Home Learning Grid

Scream Machine

Here is a selection of homework challenges based on our topic in class this term. You may choose which tasks you complete and when. You must complete at least one challenge from each section but feel free to complete them all! Please complete each activity with care and to the best of your ability.

Bring each piece of work in upon completion to be displayed and claim your house points!

Bronze (1 house point)	Silver (2 house points)	Gold (3 house points)
Make a flipbook animation of a roller coaster ride that includes a loop the loop.	Plan a trip to a local theme park for your family. Calculate how much it will cost, how long it will take to get there and write an itinerary for the day.	Use the web to investigate mathematical data about a range of different theme park rides. Find information such as the ride's length, g-force, type and height. Use your data to create spreadsheets or charts, then interpret and find relationships and patterns.
Research online to find information about roller coasters from around the world. Which is the oldest? The longest? The scariest? Record your results in a table.	Research the history of fairground rides, and create a PowerPoint presentation that includes information, timelines, pictures, film and sound clips.	Make a loop the loop using flexible track. Modify the track until a marble or toy car can successfully make it round the loop. Challenge other family members to get the marble or car to fly off the end and land in a pot by changing the trajectory. Keep a tally to show your success rate
Explore your home and the surrounding area to look for machines, toys and other objects that use cams, gears, levers and pulleys. Take photos and create a montage of all the different mechanisms found.	Plan and draw a map of your own design for a theme park. Think about the amount of space you give to each ride, what will the theme of each ride be? What type of ride? (swing, rollercoaster, centrifugal, water) What will you call each ride? Don't forget your other amenities food courts/ toilets/play areas.	Research and write a biographical account of Walter Elias Disney, animator and entrepreneur. Find the location of Disney theme parks around the world.
Become a pendulum on the swings at the park. Swing as high as possible and time how long it takes for you to slow down and stop completely. Time friends and family then identify patterns in your results. Do heavier people slow down more quickly?	Design a ride in detail – water ride/flume, loop the loop, tea-cup, octopus, centrifugal. Investigate what materials are best for the job. What properties are needed for the materials they need to be made from? Waterproof/ flexible/ strong/ able to float. Draw a set of designs and annotate them. For an extra house point make a prototype.	Use a technical construction toy, such as Lego Technic, Meccano or Fischertechnik to make a simple crane or beam crane with pulleys and nylon twine. Use a force meter to see how much force is required to lift a mass using different numbers of pulleys.

This challenge grid runs up until the May half term holidays.

Values Home Learning – Respect

This term you have the opportunity to earn even more house points by doing values homework. Please make sure this work is presented to the best of your ability as it could go on display!

Bronze (1 house point)	Silver (2 house points)	Gold (3 house points)
Make a list of people you think are respectful and who you respect. Explain why you added them to your list and why it is you aspire to be like them.	Design a poster to explain: 'How Does Respect Grow?' You can design your own garden, think of the skills, values, actions that will help respect grow. 	What does being respectful mean to you? How can you demonstrate respect? We would like you to think about what it means to show respect. Use your creative head and think outside of the box! Here are some ideas: • Make a piece of artwork – pastels, pencils, paint, collage – showing what respect means to you • Create a short film or animation about how to be respectful • Use your computing skills to create a Power Point presentation about respect • Interview people close to you and ask them how respectful they think you are • Create a picture book about being respectful

ISOLATION WORK

If you are sent home from school or if you have to self-isolate please select three tasks from the Home Learning Grid above if you are well. The class teacher will then be in touch and will set work daily and give feedback on Seesaw.

REMOTE LEARNING - If a class/es close we will move to remote learning.

On the first day of remote learning please follow these steps:

1. In the morning, complete the English and Maths tasks below.
2. For afternoon tasks select from the Home Learning Grid above. Your child's work can be posted back to the teacher on Seesaw for feedback.

In addition, on the first day of remote learning the teachers will send out your child/ren's school email and password via Seesaw.

Then on the second day of remote learning there will be two remote sessions using TEAMS in the day. One in the morning and one in the afternoon. A register will be taken at both of these sessions and your child/ren need to attend if well.

Please post your child/ren's work on Seesaw each day so that the teachers can see the work your child/ren have been completing and can give feedback.
We will send more detailed information in the event of a class/es closing.

Maths Task	English Task
Make yourself a set of memory cards to revise an area of maths for example: fractions, decimals and percentages. Or for converting between metric measures (mm/cm/m/km) or converting between the 12 and the 24 hour clock or Roman numerals and numbers. You need the question on one card and the answer on another. You need at least 20 questions (and 20 answers!) 40 cards AT LEAST. Once you have made the cards you can play Snap or the Memory game with them. For the Memory Game you need to lay the cards face down so you can't see the questions and answers. You take it in turns to turn over two cards – if the question matches the answer you get to keep the pair. If they do not match you turn them back over and the other person takes their turn. The winner is the person who has the most cards at the end when all the cards have been matched. Watch the video to see how to play with a deck of cards: https://www.youtube.com/watch?v=492bM_dhdR4 Here are some examples of the questions and answers you could make up for fractions decimals and percentages:	Watch the clip from Literacy Shed, it is the true story explaining the history of Lego and the development of how Lego came to be. Watch here: https://www.literacyshed.com/legostory.html Complete 1 of the following tasks: 1. Using the video, write a chronological report about explaining the history of Lego, using your own words. 2. Design your own Lego model and write a set of instructions explaining how to build it. 3. Research and write a biography for Ole Christiansen. Challenge – Think about writing paragraphs which begin with connectives, words to show when something happened or to show the passing of time - e.g. Many years ago, one day, suddenly etc.

What is ¼ as a decimal?	0.25	Create links between sentences - e.g.: "It seemed like nothing could go wrong but a stormy night in 1942 changed their luck."
What is 1/5 as a percentage?	20%	
TIP: Make sure you only have the answer once – you don't want to answers to be the same e.g. ½ or 50% or 0.5 Have fun! Send in the results on Seesaw – who you played with and who won! ENJOY!		