**Culverhill School – Curriculum – Yearly Overview 2021-2022 amended**

Scheme of Work for: Y7 and Y8 Subject: Maths

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Problem solving:** Using and applying addition and subtraction skills in word/practical situations.  **Real world experiential learning:** Visiting shops/cafes in order to develop awareness of how much things cost, the need to give money to buy things, get change etc.  **Simple/basic fractions**: half and quarter in real life contexts. | | | | | | | | | | |
|  | Wk1 | | | Wk2 | Wk3 | Wk4 | Wk5 | Wk6 | Wk7 | Wk8 |
| Term 1 | Number/ Place Value | | | | Addition and Subtraction  Multiplication and division  Fractions | | Time | Length | Position and direction | ~~Assess and review~~ |
| Term 2 | Number/ Place Value | | Money | | Weight | Capacity / Volume | ~~Assess and review~~ |  |
| Term 3 | Number/ Place Value | | | | Time | Shape | Assess and review |  |
| Term 4 | Number/ Place Value | Money | | | Weight | Length |  |  |
| Term 5 | Number/ Place Value | | | | Capacity/Volume |  |  |  |
| Term 6 | Number/ Place Value | Money | | | Shape | Position and direction | Time |  |
|  | | | | | | | | | | |

**Number/Place value**

**STAGE 2**

**Numbers to 50**

* Count read write forwards and backwards
* 1 more 1 less
* 1 to 1 correspondence (this is one this is two)
* Equal, greater than less than more or less
* Compare numbers (here is 3 here is 4 difference)
* Order numbers
* Ordinal numbers
* Count in 2 , 10s

**STAGE 3**

**Numbers to 100**

* Counting to hundred
* Ordering within a 100
* Comparing in hundred
* One more one less within hundred
* Counting in 3s , 5s
* Tens and One with part whole model – exchanging 10 Ones for 1 Ten
* Using a Place value chart
* Hundreds
* Represent numbers to a Thousand

**STAGE 4**

**Numbers to 1000**

* Find 1, 10, 100 more / less than a given number
* Compare numbers to 1000
* Order numbers to 1000
* Counting in 50s
* Round to the nearest 10 and 100
* Counting thousands
* Thousands, Hundreds, Tens, Ones
* Partitioning
* 1000 more / less
* Compare numbers
* Order numbers
* Round to the nearest 1000
* Count in 25s
* Negative numbers

**Addition and Subtraction**

**STAGE 2**

* Addition facts (all number bonds within 10)
* Comparing number bonds (which is more which is less)
* Subtraction, (missing number, 9 = 4 + 5)
* Number bonds within 10
* Finding and making number bonds
* Subtract not crossing 10 (16-4)
* Ten more / less
* Add and 2 digit and 1 digit number crossing 10 – count on from biggest number
* Subtract a 1 digit number from a 2 digit number crossing 10 – count back from biggest number

**STAGE 3**

* Systematic methods within 10 (1 + 9, 2 + 8, 3 + 7 etc)
* Finding a part (Missing numbers)
* Fact families to 10 (3 = 1+2 , 3= 2+1, 3 = 3-0)
* Subtraction finding the difference
* Comparing addition and subtraction statements
* Add by making 10
* Subtraction crossing 10 (16 – 8 = 16 – 6 – 2)
* Related facts (6 + 4 = 10 so 4 + 6 = 10)
* Fact families numbers bonds to 20
* Check calculations
* Compare number sentences
* Related facts
* Add 3 digit and 1 digit numbers, not crossing 10
* Add three digit and 1 digit numbers – crossing 10 by counting on
* Subtract a 1 digit number from a 3 digit number – not crossing 10
* Subtract a 1 digit number from a 3 digit number – crossing 10

**STAGE 4**

* Bonds to 100 (multiples of Ten)
* Add and subtract Tens
* Add two 2 digit numbers not crossing 10 – using partitioning
* Add two 2 digit numbers crossing 10 – using exchange
* Subtract a 2 digit number from a 2 digit number not crossing 10
* Subtract a 2 digit number from a 2 digit number crossing 10 – using exchange
* Bonds to 100 (Tens and Ones)
* Adding three 1 digit numbers
* Add and subtract multiples of 100
* Add and subtract 3 digit and 2 digit numbers not crossing 100
* Add and subtract 3 digit and 2 digit numbers crossing 100
* Add and subtract 100s

