## 40 Weeks of Math Challenges



These visual math challenges have been created to intrigue and inspire your children. They are designed to be hands on, open-ended inquiries, to challenge them to think deeply about the world around them.

Each week a new set will be released with four levels.

- Preschool
- Years 1/2 (approx. age 6-8)
- Year 3/4 (approx ages 8-10)
- Year $5 / 6$ (approx. ages 10-12)

I hope you enjoy exploring the ideas with your children! The challenges don't require any special resources, however your children will need a 'Math Journal' to record their discoveries. Any notebook will work, but if you can, try to encourage them to use a Grid book.

You are welcome to freely print these cards for your family but please respect our creative copyright and link back to the original file on our web page to share with others. Thanks, Jo

## Mode, Mean, Median

Definition:

Are ways to describe the average of data we have collected.

1. Look at the picture, what do you notice?
2. How many apples? How many pears?
3. What is there the most of?


## Mode, Mean, Median

Definition:

## Are ways to describe the average of data we have collected.

1. Look at the picture, what do you notice?
2. Take a carton of eggs and weigh each egg. Write down the weights in your journal.
3. Add up all the weights. (You can use a calculator) and then divide the total by 12 (that's how many eggs you have in the carton). Write down this answer.
4. You have found the MEAN (or average) weight of
 the eggs!

## Mode, Mean, Median

Definition:

## Are ways to describe the average of data we have collected.

1. What do you see, what do you notice.
2. Ask if you can have a piece of fruit. Carefully cut it open and remove the seeds. Measure each seed. Write each size in your journal. Now order the sizes from smallest to largest. Circle the middle size. This is the MEDIAN.
3. Add up all the sizes and then divide by the number of seeds. This is the MEAN (average) size.
4. Are the two amounts the same? Are they close?


## Mode, Mean, Median <br> Definition:

## Are ways to describe the average of data we have collected.

1. Look at the picture. This is a weather chart for the capital cities in Australia.
2. Round each temperature to the nearest degrees and write them in your journal from coolest to hottest. Circle the middle value. This is the MEDIAN temperature.
3. Are there any repeated values? Which temperature do you see the most of in this data set? (Hint there might be two) These values are the MODE. The MODE is the data which occurs the most.
4. Add up all the values and divide by 8 (the total amount of values. This is the MEAN (average) temperature.


## MODE

Is the number that appears most offen.

$$
3,6,2,3,3,7,3,1,8
$$

# MEDIAN 

Is the number that is in the middle of an ordered set.

$$
1,2,3,3,3,3,6,7,8
$$

## MEAN

Is the total value of all the amounts added together and then divide by the number of values.

$$
(3+6+2+3+3+7+3+1+8) / 9
$$

