Year 1

Spring Term

Parent Maths Pack

Focus: Time and Fractions
This pack includes:

- An overview of Mathematics Mastery
- Key vocabulary
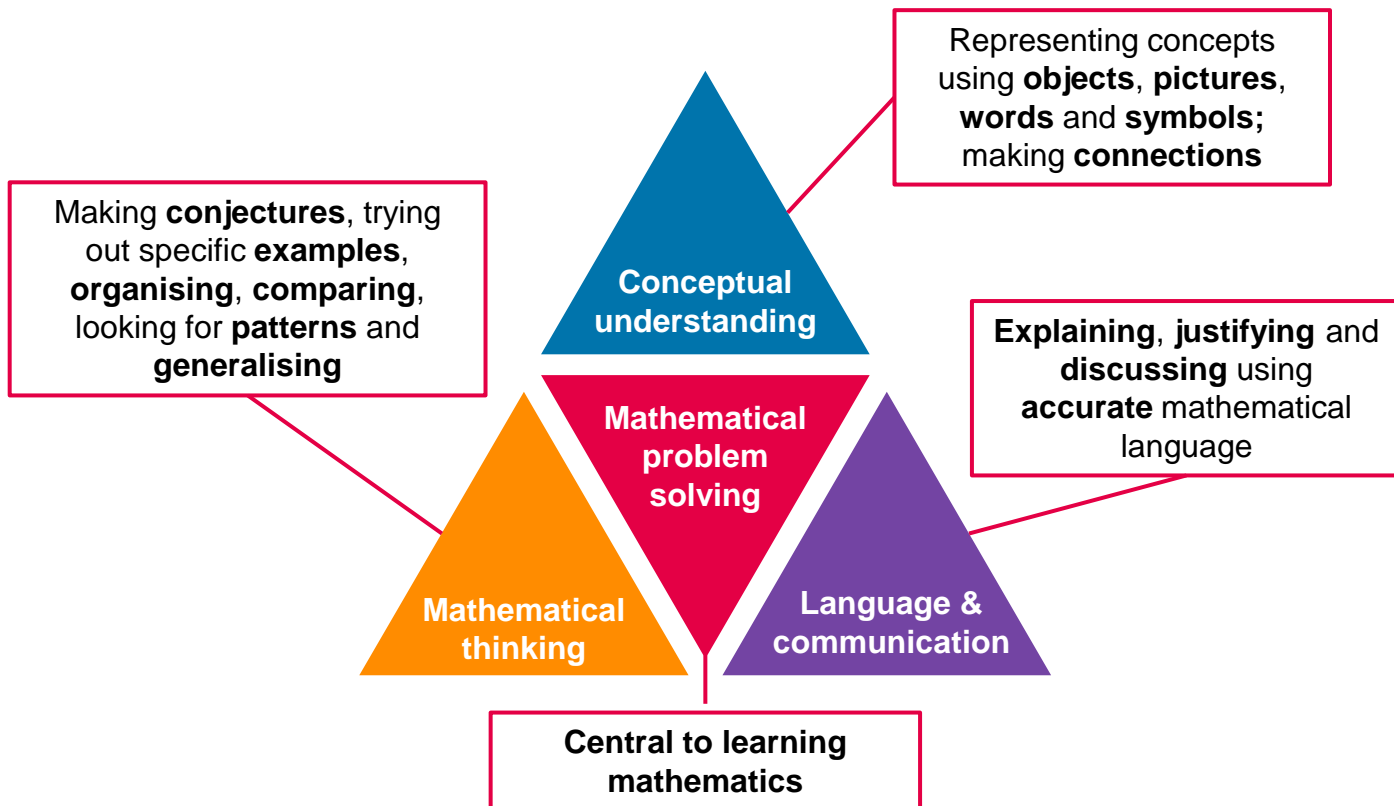- Key representations
- Big Pictures
- Games to play at home

Mathematics Mastery

Mathematics Mastery

What is 'Mastery'?

