Photograph by Juli Leonard

A Curriculum Guide to:

What the Dog Knows Young Readers Edition
By Cat Warren

About the Book

Cat Warren and her dog, Solo, bring science to life in this book for young readers, telling the story of their life as working partners. Overly energetic Solo and his new owner weather a rough start, but Solo's vibrant personality and his keen nose are soon put to use during cadaver dog training. Upon graduation, Solo and Cat hone their skills through continual training and work. Solo is one example of a variety of working dogs whose skills and abilities have helped rescue or locate the missing or the dead, bringing peace to their families. The book relays the story behind the science, the meticulous and grueling training, and the value of handlers and their dogs in these types of searches.

Standards

The questions in this section address the following Common Core State Standards: (RI.3.1, 2, 3, 4, 7) (RI.4.1, 2, 3, 4, 5, 7) (RI.5.1, 2, 3, 4, 7, 8) (RI.6.1, 2, 3, 4, 6, 8) (RI.7.1, 2, 3, 4, 5, 6, 8)

The discussion questions and activities below address the following Next Generation Science Standards: (LS1.A, LS1.B, LS1.D) (LS2.D) (LS3.A, LS4.B) (ESS2.D) (ETS1.A, ETS1.B, ETS1.C)

Discussion Questions

1. Describe the book's structure: think about the number of personal stories compared to the strictly factual information. Why do you think the author chose to use a combination of the two? What does this tell you about the author's intentions or the messages she was trying to convey?

2. Why is the author upset after she and her husband bring Solo home?

3. Why do the author and her husband change the pup's name from Coda to Solo? Explain their reasoning. Do you think the new name is fitting?

4. Describe the relationship between search dogs and their handlers. Why is it important? How does a handler instruct a search dog?

5. The author mentions the words *aww* and *awe*. Discuss the differences in meanings and explain the context of the paragraph she is describing. Can you think of other moments in the book that make you feel either *aww* or *awe*?

6. Define irony and find an example from the book. For a hint, look at the author's name.

7. Find an inference that can be made about one idea or scene in the book. Describe the inference and the evidence to support it.

8. List the various kinds of jobs scent-detection dogs can perform. What makes certain dogs more suitable for one job over the other?

9. Why does the author look for a stubborn, energetic dog when she needs to train a second one? What other qualities might be important in scent-detection dogs? What qualities might be important for handlers to have?

10. Why do search dogs have a limited working life? What might happen if they're pushed past this period?

11. Explain the value of a puppy growing up in a litter as opposed to being a singleton. How might they develop differently? Think about your experiences growing up in your family: Are you an only child, or do you have siblings or other children who live with you? How has your role in your family affected you?

12. Describe how dogs can find missing people in water. What most surprised you? Why is this skill so important?

13. Describe a dog's "alert" and the moment Solo first displays his. What other examples of alerts are discussed in the book? Why is it an important form of communication?

14. Describe Solo's personality. How does it compare to that of other search dogs? How does it affect the way he interacts with the author?

15. Describe the author's and Solo's experiences training under Kevin, Nancy, and Mike. What are some of the similarities and differences in these trainers' tactics? How does each session affect or advance the canine/handler relationship?

16. Explain the "Clever Hans effect" and where the name comes from. How can the phenomenon negatively impact handlers and dogs in this line of work? What kind of warning does this section of the book serve?

17. What conditions influence or affect the search dog's ability to smell? How does this impact the outcome?

18. What are the drawbacks of using other animals for scent detection? Compare and contrast their abilities with that of search dogs. Think about the study of trying to train other animals than dogs mentioned in the book, and the example of pigs searching for truffles versus land mines.

19. What are cryptids, and how do they relate to the book?

20. How were dogs used in the Vietnam war? How did this give researchers an idea of how to use them in the United States? Why would their wartime work have been appealing for other uses?

21. Explain the relationship between "whorls," or cowlicks, and guide dog potential? What other factors might be involved in determining whether a dog makes a good guide dog?

22. Identify the book's themes. How do they relate to science today? Where can you see these dogs and their handlers being most useful in the future? Explain your thinking.

23. In the Notes and Extra Reading and Viewing section at the end of the book, the author explains the meaning of an "off-the-record" or "deep background" interview. What kind of people might not wish to be directly quoted? Explain your answer.

Extension Activities

1. Which dog would you choose if you were to become part of a cadaver-dog search team? Use *What the Dog Knows* to identify some of this breed's characteristics and skills. What makes you choose this dog over others? Research more information about your breed and their abilities, and then write a short training plan that will help bring out your breed's best skills and support their personality.

2. Imagine what it would be like to interview a search dog and handler involved in either police work or a search. Write a list of questions you would ask. Then, pair with a classmate and take turns being the interviewer and interviewee.

3. Use content in *What the Dog Knows*, books in your school library, or the Internet to locate illustrations of the anatomy of a dog's nose. Then create your own drawing, and label each part. Write a short explanation of each part's function and how it may affect their abilities. Consider reading the PBS article mentioned in the book's Notes and Extra Reading and Viewing section at https://catwarren.com/young-readers/#chap2, or other books about noses and scent the author includes there.

4. The author suffered the loss of her father, finding it difficult to remain interested in her work with Solo. Describe what you know about the emotional connection between people and animals. How might being with Solo have helped the author? Think about your experiences with animals. Have they ever helped you through a tough time?

5. Write a scene from the perspective of a new dog or puppy owner. Describe what they might see in the dog's or puppy's behaviors, and how the owner might be feeling.

6. Choose your favorite chapter in the book, and turn to the corresponding section in the Notes and Extra Reading and Viewing pages. Visit any websites mentioned there to learn more about this chapter's topics, and consider reading any of the books the author includes. Share the information you find most interesting with your classmates.

7. Chapter Twenty describes attempts to use insects for ambush detection. Ticks show promise, but need weights on their feet. Draw an image of what you think a weighted tick might look like. Why might this be problematic? Then draw an image of an animal you think would be well-suited for ambush detection, and explain your reasoning.

8. Research robotic dogs and e-noses. Describe the pros and cons of each, and discuss their abilities in relation to real dogs. Then write a letter to a search dog organization explaining why you think they should or should not add robotic dogs to their efforts.