

HIAS MOODLE+ RESOURCE

Year 1 Unit Plan 1.2

Measurement

Addition and Subtraction

Autumn Term

HIAS Maths Team
September 2026
Final version

© Hampshire County Council

Overview

This document contains...

Year 1 Unit Plans linked to the Hampshire Medium Term Overview

Points to consider when using this resource:

These unit plans provide an example of how medium-term planning could be developed into units of work. These unit plans will need to be adapted to meet the needs of pupils. The unit plan provides an outline of a possible learning journey with suggestions of types of tasks that could be used. They also identify required prior learning, some common misconceptions and an indication of key skills pupils need to secure competency. It is assumed that teachers will make use of appropriate mathematical representations (manipulatives, visuals and symbolic) to support conceptual understanding for pupils alongside procedural fluency.

National Curriculum Links:

Measurement

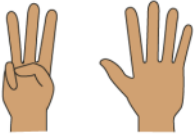

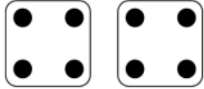



- Compare, describe and solve practical problems for:
 - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
 - mass/weight [for example, heavy/light, heavier than, lighter than]
 - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
- Measure and begin to record the following:
 - lengths and heights
 - mass/weight
 - capacity and volume

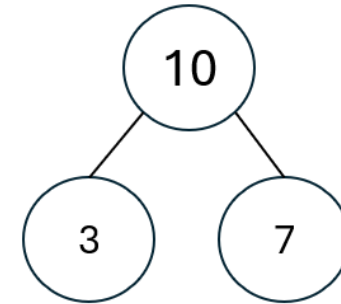
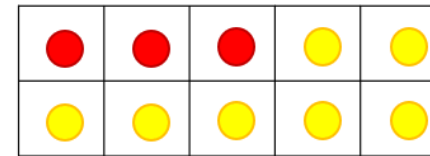
Addition and Subtraction

- Represent and use number bonds and related subtraction facts within 20
- Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = [?] - 9$

<p>This unit builds on the foundational understanding of numbers 1 to 5 by extending pupils' number sense to 6, 7, 8, and 9. It deepens their grasp of part-whole relationships and introduces number bonds within and to 10. Building on the EYFS skills and early number fluency developed in Unit 1, pupils now begin to apply this knowledge to solve simple addition problems, laying the groundwork for more complex operations. Pupils will also learn to compare, describe, and order objects by length, mass, and capacity using everyday language.</p>		<p>Notional Time: 15 sessions</p>
<p>Check and Refresh - <i>skills and knowledge that pupils need to know</i></p>	<p>Verbal coding- <i>precise mathematical language to model during worked examples</i></p>	<p>Mastering Key Facts in Key Stage 1 – developing fluency and automaticity</p>
<p>Perceptual Subitising (recognise quantities instantly without counting) up to 5.</p> <p>Conceptual Subitising (recognise a quantity by seeing it as a composite of smaller groups that are perceptually subitised and combined).</p> <p>Verbally count beyond 20, recognising the pattern of the counting system.</p>	<p>___ is the whole. ___ is a part and ___ is a part.</p> <p>6 is 5 and ___ more</p> <p>___ plus ___ equals ___</p>	<p>Number bonds within 10</p> <ul style="list-style-type: none"> Focusing on 2, 3, 4, 5 <p>Count in 10s to 50 (Forwards and backwards)</p> <p>One more one less within 20</p>
<p>Mathematical Concepts- <i>important pieces of information learners should take away from the unit</i></p>	<p>Watch out for</p>	<p>DfE Ready -to- progress criteria</p>
<p>Recognising parts within a whole.</p> <p>Representing and using number bonds within 10.</p> <p>Representing and using number bonds to 10.</p> <p>Aggregation: Combining two or more groups to find a total</p>	<p>Pupils who are not able to add one more to the first number without re-counting (cardinal principle).</p> <p>Pupils who do not understand that numbers can be partitioned in different ways.</p> <p>Pupils who do not understand and cannot talk about 'part-whole' relationships.</p> <p>Pupils who cannot automatically recall number bonds up to 5.</p> <p>Pupils who cannot see small numbers within a larger collection.</p>	<p>1NPV-2 1NF-1</p> <p>1AS-1 1AS-2</p> <p>Formative assessment questions - <i>key questions to support pupil reasoning and teacher assessment</i></p> <ul style="list-style-type: none"> What is the same and what is different? What if I change...? Can you give me an example of... and another...and another? Which is harder and which is easier...? If I know this, then what else do I know?

