Steinbeck: Cannery Row: Art/Science Connected
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"We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time"

T. S. Eliot, The Four Quartets

Anything can be a starting place.

Keri Smith, How to Be an Explorer of the World

Intro: It is my sense that Cannery Row is in part, and particularly in its portrayal of Doc, a celebration of the power of the Arts and Sciences to lend meaning to human lives. It is in this spirit that this lesson was designed. It is hoped that at least some part of the idea will be useful to others.

I. Text: Cannery Row – John Steinbeck
Other texts: Sonnet: To Science – Edgar Allen Poe
When I Heard the Learn’d Astronomer

Level: Middle School/High School

Purpose/Objective:
   a. To introduce the idea of Science and Art as differing but mutual and complementary human paths towards knowledge, truth and enlightenment.
   b. To identify and recognize these twin threads/elements in a selection of text from Cannery Row.
   c. To utilize scientific and artistic observations to facilitate a close reading of a rich and most beautiful chapter of literature.
   d. To introduce the novel Cannery Row.

Overview:
   Discussion of Science and Art will be initiated with the poems by Whitman and Poe. Scientific and artistic purposes, methods, and thinking will be discussed. A close reading of the last chapter of Cannery Row will follow, noting the interrelationship of Art and Science within it.

Procedures:
A. The poems by Poe and Whitman are read out loud, and discussed, one at a time. Students should have paper copies (that they can mark on) as well. These poems naturally provoke discussion of the relative values of Art and Science, are skewed towards Art, and
emphasize the differences of the two pursuits. Students will read and respond to the poems. What are the authors saying about the relative values of Art and Science? Do you agree? What is Art? What is Science? Teacher should task students with finding evidence to support their interpretation. This could be reasoned logic or inexplicable insights.

B. Students brainstorm in small groups regarding Art and Science, making a list of methods, purposes, ideas and attributes for each of these disciplines. What are responsibilities of an artist? What do they do? What are the responsibilities of a scientist? What do they do? Are there connections between the disciplines? Discuss findings with large group. As the discussion occurs the teacher completes a Venn diagram on the board, with one circle for Art and one for Science and an area of overlap for commonalities noted.

C. Utilizing the Venn diagram and the discussion as a starting place the teacher leads a discussion on the topic: How do writers utilize scientific and artistic methods and thinking to create their work?

D. Before we read: How can we as readers use both scientific methods and artistic thinking to read the chapter? (observation, evidence, inference, intuition, representation, imagination…). What are the scientific and artistic tools available to the writer of a novel? (A review of the Scientific method could also be facilitated here.)

E. A close reading of the last chapter of Cannery Row will follow, guided by the previous discussion and the following questions:

As we read: How is the author utilizing scientific and/or artistic methods in this chapter? As we read, what specific evidence leads us to what specific insights? Can you identify any artistic or scientific content/subject matter in this chapter? Is the writer thinking/writing like an artist or a scientist? Is the character (Doc) thinking/acting like a scientist or an artist? Cite evidence. (The “As we read” questions could be assigned to students individually if the chapter reading is done as HW. The before questions, and to a lesser extent, the “after” questions would be best completed as a small or large class group exercise.)

After we read: What specific evidence of scientific activity and thinking is observed within the chapter? What specific evidence of artistic activity and thinking is observed within the chapter? By, and in, his explicit utilization of both scientific and artistic content and methods within this chapter, what is Steinbeck saying about these disciplines? What is the role of art within this chapter? What is the role of science within this chapter? What is valued in this chapter? Can art contain science? Can science contain art? What makes for good science? What makes for good art? What is essential for each? Can something be both art and science? What are the connections and overlaps of science and art within the chapter?

Assessment: Written answers to some of the Before, As, and After questions may be used to assess student engagement/knowledge. If the class group is not too large, a group
discussion, which should occur anyway, could serve to assess this learning. Artistic projects and hands-on Science activities would be natural activities here, and could be utilized to assess learning as well. Indeed, “doing” Science and “doing” Art might be essential for furthering the discussion for many.

