The website “freezeray.com” consists of a wide variety of science teaching aids in the form of interactive models. The interactive models included in this website are categorized by their branch of science. For example, the biology section contains interactive diagrams of the heart, the eye, and the ear, just to name a few. Teachers may want to reference these diagrams throughout the lesson they teach by projecting them on a Smartboard during class. A diagram such as this can be used to introduce a topic or assess student knowledge during and after a concept is taught. Students may also use these interactive diagrams as a study tool at home. There are a variety of uses for these interactive activities, allowing teachers to be creative with how to they utilize them in their classrooms and students to practice science skills independently.

In the Investigations tab on freezeray.com, students and teachers can create graphs and graphic organizers. Both of these pages can assist students when completing lab reports and compiling and organizing data. Teachers may also choose to use the “planning aid” section to create review sheets or notes pages for their students to use and/or fill out during a lesson. In addition, the “Scientific Literacy” section of the website provides students with more independent practice of their science skills. Teachers can create various types of sentence starters or “key words” activities for students to use in their classrooms or for review at home for homework.

Even with so many options and topics to choose from, freezeray.com may come with some negative attributes as well. Many of the interactive models do not come with written instructions on how to use them or to describe what the viewer is actually seeing or manipulating. As a teacher, I would appreciate written instructions and an explanation of the science behind each model to be included with each one. This would be very beneficial when
promoting student use of these models at home. My students would definitely figure out how to use them, but would most likely not fully understand what they are viewing and what the science concept is behind it. The other negative aspect of this website is that the models run using the Flash plugin. Although Flash is very common nowadays, some computers and/or tablets may not have it, especially in a school setting. These models would be unusable if a school does not have Flash enabled on their devices. Even though there are a few negatives to using freezeray.com, I would still love to incorporate it into my teaching.

In my middle school science classroom, I would utilize many of these tools to assist both my lesson planning and my students’ learning. For example, one of the units I teach at the start of the school year is the solar system. One topic of study during this unit is the moon and its phases. In the Physics/Earth and Space section of the website, there are interactive models of the moon phases, as well as one about the seasons. I would love to introduce my students to these interactive models during my teaching. I think many students struggle with understanding how these phases occur, so this model will be an effective tool to model the movement and phases of the moon throughout the lunar cycle. I would also provide links to these interactive models on Google Classroom so that my students can practice and view them at home when completing homework or preparing for assessments. With New Jersey now using the Next Generation Science Standards, models like these are very valuable resources to incorporate into my teaching as much as possible.