Visual coding: key representations

 <p>Figure 17: 8 represented as 3 fingers and 5 fingers</p>	 <p>Figure 18: 8 represented as 6 and 2 with base 10 number boards</p>	 <p>Figure 19: 8 represented as two 4-value dice</p>
 <p>Figure 20: 8 represented as 2 rows of 4</p>	 <p>Figure 21: 8 represented as tally marks: 5 and 3</p>	 <p>Figure 22: 8 represented on a bead string: 7 and 1</p>

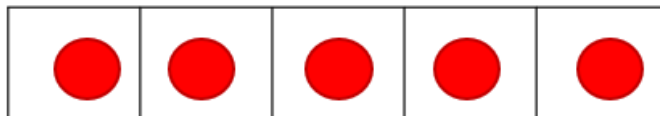


3 and 7 equals 10

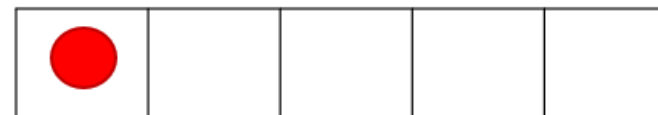
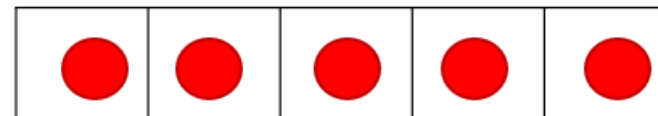
10 takeaway 7 equal 3.

[Mathematics guidance: key stages 1 and 2 \(covers years 1 to 6\) – 1NF-1](#)

Five Frame – “5 and ___ more”



Two Five Frames – “5 and ___ more”



Learning Journey – Measurement

Autumn unit 1.2 (1 week)	Spring unit 1.5 (1 week)	Spring unit 1.9 (2 weeks)	Summer unit 1.13 (3 weeks)
<p>I can compare the length of two objects using words like <i>longer</i>, <i>taller</i> and <i>shorter</i>.</p> <p>I can order objects by length or height from shortest to longest.</p> <p>I can compare the mass of two objects using words like <i>heavier</i> and <i>lighter</i>.</p> <p>I can order objects by mass from lightest to heaviest.</p> <p>I can describe containers using words like <i>full</i>, <i>empty</i>, <i>half full</i>, and <i>nearly full</i>.</p>	<p>I can use words like before, after and later to explain my daily routine.</p> <p>I can name the days of the week in order.</p> <p>I can say what day it is today, yesterday, and tomorrow.</p> <p>I can name and match coins like 1p, 2p, 5p, 10p, 20p, 50p, £1, and £2.</p> <p>I can count using 1p coins to make amounts.</p> <p>I can use different coins to make the same amount (e.g, $1p + 1p + 1p + 1p + 1p = 5p$, or $2p + 2p + 1p = 5p$).</p>	<p>I can measure length or height using cubes or other objects.</p> <p>I can use balance scales to compare weight.</p> <p>I can describe containers using words like full, empty, half full and nearly full.</p> <p>I can measure and record how much a container holds using cups or other units.</p> <p>I can say which coin is worth more or less.</p> <p>I can name and match notes like £5, £10 and £20.</p> <p>I can name the months of the year.</p> <p>I can use words like morning, afternoon and evening to talk about time.</p> <p>I can talk about time using words like second, minutes and hours.</p> <p>I can tell the time to the hour.</p> <p>I can draw the hands on a clock face to show time to the hour.</p>	<p>I can solve practical problems for length using words like longer, taller, shorter.</p> <p>I can measure length or height using a ruler.</p> <p>I can solve practical problems for length using words like double and half.</p> <p>I can solve practical problems for mass using words like heavier than and lighter than.</p> <p>I can solve practical problems for capacity and volume.</p> <p>I can solve practical problems for time using words like quicker, slower, earlier, later.</p> <p>I can tell the time to the nearest half hour.</p> <p>I can draw the hands on a clock face to show time to the nearest half hour.</p> <p>I can recognise and know the value of different coins and notes.</p>

