



HIGHAMS PARK SCHOOL

SCIENCE CHALLENGE

2020

Getting Involved

Since most of us are at home, we decided to run an at home Science Challenge to finish up the school year.

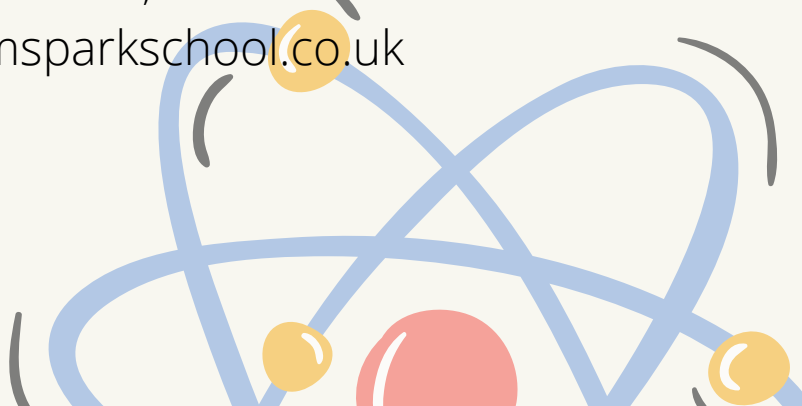
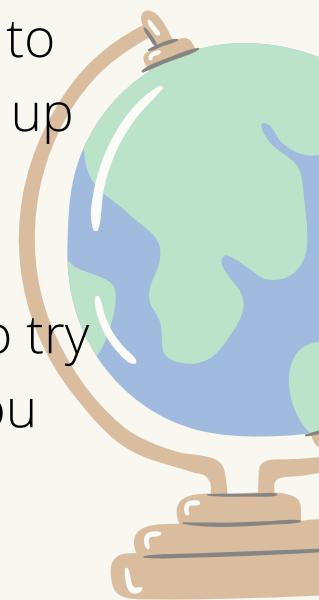
Over the course of the week we want you to try complete as many of the challenges as you can.

You can share what you have been doing take pictures or write notes and attach them to the Firefly task - you might see them featured!

For instructions for some of the tasks have a look at the resources page.

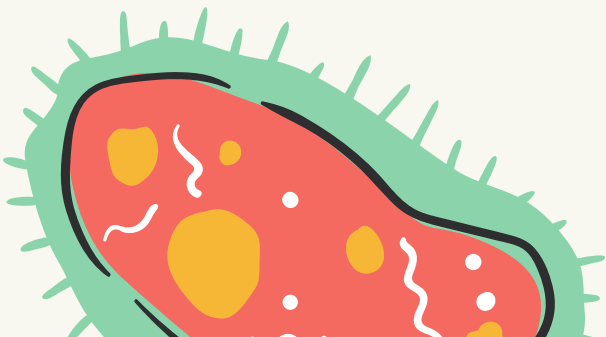
Make sure to ask permission before doing experiments and to always be safe.

If you have any questions, email me at dcallanan@highamparkschool.co.uk



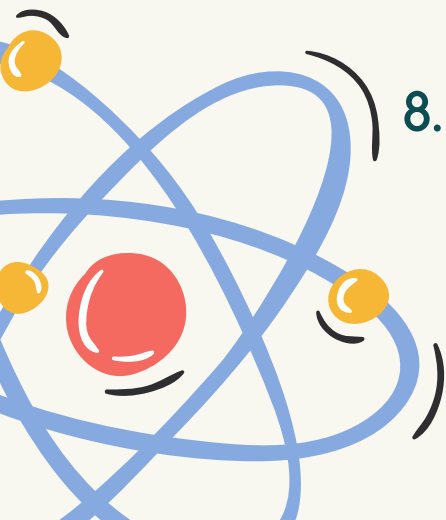
Biology

1. Go for a walk, take pictures and identify local trees
2. Take pictures of 5 different flowers and identify them
3. Identify 3 different bird species that come into your garden
4. Design the perfect alien to live on Mars - what features does it need to survive the red planet?
5. Use the talking cards and interview members of your family or friends
6. Take a virtual tour of a zoo



