###### Unit of Study: Informational Writing about Science: Grade 1

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| Prior to the start of the unit:  * Collect ideas and prepare for a series of science experiments that yield quick results to observe and record.. * You may want to have students work in groups of 3 and have two groups at a time work on the same experiment. That will reduce the number of experiment types going on in the room, but allow for smaller groups to facilitate higher individual participation in each group. * You will want to select some experiments to use as models for the work we are expecting students to do in their small groups and independently: learning, experimenting, recording, observing, and questioning. * During Days 1 – 10, you will teach students to be specific in their observations in different ways. Days 11 – 15 focuses on teaching students to put together the information in a “report” or book by including different sections. A table of contents may be helpful. | Day 1 **Scientists Write to Learn About the World around Us, Experiment to Answer Lingering Questions, and Use What We Know about Nonfiction Writing to Teach Others What We Have Learned**  **Teaching point: “**Scientists record as much information as they can while they are observing and studying a topic. Scientists can draw detailed, precise illustrations, add labels, write step-by-step what they observe, and describe using their senses.”  ***Select some experiments on various topics for groups of students to try, observe, and record.*** | Day 2 **Teaching point:** “Scientists can use specific tools to observe and record exact information about their observations.” (for example, nonstandard rulers, graph paper, hand lenses)  ***Continue experimenting, observing, and recording.*** | Day 3 **Teaching point:** “Scientists use science language in their writing to teach their readers.” See the video [Whole Class Instruction to Teach Students to Use Domain-Specific Vocabulary Within Informational Writing](http://readingandwritingproject.org/resources/units-of-study) (scroll all the way down the page under Informative/Explanatory Writing). **Mid-workshop teaching point: “**As scientists are writing about their experiments, they need to also make sure that they have paper that helps them write as much as they can. Choose paper from the writing center by asking yourself, ‘Does this paper choice give me enough room to do my best writing?’ ‘Could I make a booklet to collect more information?’ ‘Do I need to make my own original paper choice for the writing that I plan to do?’” |
| **Day 4**  **Scientists have questions about what they observe.**  **Teaching point:** “As we are conducting our experiments, we think about the essential question and use it to think about what to record. As we are recording, we jot our lingering questions, big ideas, or conclusions to our experiments.“  ***Tie into Lobster Tales trip (generate questions during the share that they have prior to the trip).*** | SCIENCE WORKSHOP **Scientists create their own experiments from their questions and observations.**  **Teaching point:** “As you work with your partners, you need to decide whether or not an experiment is possible to test. Although your ideas might be good ones, you’ll have to decide whether or not they are possible in our classroom. Some questions to consider as you make these important decisions might be ‘Do we have all of the materials that we need?’ ‘How long will this experiment take?’ ‘Do we have enough time?’ ‘Which experiment will we want to start with?’ and so on.” | Day 5 **Teaching point:** Repeat from Day 4.  ***Model with an experiment for which the class developed an idea in the science workshop (previous cell of this chart).*** | Day 6 **To Lobster Tales!** |
| **Day 7**  **Science Writers Use All They Know About Writing Information Text to Share Their Learning**  **Teaching point:** “We can use everything that we remember from writing how-to books and our class experiments to support us when we are writing our own experiments. We can think about what we need and consider each step in the experiment and how we will add illustrations that teach in a way that someone could follow our directions.  ***Model with an experiment for which the class developed an idea in the science workshop.*** | **Day 8**  **Science writers think, write, and record in different ways to collect enough information to teach others.**  **Teaching point:** “We need to think about how we might ask a question, include background research, construct a hypothesis, test our hypothesis by doing an experiment beforehand, study our information, and draw a conclusion to share our results. ***Shift to ocean-specific experiments.\**** | Day 9 **Teaching point:** Repeat from Day 8 and demonstrate with a different example. | **Day 10** Teaching point: “We can revise our writing by working with others. You can work with your partners to decide where you might add more specific information or additional steps or where you might take away unnecessary parts. Being specific allows our readers to replicate our experiments. We can add information that teaches how much, how long, how it moves, and so on.” Mid-workshop teaching point: “When we revise, we want to make sure that our steps match, and sometimes we need to take away parts that don’t match or are not clear.“ |
| **Day 11** Putting All of Our Learning Together and Publishing Our Informational Books **Teaching point:** **“**Writers plan informational/experiment books by rereading our notes and thinking about the big things that we learned and the experiments that we conducted. Then, we can choose the information that is important to teach others.” **Mid-workshop teaching point:** “As we write, working with partners can help us remember and decide on the information that is most important to include in our books. | **Day 12**  **Teaching point:** Using mentors can help us make our writing look and sound like other science books in the world. We can think about how we want our whole books to be structured, individual pages to be organized, which details science writers often include, and so on. As we study our mentor texts, we may ask ourselves, ‘What is this author doing in her writing that I could do, too?’” **Mid-workshop teaching point: “**As we write, we can choose or design our paper choice to match our mentor texts. We can keep our mentor books at our writing spots and study how the author organized the page.” | Day 13 **Teaching point: “**Writers use everything that we know to revise and say more in our lab reports. We can use everything that we have already learned about informational writing to make comparisons, give examples, use definitions, and so on. This will help our readers understand what we are teaching.”  ***This would be a great time to take out your anchor charts from your nonfiction writing unit to remind students about what they learned (and already know!). You may want to divide this lesson into 2 days, emphasizing something new that perhaps you didn’t teach explicitly in January or that would be particularly helpful for this unit.*** | **Day 14**  **Teaching point:** “Writers can include an introduction and conclusion to our books. When we are writing our introductions and conclusions, we think about the important points in our books. We can highlight the important information and tell a little of that in these two sections.” To demonstrate, you may want to look at mentor texts to see what they do (ask the readers a question, recap the important ideas).  ***It might be interesting to consider a place for a QR code that will allow a short video of an experiment, if that fits.*** |
| **Day 15**  **Teaching point:** “Today I want to remind you that you are writing for readers, and just like we have done in all of our pieces across the year, we want to make sure that our writing is as easy to read as possible. We have a toolkit full of strategies to help us edit our writing. As you edit your writing, remember to check your spelling, use capital letters at the beginning of sentences, and punctuation at the end of sentences.” | **Day 16** Teaching point: “As we get ready to publish our books, we will want to think about ways that we might fancy them up. Today I want to teach you how we can include photographs, different fonts, and an eye-catching cover or an intriguing back blurb to make others want to pick up the books that we have worked so hard to write.” |  |  |

\* ***At this point, you will want students to shift to ocean-specific science experiments. Maybe groups focus on one type of investigation (oil pollution/cleanup, salt/fresh water differences, etc.) and conduct two or three experiments that relate to this idea. Then they can include information from the reading they have done, the experiments they have done, and collect information for the books they will begin writing about Day 10.***