Red Cross Parcel 2022

In our family, red cross parcels were sent to those in need of some support. So this is to help you get through those first few days of home learning, some quick-fire, out-of-sequence science lessons.

General

* + Oak National Academy (UK) has alot of online lessons and units for Bi, Ch, Px, Sci. <https://teachers.thenational.academy/subjects>
  + Smithsonian Natural History museum webinars, originally made for 2020 lockdown but still being added to. <https://naturalhistory.si.edu/education/live-video-programs/archives>

Biology

* + Carmen Kenton & Sabina Cleary (Kaha Education) developed online lessons for Science **90948 Genetics** <https://docs.google.com/document/d/109JHVcSH0gd8i-t1HWhhV2znkSHvokhPGpl1z4hoRHU/edit?usp=sharing>
  + **Marine metre squared** (mm2) online resources to remotely collect your own mm2 survey data <https://www.mm2.net.nz/resources/interactive-resources>
  + From NZ Marine studies centre a [**guided walk along the rocky shore**](https://www.facebook.com/watch/live/?ref=watch_permalink&v=3316989455025316) (start at 5.00)
  + TEDed lesson on **hearing** <https://ed.ted.com/lessons/the-science-of-hearing-douglas-l-oliver>

Chemistry

* + A virtual activity for **naming ionic compounds** & writing their formula <https://www.chemedx.org/activity/naming-and-formula-writing-ionic-compounds-virtual-activity>
  + TEDed videos using a macaroni salad to explore [**molecules**](https://ed.ted.com/lessons/the-science-of-macaroni-salad-what-s-in-a-molecule-josh-kurz) **and** [**mixtures**](https://ed.ted.com/lessons/the-science-of-macaroni-salad-what-s-in-a-mixture-josh-kurz)**.**
  + Chemistry videos for teaching **senior calculation skills.** <https://www.youtube.com/channel/UCj3EXpr5v35g3peVWnVLoew>
  + [JoVE Core: Organic Chemistry video textbook](https://info2.jove.com/core-organic-chemistry-q4) explains the basic concepts through concise and easy-to-understand **animated video lessons** showing scientists in action.
  + A virtual lab to demonstrate **different types of reactions** <https://www.chemedx.org/activity/adjusting-types-reactions-lab-virtual>
  + Videos of **practicals** from RSC for [14-16](https://edu.rsc.org/resources/practical-videos-14-16-students/4012090.article) and [16-18](https://edu.rsc.org/practical/practical-videos-16-18-students/4012343.article) year olds (UK).

Earth & Space Science

* A lesson in **stratigraphy** <https://igws.indiana.edu/outreach/WhichCameFirst.pdf> and a slow video simulation [https://www.iris.edu/.../stratigraphy\_geologic\_history\_of...](https://www.iris.edu/hq/inclass/animation/stratigraphy_geologic_history_of_a_region_in_cross_section?fbclid=IwAR2QyoGh9pPVQ4uDgk3fuK0wV0F1eolrJq0z_VLszjJelDP9tTnBqe_fk2g)
* Data activity exploring **planetary mass**, radius and density <https://reader.activelylearn.com/authoring/preview/4101255/notes>
* An ABC [lesson](https://www.abc.net.au/cm/lb/13749426/data/iss-crash-plan-%25E2%2580%2593-teacher-resource-%28pdf%29-data.pdf) on the International Space Station based on [this video](https://www.abc.net.au/btn/classroom/iss-crash-plan/13747792)

Physics

* + **Paper airplane** flight challenge <https://www.youtube.com/watch?v=RAPPT7gcl5s>
  + Do an **energy audit** at home <https://neefusa.org/sites/default/files/assets/education/climate-superstars/ACTIVITYGUIDE20-SavingEnergyWithIMSHeroes.pdf>
  + Video and article about using radar, laser and **electromagnetic induction** to measure thickness of Antarctic ice from the air <https://www.stuff.co.nz/science/127333105/researchers-using-radar-laser-electromagnetic-induction-to-measure-thickness-of-antarctic-ice-from-the-air>
  + PhET interactive simulation on **density** <https://phet.colorado.edu/en/simulations/density>

Primary & Intermediate

* **Earth science** videos on rocks, soil, water and fossils for 7-9 yearolds <https://www.earthlearningidea.com/home/Tchg_vids_wkshps_primary.html>
* Factsheets & links for **Suzy’s World videos** <https://suzy.co.nz/sw-factsheets/>
* Free **learning at home** packs, in 4 age groups <https://topteachingtasks.com/learn-at-home-home-learning-packs>