The 'mastery approach' to teaching mathematics is the underlying principle of Mathematics Mastery. Instead of learning mathematical procedures by rote, we want your child to build a deep understanding of concepts which will enable them to apply their learning in different situations. To achieve this we aim to develop pupils' **Conceptual Understanding, Mathematical Thinking** and **Language and Communication.** (See diagram below).

Representing concepts using **objects**, **pictures**, **words** and **symbols**; making **connections**

Making **conjectures**, trying out specific **examples**, **organising**, **comparing**, looking for **patterns** and **generalising**

Conceptual understanding

Explaining, **justifying** and **discussing** using **accurate** mathematical language

Mathematical problem solving

Mathematical thinking

Language & communication

Central to learning mathematics

Success for all

At school we believe <u>all</u> pupils can achieve success in maths. We encourage pupils to have a 'growth mindset' – a belief that effort leads to success and that challenges are opportunities to learn.

Here are a few tips to encourage your children at home with maths:

- ✓ Talk to your children about everyday maths
- ✓ Play games with them
- ✓ Value mistakes as learning opportunities
- ✓ Recognise that there is more than one way to work things out.
- ✓ Praise children for effort over outcome.
- ✓ Avoid saying things like "I'm useless at maths".

Spring focus: Time and Fractions

Year 1 - Spring Curriculum Map

Time	Calculation strategies within 20	Numbers to 50	Addition and subtraction within 20	Fractions	Measures: Length and mass
• Read, write and tell the time to o'clock and half past on analogue clock • Sequencing daily activities • Whole and half turns linked to time	• Model, explain and choose addition and subtraction strategies	• 2-digit numbers – represent, sequence, explore, compare. • Count in 2s, 5s and 10s • Describe and complete number patterns	• Illustrate, explain and link addition and subtraction with equations • Apply 'Make Ten' strategy • Use language to quantify and compare difference	• Represent and explain addition and subtraction strategies including 'Make Ten' • Use known facts to add and subtract	• Compare and measure lengths and mass using cm and kg • Doubling and halving

This term, Year 1 focus on both time and fractions:

Time Small Steps

- To know and order the months of the year
- To put events in order
- To understand time is measured in minutes and seconds
- To read the time on an analogue clock to the nearest o'clock
- To read the time on an analogue clock to half past
- To read the time to o'clock and half past on an analogue clock
- To read and write the time in words to o'clock and half past
- To explore adding on hours and half hours
- To use the language of position, movement and direction

Fractions Small Steps

- To Identify half of a shape or object
- To find half of a quantity
- To identify one quarter of a shape or object
- To find one quarter of a quantity
- To describe position and direction using half, whole and quarter turns, including three quarter turns.

Key vocabulary – Time:
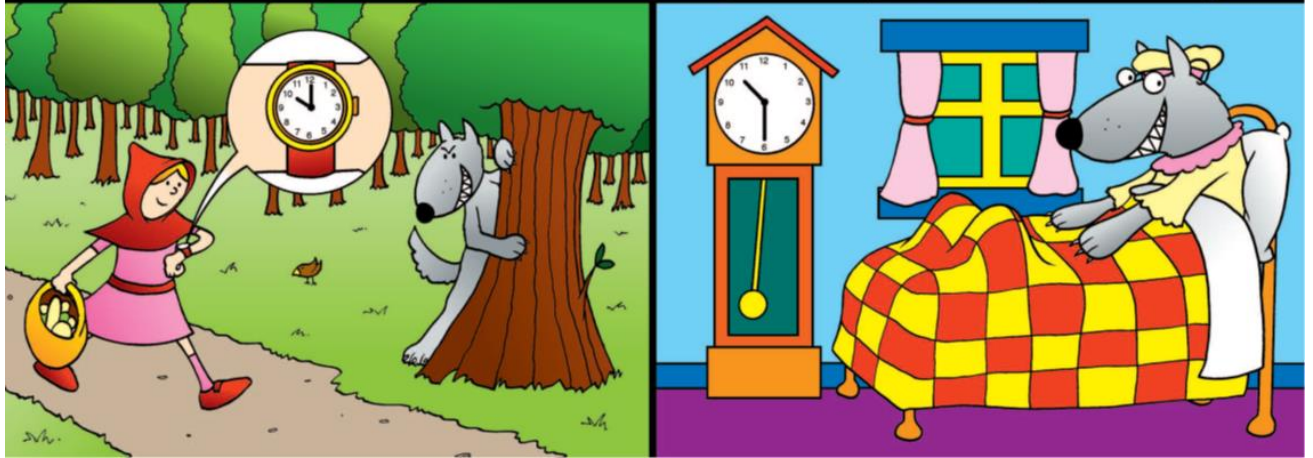
before   after   next   then   first

