READY TO PATENT: SEQUENCE OF ACTIVITIES (DSCS MIDDLE SCHOOL)

- One-day construction assignment (students built rovers from cardboard)
  (Science teacher)

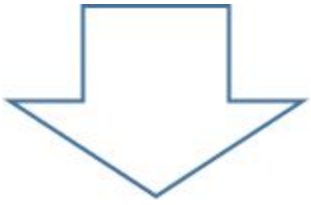
- Construction of (a different) device meant to pick up “resources” and place them in a container
  (Science teacher)

- “What is design thinking?” lessons from Youtube videos, and discussion around the meaning of Engineering Design and how vocabulary aligns with formalized sequential steps in design
  (Middle School teacher I)

- Assessment rubric - have students assess 3 rovers using the rubric
  (Middle School teacher II)

- Concept development
    - Design a problem
    - Imagine a solution
    - Design the solution as a pre-prototype concept and drawing
    - Construction time in groups of up to 3 students

  (Middle School teachers)



- Build and test
  (All teachers and support workers)

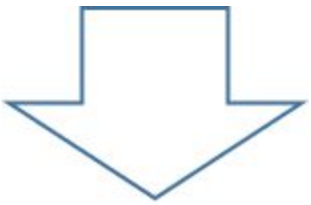
- Prototype iterations of the design
  (All teachers and support workers)

- Final presentation to teachers
  (parents invited)

OUR CATACLYSMIC PLANET: SEQUENCE OF ANCHOR LESSONS (DSCS MIDDLE SCHOOL)

- Literature circles with Survival as the topic
  (led by Language/Science teacher)
- Cosmic events and their effect on Earth
  (Middle School teacher I)
- Plate tectonics
  (Middle School teacher II)
- Earth's changing climate … and large weather events
  (Middle School teacher I)
- Erosional and depositional land formations
  (Middle School teacher II)
- Science labs about chemical weathering, freeze-thaw weathering, rocks and minerals
  (Science teacher)
- Building code and destructive testing (for earthquake preparedness)
  (Shop teacher)
- First Peoples knowledge of large scale changes in the past:
  - Local geological formations
  - Significant local geological events

  (Aboriginal Student Support Worker)
- Fossil record, geologic time, and evidence of biodiversity
  (support teacher)



PROJECT ASSIGNMENT: Design and build and survival kit in preparation for a physical cataclysm (of your choice).