

HIS Competitions

For a bit of fun (and great learning opportunities) the specialist teachers have put together these competitions. If you as a family are up for the challenge, you are welcome to enter all three or just choose one. Please email your results to the teacher that set the challenge - we look forward to seeing how you get on!

STEM: Paper Airplane

Challenge:

ryanc@his.school.nz

Challenge: Design a paper airplane that will travel the furthest distance when thrown. Use a tape measure to record your flight distance and a camera to record your flight as evidence. Email Mr Clark the video, with your best distance measured. Prizes for the top 3 distances shared with me.

Materials:

- A4 paper (or any sized paper/card that can be cut into smaller sizes)
- Scissors
- Cellotape

Background:

Before beginning this challenge, do some background research to answer the following questions

1. What is a force?
2. What forces act upon planes while they are flying?
3. What forces act to slow your plane down?
4. Head to youtube and look for some designs.

<https://www.youtube.com/watch?v=3BNq4fDJC8A> Aim to use at least 3 different designs.

Extension: Design a paper plane that when thrown, will return (like a boomerang) to the person throwing it. If you can record yourself designing a plane that can do this then you will automatically earn 10 gold cards.

Food Technology Challenge:

Food Presentation Challenge

Watch the following videos (I'm sure you'll find more!) then present your next family meal in an appetising and creative way. Take a photograph and email it to sallyg@his.school.nz with your name and class.

You do not *have* to have made the meal, just present it in a way that makes it really inviting. I will judge the best presentation (given the meal you're working with) for each class and a prize will be awarded accordingly when we return to school.

There will also be a prize for THE CLASS WITH THE MOST ENTRIES!!

Back ground : the science behind presentation:

<https://www.youtube.com/watch?v=D-XVm5ai0IY>

Some videos to give you some inspiration:

<https://www.youtube.com/watch?v=YkW11oOGTVg>

<https://www.youtube.com/watch?v=r2tul8uyzA8>

<https://www.youtube.com/watch?v=8VdDnKBGJ6Q>

Digital Technology: Coding Challenge

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Scratch: Open up scratch
Create a game or challenge with the following requirements;

1. Multiple Levels
2. An explanation page
3. A custom sprite
4. A custom background.

Here are a few videos that may help;

1. <https://www.youtube.com/watch?v=2bl-JDvj4X0> (How to make a new level)
2. <https://www.youtube.com/watch?v=ukOON8WNJ-c> (Basic game creation)
3. <https://www.youtube.com/watch?v=G9QqjTwTzpk> (Basic scratch maze creation)

Minecraft Education Edition: Open up Minecraft Education Edition and code your agent to do the following;

1. Build a house in minecraft
2. Use glass in the building
3. Make the house have a roof
4. One set of code, not multiple
5. Use multiple loops in the code

Performing Arts: Dance Battle Challenge

sarahh@school.co.nz

Challenge: Create a 30 second (ish) dance routine to your favourite song. Tik Tok style! Must be your own choreography. Record it and email the video to Miss Harrison with your name and class.

Hip hop, contemporary, K Pop, ballet, Irish, rock n roll, ballroom- all dance styles welcome!

- > You can enter individually or work with other students to create an online dance group.
- > Costumes- find things at home to make you stand out from the crowd!
- > **Bonus prize-** for the class with the most members in their dance team.
- > **Gold card-** for teaching it to a family member (and including them in your video)

I'm very excited to watch all of your videos! The top 3 dancers/ dance teams will be invited to an online dance battle (using Zoom) where you will compete for 1st place.

See you on the online dancefloor!

Some inspiration:

<https://www.thenational.ae/arts-culture/five-tiktok-dances-to-learn-while-you-re-at-home-in-self-isolation-1.996838>

<https://www.wmar2news.com/news/coronavirus/local-school-staff-challenges-their-own-school-to-a-quarantine-dance-off>

Visual Art: Photography Competition

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Jim Golden is a photographer who takes photos of collections of everyday objects. He sometimes arranges them into shapes (eg; lots of trainers arranged into a nike tick) or he spreads them out with even spaces.

Search for Jim Golden using google images to see his photographs.
Have a go at arranging some items, take a photograph and email it to me.

Things to think about when you are arranging your items and taking your photograph:

- The background: light/dark, texture, flat surface, colour, outside/inside....
- What kind of objects: natural from the garden (leaves, twigs, petals, stones etc...) toys, kitchen utensils, accessories, shoes, stationary items, food - just make sure you tidy everything away afterwards!
- How you arrange your objects: colour coded, in order of size, like a jigsaw puzzle, evenly spaced, to make the shape of something...
- The angle of your photograph: from above (birds eye view) or from the side.

Make sure you have a steady hand and enough light.

I'm looking forward to seeing your photographs!
The person that creates the best one will get a prize.
The class with the most entries will also get a prize!

Product Design: janew@his.school.nz

You have a choice of two challenges Pet House or Dream Bedroom

1. You are to design the perfect home for your pet. You are to think about what your pet needs and likes. It will need to have a bed, maybe somewhere to feed it and entertainment.
2. You are to design your dream bedroom. Think about layout, creating spaces, furniture, colours and accessories. Have fun.

You can present your final idea as a model or drawing with some explanations as to why you have designed it in that particular way. There will be a prize for each choice. If you would like any further help on how to get started or where to look for inspiration do not hesitate to contact me. I look forward to seeing your entries. Please check out other ideas for product design if these do not excite you. Further prizes for best creations. Design, make, create have fun.