**Next:** Identify the chapter as from Cannery Row. Assign novel in whichever way that you wish, in class, home reading, or both.

**Optional Final Assessment:** Written responses to a variety of comprehension questions on the novel, which includes some of the “bigger” questions, as above, would be ideal. Artistic and/or Scientific projects that amplified moments or these themes would be excellent. The general idea is to get at how the theme of Art/Science is part of the “story”, how it impacts the narrative, and in some ways becomes one of the big ideas of the book. Depending on the size of the group, some of this assessment could take place within the context of group discussion.

**Words to the wise:** This is a big “lesson”, more like a unit idea, really. It is intended as an introduction to Cannery Row, but it also leads naturally to many other possible extensions: The art of Andy Goldsworthy, Christo, “Spiral Jetty”; The Renaissance (Scientists and Artists alike: DaVinci, Durer, etc.); Life and writings of Ed Ricketts; Ricketts/Steinbeck: Mutually beneficial relationship (as Art/Science)?; Field Science activities; Steinbeck and his use of the “real” in his stories; to name a few.

Ideally the Steinbeck chapter can be approached without identifying it as the last chapter of a book, without identifying it as Steinbeck, without identifying it at all, really (if possible). Look at it as evidence, pure and simple, without expectation.

Surely good readers naturally and unconsciously use the tools of Art and Science as they read. This lesson brings some of that thinking into relief.

It is important that the discussion of Art and Science lead to a sense of interrelationship and commonalities between the two, such as sensory input, observation, the gathering and presentation of information, etc. Differences should include that art is a creative ordering of a world, whereas Science is theoretically involved with making careful, objective observations of worlds. A discussion of subjective/objective POV might be appropriate in general, and as applied to the chapter in particular. And, as Steinbeck has very purposefully woven all these ideas together, an important point is to consider what his POV is on science and art. Obviously these big questions won’t be entirely answered, but a potential window of insight may be opened to the consideration of these type of phenomenon in an ongoing way.

The idea of starting at the end is odd, to say the least, but it makes sense both as an examination of Art/Science (the chapter is rich with it), and as a pre-reading of a great conclusion to a story, that will not likely spoil the narrative for anyone, and hopefully enrich the approach taken greatly (as well as open up the idea that you, as an active reader, can start anywhere!). The teacher can decide the degree of explicitness with
which he/she chooses to reinforce the ideas of the lesson as the whole book is read. The metaphor of Cannery Row as a tide pool might play into this as well.

The poem, “Black Marigolds”, which is imbedded within the last chapter (and one other), could be studied as well. A Poetry unit could precede or naturally follow Cannery Row as well. If so, Eliot’s Four Quartets might be studied as well. The quote, at the top of the lesson, could be utilized in lieu of the whole poem as an impetus for exploration and interpretation (and an affirmation of the idea of beginning at the end!). Keri Smith’s “How to Be an Explorer of the World” is a great sourcebook for hands-on learning activities that ignore and embrace the boundaries of Art and Science.

Sources: Poe, E. A.; Sonnet: To Science  
Whitman, Walt; When I Heard the Learn’d Astronomer  
Steinbeck, John; Cannery Row

Optional: Mathers, E. Powys (translator); Black Marigolds  
Eliot, T. S.; The Four Quartets  
Smith, Keri; How to Be an Explorer of the World

Notes:

Art= the creation, ordering of a world, whereas Science = the observation of the world, of the order that exists within the parameters prescribed. Both are inquiries into the world in an attempt to make sense of it. Question: Is the act of seeing/observation itself a creative act?

What is the role of art (the arts) within this text? (Art is transformative)

Commonalities:  
Inquiry  
Evidence/insight  
Leaps of imagination  
Framing a world  
Discipline  
Can trigger transcendence, a sense of beauty

Does Art have the final word?
A few more “as you read” or “after you read” questions:

Can you utilize scientific thinking to explain the meaning of this chapter?

What is it that triggers the transcendent, reflective quality in this reading?

Are both Science and Art necessary for a fully human existence?

How do Science and Art complement each other?

What is the role of the arts within this chapter?