Card Sort Answer Keys

# Science

|  Card Color | Substitution | Augmentation | Modification | Redefinition |
| --- | --- | --- | --- | --- |
| Green | Students will match the word with the pictures of ecosystem components on Google docs.  | Students will create an infographic for an ecosystem using Google drive.  | Students will use Google Cardboard/VR viewer to take a virtual reality trip to an ecosystem.  | Students will use Google hangouts to interview a marine biologist to discuss how the ocean ecosystem is changing and how we can help. Then create a PSA video to publish on class’ Google site.  |
| White | Use Google Draw to create a model. | Draw an evidence-based model in Google Draw using authentic data sets available online. | Evaluate strengths and weaknesses among online models and simulations relative to scientific reality. | Collaborate with a scientist over Skype/Google Talk to create a model based on their research that will be published online as an open education resource. |
| Blue | Record daily weather variables (e.g., temperature) into a class-wide Google Sheet. | Analyze local climate variation using historic weather data from online scientific databases and enter it into Google Sheets. | Use the Google Earth time lapse feature to model a notable effect(s) of climate variation on a specific location.  | Participate in an I See Change citizen science investigation by providing local scientific data and a written narrative of how those particular variables in local weather and climate data impacts you. |
| Pink | Complete a worksheet in Google Docs describing landforms. | Use Google Slides to make a landforms “book” page that includes pictures and descriptions of a specific type of landform. | Use Google My Maps to locate a real-world example of a specific type of landform and include a description of the place. Add this to a “book” page with pictures and general descriptions of that type of landform.  | Use Google Tour Builder to create a virtual field trip to several real-world examples of one type of landform. Each location should include place-specific geological details. |

# Math

|  Card Color | Substitution | Augmentation | Modification | Redefinition |
| --- | --- | --- | --- | --- |
| Green | Use Google sheets / Excel to calculate central tendency.  | Use explore function on Google Sheets to collaborate with other students to compare mean data.  | Students create a lesson (book, iMovie, educreations) for other students explaining how to solve for unknown quantities.  | Incorporate interactive multimedia – audio, video, hyperlinks – in the presentation to give more depth and provide more engaging presentation. |
| White | Use an Excel spreadsheet to let students "color in" the blocks of fractions.  | Using Google Sheets to let students "color in" the blocks, where the teacher can offer feedback directly on a Sheet.  | Use a fractions app, like Geoboard instead.  | Create a YouTube video that demonstrates how fractions are used in everyday activities. |
| Blue | Based upon a task card, students interact with the problem by solving it and recording their thinking. | Students solve problems via a worksheet and self-check answers using QR codes.  | Create a digital travel brochure exploring geometric shapes in the neighborhood that incorporates multimedia and student created video. | Virtually interview an architect about geometric shapes used in building design. Create an infographic using the interview results that describe the mathematical features of an example shape and why it’s used in architecture. |
| Pink | A Word Processor replaces a Pen/Pencil in a Math worksheet.  | The document created using the Word Processor and text-to-speech function is shared on a blog where feedback can be received and incorporated to help improve the quality of writing. | Students solve problems via a PDF and send work toteacher via Edmodo.  | Use presentation software (like Powerpoint or Prezi) to construct a presentation providing information about a selected locale. |

# Social Studies

|  Card Color | Substitution | Augmentation | Modification | Redefinition |
| --- | --- | --- | --- | --- |
| Green | Students will type a paragraph explaining the author's purpose of a propaganda poster citing textual evidence to support the explanation.  | Based upon a primary source document (ie: propaganda posters) students will create a graphic organizer to explain the author's purpose citing textual evidence to support the explanation.  | Students locate similar and contrasting posters via the web or Gale database. Type a paragraph comparing and contrasting at least two posters citing textual evidence supporting the explanation.  | Students take a virtual field trip of a museum to view propaganda posters.  |
| White | Recreate a chart using Google Sheets.  | Color code the table , label the information, format line borders using Google sheets.  | Take a class survey with Google Forms. Use the information to create a table and chart.  | Identify a school-wide issue. Take a survey to collect possible solution data with Google Forms. Create the table with solution with Google Sheets to present to principal with Google Slides.  |
| Blue | Use presentation software (like Powerpoint or Prezi) to construct a presentation providing information about a selected locale.  | Incorporate interactive multimedia - audio, video, hyperlinks- in the presentation to give more depth and provide more engaging presentation.  | Create a digital travel brochure that incorporates multimedia and student created video.  | Explore the locale with Google Earth, seek out and include interviews with people who have visited the locale.  |
| Pink | Students view images and documents related to the Battle of Gettysburg online instead of in a textbook.  | Students make a timeline on a presentation with pictures & graphics they found online. | Students view the battlefield with an online tour, such as Google Maps, to locate and better understand the events of the battle.  | Students can now apply their timeline to the actual battlefield. They can create a narrated tour of their own when applying the timeline to respective points on the battlefield.  |

# ELA

|  Card Color | Substitution | Augmentation | Modification | Redefinition |
| --- | --- | --- | --- | --- |
| Green | Students read a book on an iPad. | Students will take a quiz within the iBook app. | Students will create an iBook sequel to the one they just read.  | Students will share their iBook by reading them on Skype to classrooms around the city/state/country/world.  |
| White | Read Shakespeare texts online. | Use online dictionaries, study guides and history sites, to supplement reading.  | Use multimedia resources like text, audio, and video tools to jointly construct knowledge, learning, and understanding of a portion of a play, or a character, as a group project.  | Answer the question, "What did the culture of the time have on the writing of Shakespeare's plays?" using a concept mapping tool and constructing a mind map demonstrating key elements through words and images.  |
| Blue | Students read an online article discussing email etiquette concepts and guidelines.  | Students watch the guidelines video, then assess examples of email etiquette 'violations' and indicate which guidelines should be applied to correct/improve on the examples.  | Students read an online article discussing email etiquette concepts and guidelines that include links to examples, and offer comments online indicating their top 5 favorite tips.  | Students watch a video discussing email etiquette concepts and guidelines and after reviewing the guidelines, they create a Twitter account and Tweet their top 5 favorite tips.  |
| Pink | A word processor replaces a pen/pencil in a writing assignment.  | A word processor and text-to-speech function are used to improve the writing process.  | The document created using the word processor and text-to-speech function is shared on a blog where feedback can be received and incorporated to help improve the quality of writing.  | Instead of a written assignment, students convey analytic thought using multimedia tools.  |