought held itching powder in fact contains Metamucil. Although Aunt Zoe insisted that the kids be brought home, Tesla devises a plan for them to return to the set undetected using Silas's Bald Eagle stunt dummy.

NINE

With the help of one of the protestors and Silas's Bald Eagle stunt dummy, Nick, Tesla, and the boys divert the security guards' attention and sneak back onto the movie set, only to end up hiding in Damon Wilder's "swanky" on-set trailer. There's just one problem: Wilder is in there, too.

TEN

The kids hide behind a bar, eavesdropping on Wilder's conversation with Jack Wiltrout, the writer. Wilder and Wiltrout are discussing "improvements" to the Metalman movie script and also air their concerns about the director and Silas's Aunt Zoe. They want both Cash and Zoe ousted.

ELEVEN

Phase two of the plan involves the kids donning zomboid makeup and posing as extras for the movie. When they've decided to observe the makeup crew, a production assistant (P.A.) calls out for all zomboids and then leads them away.

TWELVE

The kids are surprised to find that, instead of being caught, the P.A. takes them to the old theater, where the zomboids are waiting for their call. The kids overhear other extras and learn that in the past Damon has always been a well-behaved, dedicated actor; some theorize that his behavior has changed because his new contract pays him a lot of money, no matter what happens. Tesla thinks she's figured out who is sabotaging the movie and why.

THIRTEEN

The kids sneak out of the holding area to look for evidence to support Tesla's theory. Nick and Tesla find the script Wilder and Wiltrout had been working on in the trash bin behind Wilder's trailer. But before they can grab it, the trash is hauled away.

FOURTEEN

Nick and Tesla find the script atop a trash pile on the outskirts of the movie set, and Tesla keeps the security guard occupied until Nick can snag it.

FIFTEEN

Nick, Tesla, and their friends prove that Damon Wilder and Jack Wiltrout were sabotaging the Metalman movie. Their plan was for Wilder to be fired from the movie and then they would use the money he'd earned to finance the film that they had been planning to produce. After proving their theory, Nick and Tesla return home, where Nick reads a cryptic e-mail about his

parents. Just before he can open the attachment to the message, however, power to the house—and computer—is lost.

ADDITIONAL ASSIGNMENTS

The CCSS ask students to conduct basic research. The abilities to formulate a question and use credible sources are two important components. A third is the ability to write unified informative and argumentative pieces. The following assignments and activities include several that can be used to meet the CCSS for writing. Depending on how the topics are worded, they can be used as either informative writing topics or argumentative topics. Several of the activities provide the opportunity to assess student comprehension in a different manner, requiring students to use specific examples or references to the novel to complete. Activities that pertain to specific chapters have the chapters noted.

1. (Chapter 1) Draw a picture of Uncle Newt, based on the description given on page 16.
2. Write an informational essay about Wardencllyffe Tower. Questions to consider answering in the essay include: What is it? Where is it located? Compare and contrast its original function with its current function.
3. ONGOING—Write a compare-contrast essay about computer-generated imagery versus practical effects. This essay can be informative or argumentative if the student chooses to argue that one is more effective than the other.
4. ONGOING—Have students keep a list of idioms and their meanings used throughout the novel, like “time to face the music” (47). This is particularly useful for ELL students.
5. Write an informational essay on the use of slang in American culture, including specific examples from the novel as evidence.
6. ONGOING—Have students identify three allusions the authors use and explain the purpose of these references.
7. Write an informational essay about the major positions on the staff of a motion picture production crew. Students should be encouraged to develop the list based on the characters’ jobs in the novel. Cash Ashkinos would inspire students to include the position of director, for example.
8. Write a literary analysis essay explaining the purpose of Uncle Newt’s character. He seems to be a minor character, appearing only at the beginning and at the ending of the novel. Why is he included at all?
9. Write a literary analysis essay comparing and contrasting Nick and Silas.
10. (Chapter 11) Watch an action film and analyze its acts. Does it match Silas’s assessment of the three acts he explains in chapter 11?
11. Write an argumentative essay evaluating the appropriateness and/or effectiveness of the title of the novel.
12. Damon Wilder claims he was accepted into Julliard. Have students write an informative essay about this institution of higher education in the fine arts.