June Learning
This shouldn't require printing, you can just make notes guys.

Complete the VF strips before the PSR strip.
Remember to choose to do either strip $a$ on $b$, you don't have to do both for the varied fluency sheet (VF) and problem solving and reasoning sheet (PS/R)

Complete the worksheets at youn level:
GD - Blue
E - Green (Unless yow want to pusth yourself - try GD)
D -
/Red
There are also challenges - Do whichever you feel you can - on try all of them!

Don't be afraid to challenge yourself!


Maths is easier when you smile!


## Pie Charts with Percentages

1. A safari park counted the total number of animals they had in 2018. They converted their data into a pie chart.

There were 18 gorillas in the safari park in 2018. Investigate how many of each type of animal there were in 2019.

The total number of animals stay the same each year.

Animals in 2018


Animals in 2019
Zebras


Key points,
Total number of animals doesn't change - how can we work out the total? They gave us this info- 18 Gonillas $=10 \%$ in 2018 so total number of animals $=10 \times$ more than that!

2019
We still have a total number of animals.
What fraction is 25\% ?
How can you find 5\%? 15\%?

Check answers page see if you were right.

## The Mean

1. A restaurant has worked out the weight of some ingredients that they use each day during the week in kg . They have rounded the weight to 1 decimal place.

|  |  | Carrots | Potatoes | Beef | Chicken | Fish |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mon | 39 kg | 75 kg | 50kg | 65.2 kg | 56.3 kg |
|  | Tue | 41 kg | 90 kg | 75.1 kg | 72kg | 60.1 kg |
| RESTAURANT | Wed | 53.1 kg | 107.4 kg | 79 kg | 61.3 kg | 51 kg |
|  | Thu | 52.7 kg | 102.2 kg | 81 kg | 71 kg | 69.9 kg |
|  | Fri | 71 kg | 125.5kg | 105.1 kg | 95 kg | 78 kg |
|  | Sat | 85.9 kg | 150kg | 125kg | 140.4 kg | 92.5 kg |
| Sun ${ }_{\text {Mean } \mathrm{kg}}$ |  | 64 kg | 120.7 kg | 90.5 kg | 104kg | 101.1 kg |
|  |  |  |  |  |  |  |

Calculate the mean weight of each ingredient used in a week.
The manager of the restaurant would like to organise the data. Explore the different ways that it could be ordered.

## How to Find the Means

The mean is the average of the numbers.
It is easy to calculate: add up all the numbers, then divide by how many numbers there are.

> In other words it is the sum divided by the count.

Example 1: What is the Mean of these numbers?

$$
6,11,7
$$

- Add the numbers: $\mathbf{6 + 1 1 + 7 = 2 4}$
- Divide by how many numbers (there are 3 numbers): 24 / $3=8$

The Mean is 8

Check answers page see if you were right.

## Pie Charts with Percentages

1. A safari park counted the total number of animals they had in 2018. They converted their data into a pie chart.

There were 18 gorillas in the safari park in 2018. Investigate how many of each type of animal there were in 2019.

The total number of animals stay the same each year.
There are 180 animals in total.
In 2018 there are 36 zebras, 27 giraffes, 18 gorillas, $\mathbf{4 5}$ flamingos and 54 monkeys.
In 2019 there are $\mathbf{2 7}$ zebras, 27 giraffes, 27 gorillas, 54 flamingos and $\mathbf{4 5}$ monkeys.



The Mean

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|  | Sun | 64kg | 120.7 kg | 90.5 kg | 104kg | 101.1 kg |
|  | Mean kg | 58.1 kg | 110.1 kg | 86.5 kg | 87kg | 72.7 kg |

