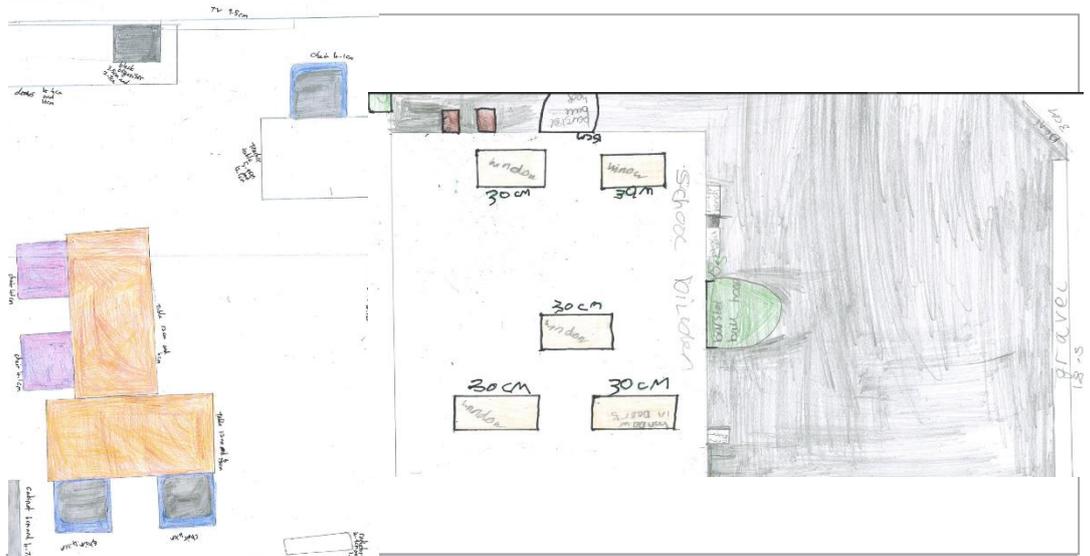**Outcomes:**

Maths learning

To be able to convert fluently between key fractions, decimals and percentages.

To solve problems involving shapers where the scale factor is known or can be found.

To be able to determine the scale factor of an enlargement

All our students have had a really great 2022! Using all their previous knowledge and learning new skills, such as using the trundle and measuring large areas. We have been learning all about scale factor, drawing sky view prints and also to percentages and fractions and decimals.

Our year 8 have been learning all about fractions, decimals and percentages, learning about easy ways to remember how to get from each, they have all enjoyed making their own starter, our maths sale, finding things to sell, giving them a price and then putting them on sale. They have all worked amazing and really showing their understanding.

Year 9 and 10, have been looking at the circumference of a circle, learning about PI also completing their practice functional skills papers and then sitting the real thing! Then also working towards their cope qualification, so has been completing their cope challenge. They have all worked amazingly, picking a room to draw a sky view plan of, to then measure to scale, to then convert to a ratio and then finally be able to draw their drawing to scale, for example 1cm: 1m. the outcomes of their drawing are brilliant, and the students are very proud of themselves.

This half term the Year 11 pupils have been sitting their GCSE exams. Not only this, our year 10s and year 9s have also taken their Functional Skills maths exam. All pupils have been a real credit to the school, they have followed all the exam processes and procedures, supported one another and really given it their all! A HUGE well done to our fantastic pupils!

Quotes:

To get from a decimal to a percentage you time it by 100 e.g. 0.4x100=40%

You can't eat PI, PI= 3.14159265359

Maths is an everyday essential!

Date: 30.6.22.

LO: to be able to calculate percentage increase and decrease using a multiplier

Bronze:
to be able to draw bar models to show these increases and decreases

Silver:
to show knowledge by matching the calculation to the decimal number

Gold:
to be able to work out the answers of worded problems

Key Words:

Let your teacher know

Self Assessment

MATHS SALE!!

