Red Cross Parcel 2021

For those who need some quick-fire out-of-sequence science lessons to get through til the weekend.

General

* + Online course **teaching students how to search with Google** (it is free but will try to direct you to paid options) <https://www.edx.org/course/power-searching-with-google>
  + Home Learning TV can be [accessed on demand here](https://govt.us3.list-manage.com/track/click?u=2f59fcd18a691d315b5a045cb&id=8b8d8c9394&e=b88883bb0f) or via the TVNZ App on a device (mobile phone, smart tv or tablet)
  + Explore the Learnz field trip *Map my waahi* <https://www.learnz.org.nz/mapping183>, then use google earth to map and share your story – your mountain, river, ocean ...

Biology

* Challenge students to make a bird feeder to hang (in a tree, off a balcony) outside. Eg [here](https://kids.nationalgeographic.com/nature/article/make-a-bird-feeder?cmpid=org=ngp::mc=crm-email::src=ngp::cmp=editorial::add=FFG_Special_20220116::rid=001105F5A093A408D9C261D0B5EFA595) or [here](https://www.countryliving.com/diy-crafts/how-to/g3060/diy-bird-feeders/).
  + - Try to identify the birds that feed there – iNaturalist may help <https://inaturalist.nz/> or the ID charts here <https://www.landcareresearch.co.nz/science/plants-animals-fungi/animals/birds/garden-bird-surveys/activities-for-schools>
    - Try to photograph some, experimenting with angles and light.
    - Investigate to find out what food attracts what birds. Research possibilities online & try them out.
    - Investigate food to specifically attract native birds <https://www.forestandbird.org.nz/resources/feeding-native-birds-garden>
    - Collect data – what birds arrive when, what food is most popular for which bird – decide how best to present it
    - Share findings digitally
  + NZ Seed dispersal – video and activity: attachment

Chemistry

* + Short [video and reading](https://www.acs.org/content/acs/en/education/resources/highschool/chemmatters/videos.html) on **graphene** from Chem Matters.
  + Explore **raising agents** in the kitchen – find out what they are and how they work. Find a simple recipe using each one (and make it!)
  + Blendspace activities around **water** and its properties <https://www.blendspace.com/lessons/GO17gymd0Xjn9w/properties-of-water-types-of-solutions>

Earth & Space Science

* Use resources from LEARNZ online field trips <https://www.learnz.org.nz/index.php>. You will find multiple videos, readings (with narration), activities, quizzes and career info
  + E.g. **Climate change** <https://www.learnz.org.nz/climatechange201>
  + E.g. The **apline fault** <https://www.learnz.org.nz/naturalhazards203>
  + E.g. **Taupo supervolcano** <https://www.learnz.org.nz/naturalhazards193>
* A NoS activity, exploring images of the solar system: attachment

Physics

* **MacGyver physics** <https://www.youtube.com/watch?v=QmEi-rWPnAc>
* Use resources from LEARNZ online field trips <https://www.learnz.org.nz/index.php>. You will find multiple videos, readings (with narration), activities, quizzes and career info
  + - E.g. Using **satellite technology** to navigate <https://www.learnz.org.nz/location182>
  + Find out about **simple machines** <https://www.pbs.org/video/science-trek-simple-machines/> then go on a scavenger hunt around home <https://www.teachengineering.org/content/cub_/lessons/cub_simple/cub_simple_lesson01_scavhuntworksheet_v1_sas.pdf>
  + Phet simulation on **Hooke’s Law** <https://phet.colorado.edu/en/simulation/hookes-law>
  + Watch a video about Archimedes and the gold crown <https://www.youtube.com/watch?v=sw66gzBD9fE> Students use the same method to work out the volume of an odd-shaped object. Using kitchen scales (or supermarket fruit & vege scales) they can then measure mass, and calculate **density** (D=m/v).

Primary & Intermediate

* **School Kit at Home** – a series of many mini lessons for years 5-8. Even if you have dipped into this before you won’t have used them all : attachment
* Riley Hathaway is learning more about the importance of Te Ao Māori and **kaitiakitanga** in understanding and conserving Aotearoa’s seas and shores. <https://www.tvnz.co.nz/shows/young-ocean-explorers-rangatahi>
* Ask students to watch and then try experiments from **Nanogirls Kitchen Science** <https://www.tvnz.co.nz/shows/kitchen-science>
* Free animated story books <https://www.vooks.com/pages/educators>