o'clock   half past   minute hand

hour hand   morning   afternoon   time

analogue clock

Key vocabulary – Fractions:

quarter   equal

unequal   part   whole

divide   quarter turn

half turn   clockwise

anti-clockwise

Big Pictures

What maths can you see? Discuss with your children at home using the key vocabulary from the previous page.
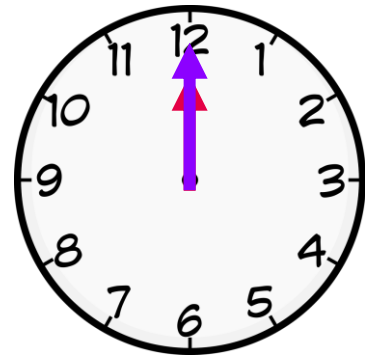
First to 12 O'clock

Players: This game is for two players
What you need: Geared clock or paper clock faces

To start set the clock to 6 o'clock.
Player 1 chooses to put the clock forward wither one hour or half an hour and moves the clock hands to that time.
Pass the clock for player 2's turn.
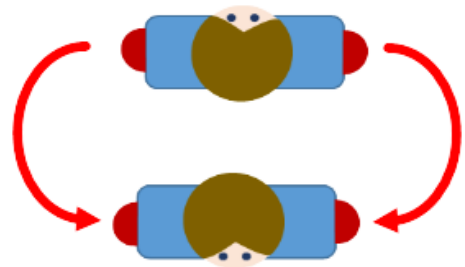The winner is the player who moves the hands onto 12 o'clock.

Can you work out a winning strategy so that you can always beat your opponent?

Talk Task

Pupil A gives an instruction to turn a half turn either clockwise or anti-clockwise.

Pupil B completes the instruction stating what they can see before and after the turn.
Then swap roles.

Complete a half turn clockwise.

Before the half turn I am facing the book corner.
After the half turn I am now facing the opposite direction.

Try this at home – more ideas

Months of the year
- Talk about what happens in each month,
- Create a calendar at home, marking on special occasions e.g. birthdays, festivals etc.
- Play 'Game 21'

Game 21 – in pairs
Partner A: chooses to say either 1 or 2 months, e.g. January, February.
Partner B: continues to sequence the month choosing either 1 or 2 months, e.g. March
Take it in turns until you get to December. Whoever says December is the winner.

Make a paper plate clock at home
Why not make your own clock that can be used to practise telling the time or play the "Stop the clock" game on the previous page.

You will need: a paper plate, split pins, coloured card, felt tips.
- *Write numbers 1-12 around your clock, discuss how might be the best way to do this accurately with your children. E.g. start with 12, 6, 3 and 9 first.*
- *Create arrow hands from coloured card, one longer to be the minute hand and a shorter one to be the hour hand*
- *Use your split pins to attach these to the centre of the plate.*

Songs
Try singing this song with the actions to learn how to tell the time
https://www.bbc.co.uk/teach/supermovers/ks1-maths-telling-the-time/zk4t8xs

Finding Halves and quarters
- Try finding halves and quarters in your daily routine at home. For example when sharing toys or food, "let's have half each", "how can I share this between the four of us?".
- When preparing meals or baking, show your children how to measure half a cup or half of a jug of something.
- Link this to time, it has been half an hour since… We have half an hour until we get to go to grandma's.

Questions to support thinking
- What do you think would happen if….
- What's the same? What's different?
- How do you know that?
- Can you see a pattern? What would come next?
- What else could go in this set? What couldn't?