Bottle of coke £1.50
SALE 50%

Laptop £80
SALE 22%

. Bruno's house £474'000
SALE 12%

. Electric Scooter £268
SALE 64%

l. Hover Board £99
SALE 52%

5. Bike £300
SALE 5%

$1.50 \times 50\% = 0.75$
0.5

$80 \times 22\% = 62.40$
$80 \times 0.78 = 62.40$

$474000 \times 1.21 = 41$
$474000 \times 0.88 = 4$

$268 \times 64\% = 96.48$
$268 \times 0.36 = 96.48$

$99 \times 52\% = 47.52$
$99 \times 0.48 = 47.52$
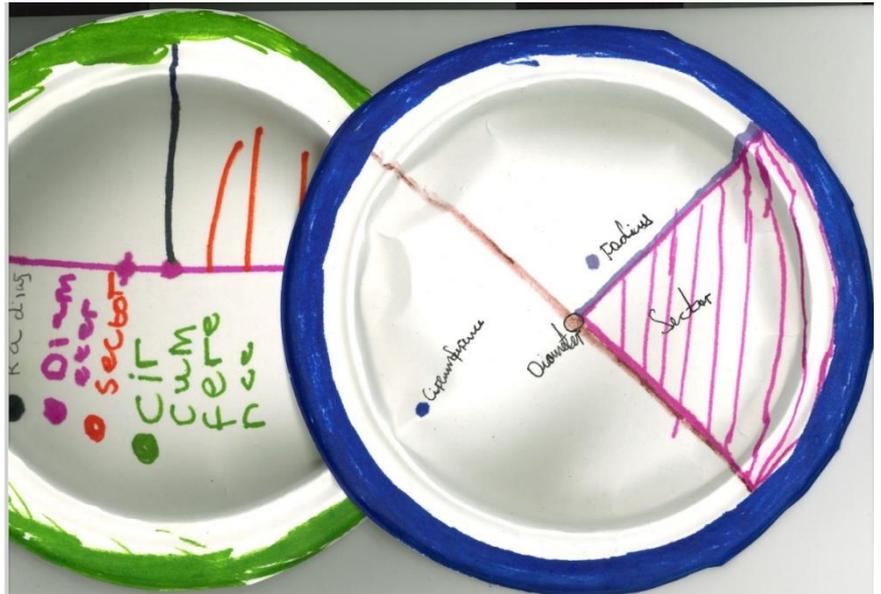
Here is some of our work from all year groups.

22/06/22

(a) Enlarge by scale factor $\frac{1}{3}$
(b) Enlarge by scale factor $\frac{1}{3}$
Enlarge by scale factor $\frac{2}{3}$

(a) Enlarge by scale factor $\frac{1}{4}$
(b) Enlarge by scale factor $\frac{1}{2}$
(c) Enlarge by scale factor $1\frac{1}{3}$

5 Tom and Nijah are increasing 60 by 30%

Tom's method
10% of 60 = 6
So 30% of 60 = 3 × 6 = 18
So the answer is 60 + 18 = 78

Nijah's method
100% + 30% = 130%
130% is the same as 1.3
So the answer is 60 × 1.3 = 78

Whose method do you prefer? toms
Talk about your choice with a partner.
Use your preferred method to complete the calculations.
a) increase 40 by 20% = 8
   50% × 20 = 10   10 + 8 = 18
b) increase 80 by 45% = 36
   45 ÷ 2 = 22.50   22.50 + 36 = 58.50
c) increase 70 by 25% = 17.50
   70 ÷ 2 = 35   35 + 17.50 = 52.5
d) increase 3,000 by 5%
e) increase 3,000 by 50%
f) increase 3,000 by 55%

6 Match the calculation to the decimal multiplier.

increase by 20% — × 0.98
increase by 2% — × 1.2
decrease by 20% — × 3
increase by 200% — × 0.8
decrease by 2% — × 1.02

7 a) Mr Ahmed earns £40,000 a year.
Work out his salary after a 15% pay rise.
$15\% \times 40,000 = 6000$
$+ \frac{40,000}{6000} = 46000$ £ 646,000

b) Ms Trent earns £45,000 a year.
Work out her salary after a 15% pay cut.
$45,000 ÷ 15\% = 30000$ £ 30,000

c) Mr Xu invests £20,000 in a savings account.
After a year, his investment has grown by 3%.
Work out the value of his investment after 1 year.   £

d) The price of a phone is £800.
If the price drops by 18%, what is the new price?
$800 ÷ 18 = 25.2025$ £ 82.25

8 A shop's prices are increased by 30%.
Two weeks later, there is a sale and the prices are reduced by 30%.
Are the prices now the same, higher or lower than they were before the changes?
Discuss with a partner and justify your answer.
they are the same because reducing by 30 when they are already been by 30 is just taking the 30 away