What makes a good phenomenon
http://www.nextgenscience.org/resources/phenomena

How to use phenomena in an NGSS classroom
https://www.rubicon.com/ngss-using-phenomena-engage-students/

Examples of how phenomena are used in NGSS
http://sunrisescience.blog/free-websites-ngss-anchoring-phenomena/

FREE WEBSITES WITH PHENOMENA

#PROJECT PHENOMENA

On Project Phenomena you can search by Disciplinary Core Idea (DCI) and grade level to find interesting real-world phenomena from which to launch your units! There are also tons of links to additional resources embedded on the site!

NOAA

The National Oceanic and Atmospheric Administration site is chockfull of incredible happenings in Earth and Ocean science. Check out the Education section to find resources and activities for specific DCI's.

JET PROPULSION LABORATORY

On the Jet Propulsion Laboratory website you can find NASA-approved mini-projects, slideshows, videos, and games sorted by topic and grade level.

EXPLORATORIUM

'Hungry for fresh, exciting science activities based in amazing phenomena?' Check out the Exploratorium website's Science Snacks– fun, hands-on activities that will get your students engaged and thinking! I love exploring this site for neat ideas aligned with the NGSS.

THE WONDER OF SCIENCE

Now here is a WONDERful resource! This one will be a go-to for me! The Wonder of Science has tons of curated phenomena ideas, video links, anchor chart examples, and assessment possibilities all organized by standard. And the whole website is sort of set up in a 3-dimensional manner where you can explore by DCI or by science practice to locate appropriate resources for your class!

NGSS PHENOMENA

The name says it all! The author of NGSS Phenomena calls himself an 'extreme hoarder' of NGSS resources. Type your topic into the Searchable Phenomena search bar and find some fascinating photos that could simply be used as conversation pieces to engage your students or that might spark a great idea for a performance assessment!

ZOONIVERSE

Want your students to see how data collection and observation skills are utilized in the real world? Find a project relevant to your current unit on Zooniverse! This website catalogues citizen science projects going on around the globe.

TEACH ENGINEERING

If you are looking to incorporate more of the engineering standards into your planning, try searching the STEM curriculum or Maker Space lesson inventories on TeachEngineering! This is an invaluable resource for planning lessons and units through an engineering lens.

THE KID SHOULD SEE THIS

The best site for finding kid-friendly videos that will WOW and amaze your students is The Kid Should See This! Try showing a video that will provide the foundation for students to come up with further questions that they can explore. But BEWARE: once you're on this website it's hard to leave if you love learning strange and incredible things!

CK-12

If you have Google Classroom, this one is for you! The cK12 website has loads of lesson ideas and supplemental resources for hitting the DCI's in each NGSS standard. You can assign videos and activities for your students to complete from this website directly through your Google Classroom!

SCIENCE BUDDIES
ScienceBuddies has a sorting function for topic and grade level and a nice collection of NGSS-aligned lesson plans and suggested performance assessments.

PBS LEARNING MEDIA
Browse the standards to find a plethora of idea-generating resources for teaching to the NGSS on PBS Learning Media. You can find videos of other teachers teaching certain topics, articles, public broadcasting show clips, vetted webpages, and more!

THE CONCORD CONSORTIUM
Wow. The Concord Consortium website is a gem, especially if you appreciate visuals. Click on the buttons for your science content area, the science and engineering practice you're looking to practice, and the cross-cutting concept you'd like to incorporate. There are some excellent ideas here!

EGFI
Check out the neat ideas on the eGFI website (this is sponsored by the American Society for Engineering Education and it stands for Engineering: Go For It! There are great lesson plans and project ideas here!

ENVIROLINK AND INHABITAT
If you're looking for recent news stories relevant to a topic that you're teaching, check out the headlines at EnviroLink or Inhabitat. A lot of the news is sobering, but some of it is hopeful… and it's all going on in our world.

SCIENCE FRIDAY
One of my favorite radio programs has a website that is a great resource for finding eye-popping examples of cool science! Check out the collection of free articles at Science Friday! I also suggest trying the Chrome extension Insert Learning to turn the articles into awesome interactive lessons and post them on your Google Classroom!

PULITZER CENTER

To find authentic examples of science-based humanitarian issues like water quality, nuclear issues, climate change, and pollution, go to the lesson builder at the Pulitzer Center. Try the advanced search feature and select 'science'.

SCIENCE JOURNAL

If you have iPads in your classroom or you are able to allow your students to use their smart phones to collect data, check out the neat experiments at Science Journal. You can have your students monitor motion, light levels, heart rate and more! They'll collect information to graph and analyze and they can come to conclusions about the relevant science phenomena behind their empirical data!

NATIONAL GEOGRAPHIC

National Geographic stole my heart a long time ago and it still delivers in every issue. The website also has a great collection of lessons that will help ground your students' explorations in real phenomena and events. Search the lesson database by subject to find intriguing ideas!