**Multiplication and division**

**STAGE 2**

Count in 10s

Make equal groups

Add equal groups

Make arrays

Make doubles

Make equal groups - grouping

Make equal groups – sharing

**STAGE 3**

Recognise equal groups

Make equal groups

Add equal groups

Multiplication sentences using x symbol

Multiplication sentences from pictures

Use arrays

2x table

10x table

5x table

**STAGE 4**

Make equal groups – sharing

Make equal groups – grouping

Divide by 2

Odd & even numbers

Divide by 5

Divide by 10

**Fractions**

**STAGE 2**

Year 1 WRM Fractions

Count in 10s

Make equal groups

Add equal groups

Make arrays

Make doubles

Make equal groups - grouping

Make equal groups - sharing

**STAGE 3**

Year 2 WRM Fractions

Make equal parts

Recognise a half

Find a half

Recognise a quarter

Find a quarter

**STAGE 4**

Unit fractions

Non-unit fractions

Equivalence of

1/2 and 2/4

Find three quarters

**Money**

**STAGE 2**

* Counting coins - pence
* Count money – pounds (notes and coins)
* Ordering coins
* Ordering notes

**STAGE 3**

up to £50

* Counting money - pounds and pence
* Select money
* Make the same amount using different coins
* Compare money – more or less?
* Find the total cost
* Adding notes (£5 - £20)
* Subtracting notes
* Spending money in real life situations

**STAGE 4**

Up to £100

* Find difference
* Compare prices, better value
* Do I get Change concept?
* How much do I need to pay for items?
* Two step problems
* Understanding prices
* Using money in real life accurately (Can consistently use correct money)

**Time**

**STAGE 2**

* I can use/show understanding of before/earlier/now/after/later
* I can say/show the days of the week in order I know that we have 24 hours in a day
* I know the difference between morning and afternoon
* I can tell the time using a digital clock with am and pm to the nearest minute
* I know the 12 months of the year in order

**STAGE 3**

* I can say what day it is today, what day it was yesterday and what day it will be tomorrow
* I can explain/show past/present/future
* I know the concept of Minutes, hours and days
* I can read a digital clock accurately
* I can estimate roughly how long a task/event will take
* I can time an activity using a stop clock
* I know that 1 hour has 60 minutes
* I know that half an hour is 30 minutes

**STAGE 4**

* I know that a quarter of an hour is 15 minutes
* I can work out what time to start an activity given the finished time and time to carry it out
* I can work out what time to start a sequence of activities given the finish time

**Weight/volume / capacity**

**STAGE 2**

I know a gram unit is g

I can use more or less when I talk about weight

I can show full and empty containers

I can show half full containers

I can show most and least amounts

**STAGE 3**

I know what capacity means

I can measure weight in grams to (100g)

I can read scales to 100g

I can show how many “somethings” to fill up a “something”

I can compare two objects capacity (how much liquid they hold)

I can show largest and smallest

I can read a scale on a jug in millilitres to the nearest hundred

I know that litres is more than millilitres

**STAGE 4**

I know Kilogram unit Kg

I can measure weight in Kg and Grams

I can add weights together in Kg and Grams

I know 1000 grams is 1 Kilogram

I know that there are different types of weight scale Kg, g

I know that there are different types of capacity scale; l , ml

**Length, Perimeter, Area**

**STAGE 2**

Compare lengths and heights understand the language of length such as long, longer, short, shorter, tall, taller.

Measure length / heights using non-standard units

Measure length / height – standard unit of measure cm

**STAGE 3**

Measure length (cm)

Measure length (m)

Compare lengths

Order lengths

Four operations with lengths

Measure length cm

**STAGE 4**

Equivalent lengths – m & cm

Equivalent lengths – mm & cm

Compare lengths

Add lengths

Subtract lengths

Measure perimeter

Calculate perimeter

**Shape / Position and direction**

**STAGE 2**

Recognise and name 2d shapes

Recognise and name 3d shapes

Repeated patterns with 2d and 3d shapes

**STAGE 3**

Count sides on 2-D shapes

Count vertices on 2-D shapes

Draw 2-D shapes

Lines of symmetry

Sort 2-D shapes

Make patterns with 2-D shapes

Count faces on 3-D shapes

Count edges on 3-D shapes

Count vertices on 3-D shapes

Sort 3-D shapes

Make patterns with 3-D shapes

**STAGE 4**

Turns and angles

Right angles in shapes

Compare angles

Draw accurately

Horizontal and vertical

Parallel and perpendicular

Recognise and describe 2D shapes

Recognise and describe 3-D shapes

Make 3-D shapes

**Position and Direction**

**STAGE 2**

Describe turns

Describing movement

Describe Position (1)

Describe Position (2)

Making patterns with shapes

**STAGE 3**

Describing movement

Describing turns

Describing movement and turns

Making patterns with shapes

**STAGE 4**

½ and ¼ turns

Right angles

Describe position

Turns and angles

Right angles in shapes

Compare angles

Draw accurately

Horizontal and vertical

Parallel and perpendicular

From WRM Y4

Describe position

Draw on a grid

Move on a grid

Describe a movement on a grid