



Week Commencing Monday 18th May Year 5 and 6

PE
Can you try this challenge at home from the Youth Sport Trust?

60 Second Challenge
Climb the Mountain

Can you keep going even when you are tired?

The Physical Challenge
How many mountain climbers can you complete in 60 seconds?
Make it harder by performing a press up after you bring both legs up.

#StayHomeStayActive

Equipment
Just yourself and enough space on the floor!
Why not compete against a family member?

Achieve Gold
40 Mountain Climbers

Achieve Silver
30 Mountain Climbers

Achieve Bronze
20 Mountain Climbers

Complete P.E. Inspire. Learn. Succeed.
YOUTH SPORT TRUST 25th Anniversary Believing in every child's future

You could also try this family fitness workout!
<https://www.youtube.com/watch?v=5if4cjO5nxc>

PSHE
Check the school Facebook page for *mindfulness challenges* for this week.

Mindfulness video to try at home
https://www.youtube.com/watch?v=VZ_wdeog5Ek

Check the school Facebook page for this week's *Rights Respecting School PowerPoint* to discuss at home.

DT
Check the school Facebook page for *LEGO challenges* for this week.

Something different
Engineering and science challenges from Dyson

CHANGING STATES
SCIENCE CHALLENGE 01
Designed by Charles, Design engineer at Dyson

The brief
Make an egg fit into a bottle without breaking it.

The method

1. Submerge the egg in a glass of vinegar for two days: the shell will become rubbery.
2. Heat the bottle in hot water – remember to use gloves or a tea towel when handling it.
3. Rest the egg on the neck of the bottle.
4. As the air inside the bottle cools down, it will contract and suck the egg down.

Materials
An uncooked egg
A pan of boiling water (with adult supervision)
A glass of vinegar
A wide-mouthed glass bottle

Top tip
Try lubricating the egg with cooking oil or washing up liquid.

How does it work?
Eggs are rich in protein. When heat is applied, chemical bonds within the protein molecular are broken, and new bonds are formed between adjacent molecules. This creates a network of inter-connected proteins which causes the egg to go hard.
Vinegar contains acetic acid (CH₃COOH) that dissolves the calcium carbonate (CaCO₃) shell but leaves behind the egg's springy membrane.

Before
CH₃COOH CH₃COOH
CaCO₃
CH₃COOH CH₃COOH

After
CO₂+H₂O CO₂+H₂O
K₂CO₃
CO₂+H₂O CO₂+H₂O

Music
Listen to the song *Here comes the sun by The Beatles*
<https://www.youtube.com/watch?v=KQetemT1sWc>

Discuss the questions;
-What is this song about?
-What can you hear?
-How does the music make you feel?
Why do you think this?



Art

This artwork was created by **Georges Seurat**



Discuss the artwork. What do you like and not like about this?
Can you use resources at home to create a replica of this picture?

Science – Forces

This week you will need to log into Education City and select year 5 science.

Vive La Resistance
Understanding forces

Start by choosing this game to compare how things move on different surfaces

Box Carts
Friction test

Then choose this game to complete an investigation to find out which surface will slow an object down the most.

Remember

- Our history learning project is on the school website.
- You have key words to practise reading and spelling
- You have a list of online learning sites you can use. As well as <https://classroomsecrets.co.uk/free-home-learning-packs/> (this website is updated every week)
- Children were given their own login to use Education City
- FirstNews** are offering a free digital download of each week's paper during the school closures. <https://subscribe.firstnews.co.uk/free-downloadable-issue>