## Tuesday $9^{\text {th }}$ June Good morning!

Maths: To investigate abundant numbers.
English: To consider the front cover and read the first page of 'The Promise'.

Suggested afternoon activities -
Science: To explore the brain.

## Spelling

This week we will be looking at words with the -sion, and -tion suffixes. Today we will also look at the -cian and the-ssion ending.

- When the root word ends with 'd', 'de' or 'se' the suffix used is usually -sion: expand - expansion
- If the root word ends with ' $t$ ' or 'te' use -tion: invent - invention
- If the root word ends with 'c' or 'cs' use the -cian suffix: magic - magician
- When the root word ends with an 'ss' or 'mit' use the suffix -ssion: possess - possession

Go to the link below. Watch the video and try the activity filling in the gaps:

## https://www.bbc.co.uk/bitesize/topics/zt62mnb/articles/zyv4qhv

## ARITHMETIC: MACARONI MATHS!

Use your multiplication and division skills to answer the following:

## Bronze

1.) If the piece of macaroni labelled $F$ is worth 6 , how much is a piece labelled K worth? What about a piece labelled $Q$ ?

## Silver

2.) If a piece of macaroni labelled $K$ is worth 16 , what is a piece labelled $F$ worth? What is a piece labelled $Q$ worth?

Gold
3.) If a piece of macaroni labelled $F$ is worth 1 , what would a piece labelled $Q$ be worth? (Can you give this as a fraction and decimal?) What about a piece labelled K (can you give this as a fraction?)

This week in maths is investigation week. We will be applying our number skills and deep thinking in different ways to solve problems, investigate patterns and rules.

## Abundant numbers



In this investigation you will be trying to find 'abundant numbers'. These are numbers that are smaller than the sum of all their factors.

For example, 48. A factor of 48 is a number that can be multiplied by another number to make 48. The factors of 48 are:
$1,2,3,4,6,8,12,16,24$ and 48 .
If we leave out the number we started with, 48 , and add all the other factors we get 76 . 48 is less than 76 so it is an abundant number.

Can you test other numbers to try and find abundant ones? What do you notice about the numbers? Are there any similarities or differences? Is there a pattern? Are there any rules about if a number is abundant or not?

Example: Let's try 24 and see if it is an abundant number.

The factor pairs of 24 are:

1 and 24
2 and 12
3 and 8
4 and 6

Now let's add all our numbers except $24.1+2+3+4+6+8+12=36$

24 is smaller than 36 . So 24 is an abundant number. Is there a link between this and 48?

## ENGLISH:

For English today we are going to look at the cover of a new book which we will be working through over the next few weeks. Today I would like you to explore the front cover and answer the following questions.


What do we already know about the story?

What clues in the picture tell you this?

What does the illustration tell you about the mood of the story? Where is it set?

What do you think 'The Promise' might be? Who makes it and why?

Read through the following passage from the first page of the book. Tomorrow we will think more about the setting being described. If you prefer, you can also listen to the author reading the story at this link: https://vimeo.com/73026206
Only listen up to 00:31 seconds if you watch the video.


Nothing grew. Everyithing was broken. No eae ever smiled.

When I was young I lived in a city
that was mean and hard and ugly.

Its streets were dry as dust,
cracked by heat and cold,
and never blessed with rain.

A gritty, yellow wind blew constantly,
scratehing round the buildings
like a hungry dog.

## The brain:

1.) Draw a labelled diagram of the brain.
2.) Research the different sections of our brain. Can you find out what controls different aspects of our personality such as our likes and dislikes, emotions and so on?
3.) What do we know about how our brain works? Is it true that we only use a small capacity of our brain?
4.) Make a brain hat! Find a free download of this template here: https://ellenjmchenry.com/store/wp-content/uploads/2016/04/Brain-Hat-2.0-download.pdf
5.) How is our brain linked to our memory? Play the Kims game putting items on a tray then taking one away after a certain amount of time. Can you work out what is missing? What does this tell us about our memory?

6.) Research and present information on how our brain is linked to our senses and how it associates things with other things, e.g. a red jellybean with the flavour strawberry. Why do you think it does this?

