General Science Notebook Rubric

	3 Exceeds Expectations	**2** Meets Expectations	**1** Needs Improvement	**0** Not Demonstrated
Written Communication & Reasoning from Science Notebook Prompts*	Responses include key parts of the question. Student thinking and reasoning is explained. Connections are made beyond what is asked.	Responses include key parts of the question for clarity. Reasoning is correct.	Responses are inaccurate or incomplete.	Not enough writing was done to communicate understanding of the prompts.
Data Analysis	Data tables complete and legible with units included. Explanation of data integrates information from booklet.	Data tables complete and legible with units included.	Data or explanation is incomplete.	Not enough data to draw conclusions.
Scientific Illustrations	Drawings are complete and labeled. Scientific observations demonstrated by level of detail and color.	Drawings are complete and labeled.	Drawings incomplete with lack of attention to detail.	Drawings difficult to decipher.
Teamwork	Collaborates with partner sharing materials and tasks. Communicates thinking throughout exploration.	Collaborates with partner sharing materials and tasks.	Controls equipment or investigation without attempts to include partner.	Withdraws from partner and or investigative process.

*See page 2 for details on kit Science Notebook prompts and tasks.

Get Critical Science Notebook Prompts

Page 5: Draw a diagram of your setup and use the green colored pencil to show what happens to the light. Label the incoming beam the Incident Ray and the outgoing beam the Reflected Ray.

Page 6: What do you notice as you change the degree of the Incident Ray from 70 to 65 to 60?

Page 7: Copy the data table into the science notebook and record the critical angle of water.

Page 8: Record the critical angle of the sugar water and glass.

Page 9: Graph all of the data points from the data table on the provided graph template and tape this into your science notebook. Extrapolate what a diamond's critical angle would be and record this number in the data table.

Page 11: At which angle does the amount of light coming through the fiber optics cable drop off?

Page 12: Record your Morse Code messages in your science notebook.

Page 14: Draw what you observe when you look through the slit in the two pencils towards the with light.

Page 14: Tape the scale template into your science notebook and shade them in according to what you see in the spectroscope with each of different lights.

Page 16: What do you see on the other end of the fiber optics cable when you shine all three colored light blocks through the other end at the same time?

Page 16: Describe what happens to the spectrum in the spectroscope when you block one of the colors before it enters the cable.