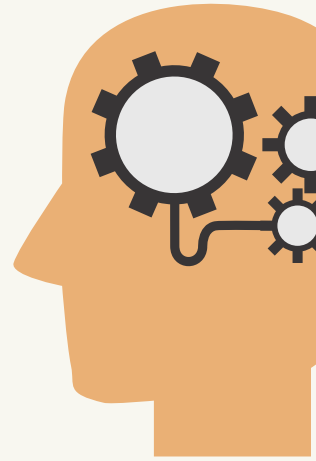
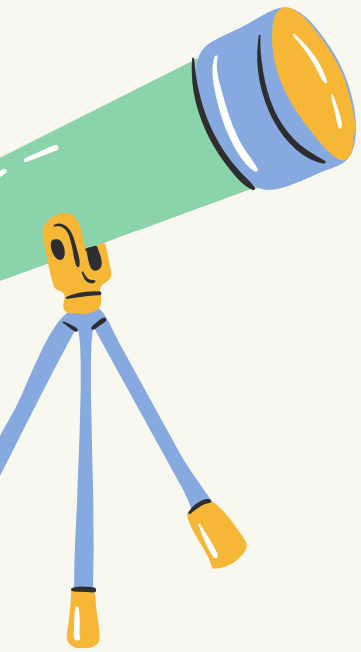
Chemistry

1. Make slime
2. Make a volcano
3. Do a Kitchen Science Experiment
4. Make obleck and research its properties
5. Make homemade pH indicator
6. Make homemade dye - dye a pillowcase
7. List 10 ways we can reduce energy and water consumption in our homes
8. Make Instant Icecream



Physics

1. Keep a Moon Phase diary for a week
2. Make a paper airplane and measure the longest distance it flies
3. "Visit" the International Space Station
4. Build and launch a water bottle rocket
5. Build a car out of recyclable materials
6. Research the likely hood of people landing on Mars in your lifetime
7. Build the tallest Spaghetti tower you can
8. Play the Total Darkness Game



Resources

Bio5 - <https://learning.sciencemuseumgroup.org.uk/wp-content/uploads/2017/09/who-am-i-talking-points-cards-ks4.pdf>

Bio 6 - <https://www.zsl.org/zsl-london-zoo/virtual-london-zoo>

Chem 1 - <https://www.bbcgoodfood.com/howto/guide/how-make-slime>

Chem 3 - <https://learning.sciencemuseumgroup.org.uk/wp-content/uploads/2017/09/Kitchen-science.pdf>

Chem 4 - <https://www.instructables.com/id/Oobleck/>

Chem 5 - <https://www.science-sparks.com/make-a-red-cabbage-indicator/>

Chem 6 - <https://muddyfaces.co.uk/activity/natural-dyes/>

Chem 8 - <https://learning.sciencemuseumgroup.org.uk/wp-content/uploads/2019/02/SMG-Learning-Activities-Instant-Ice-Cream.pdf>

Phys 2 - (<https://learning.sciencemuseumgroup.org.uk/wp-content/uploads/2019/02/SMG-Learning-Activities-Make-It-Fly.pdf>)

Phys 3 - https://www.nasa.gov/mission_pages/station/main/suni_iss_tour.html

Phys 4 - (<http://www.bbc.co.uk/bang/handson/waterbottlerockets.shtml>)

Phys 5 - (https://www.youtube.com/watch?v=QzY9RH_JnL0)

Phys 7 - <https://learning.sciencemuseumgroup.org.uk/wp-content/uploads/2019/02/SMG-Learning-Activities-Spaghetti-Structures.pdf>

Phys 8 - <https://totaldarkness.sciencemuseum.org.uk/>