Learning Journey – Addition and Subtraction			
Autumn unit 1.1 (2 weeks)	Autumn unit 1.4 (2 weeks)	Spring unit 1.5 (1 week)	Spring unit 1.8 (1 week)
<p>I can subitise 1, 2 and 3.</p> <p>I can recognise parts within a whole (2 and 3).</p> <p>I can subitise 4 and 5.</p> <p>I can recognise parts within a whole (4 and 5).</p> <p>I can solve problems using my knowledge of parts within a whole.</p>	<p>I can solve problems involving addition within 10 (<i>augmentation – add more</i>)</p> <p>I can find a missing part.</p> <p>I can solve problems involving subtraction within 10.</p> <p>I can solve problems by finding the difference.</p>	<p>I can solve problems involving addition within 20. (<i>aggregation – add together</i>)</p> <p>I can solve problems involving addition within 20 (<i>augmentation – add more</i>)</p>	<p>I can find the double of a number.</p> <p>I can solve addition problems using near doubles.</p>
Autumn unit 1.2 (2 weeks)		Summer unit 1.12 (2 weeks)	
<p>I can recognise parts within a whole (6, 7, 8, 9).</p> <p>I can represent and use number bonds within 10.</p> <p>I can represent and use number bonds to 10.</p> <p>I can solve problems involving addition within 10 (<i>aggregation – add together</i>)</p>		<p>I can represent and use number bonds and related subtraction facts within 20.</p> <p>I can solve problems involving subtraction within 20.</p> <p>I can solve problems by finding the difference</p> <p>I can solve problems involving addition and subtraction.</p> <p>I can solve problems involving missing numbers.</p>	

Proposed lesson sequence to support development of mathematical concepts


Developing fluency and automaticity – ongoing daily practice

Mastering Key Facts in Key Stage 1	<p>Autumn 1 Ongoing Mental Fluency Practice</p> <ul style="list-style-type: none"> • Number bonds within 10 - <i>focusing on 2, 3, 4, 5</i> • Read and write numbers from 1 - 5 in words
---	---

I can...	Mathematical Concepts, Key Skills and Suggested Tasks
-----------------	--

5 sessions - Measurement

<p>I can compare the length of two objects using words like <i>longer, taller</i> and <i>shorter</i>.</p>	<p>In this step, pupils are encouraged to observe and describe the length or height of objects, using the everyday language of longer, taller or shorter to make comparisons. Use real objects, such as ribbons, blocks, pencils or outdoor items such as leaves, shadows, sticks for hands-on comparison.</p> <p>Key questions:</p> <ul style="list-style-type: none"> • “Which one is longer/shorter?” • “Can you find something taller than this?” • “How do you know which is longer?” • “Can you put these in order from shortest to longest?”
---	--

<p>I can order objects by length or height from shortest to longest.</p>	<p>The focus on this step is on ordering more than two objects, a progression from comparing. This support early development of logical reasoning, sequencing and vocabulary related to measurement.</p> <p>Suggested task: Order lengths of ribbon- shortest, longest. Write some sentences and comparisons about them.</p> <p><i>The ___ ribbon is longer than the ___ ribbon.</i> <i>The ___ ribbon is shorter than the ___ ribbon</i> <i>The ___ is longer than the ___ ribbon but ___ shorter than the ___ ribbon.</i></p> <div style="text-align: right;">  </div>
--	--

<p>I can compare the mass of two objects using words like <i>heavier</i> and <i>lighter</i>.</p>	<p>In this step, pupils develop an understanding of mass by handling and comparing real objects. They learn that mass is a property of an object that can be compared, even if it is not visible and can begin to predict which object might be heavier or lighter based on size, material, or experience.</p> <p>Suggested tasks:</p> <ul style="list-style-type: none"> • Mass hunt: Ask pupils to find something heavier or light than a reference object (e.g. mini whiteboard) • Sorting game linked to a classroom object, e.g. “heavier than a glue stick” and “lighter than a glue stick” • Balance scale exploration: “which object is heavier, which object is lighter?” • Read a story like “<i>The Enormous Turnip</i>” or “<i>Goldilocks and the Three Bears</i>” and discuss which objects in the story might be heavier or lighter.
<p>I can order objects by mass from lightest to heaviest.</p>	<p>The focus on this step is on ordering more than two objects, a progression from comparing. This supports early development of logical reasoning, sequencing and vocabulary related to measurement.</p> <p>Suggested tasks:</p> <ul style="list-style-type: none"> • Pupils use a balance scale to compare pairs of objects and then arrange all objects in order from lightest to heaviest. Encourage pupils to record their order with drawing or labels. • Set up a mass sorting table with a variety of objects and a balance scale. “Can you find the heaviest object?”, “Which object would be in the middle when ordered from lightest to heaviest?” • Use a real-life context, e.g. packing a shopping bag of food. Pupils decide which item to pack first based on how heavy or light they are, ensuring that they pack the lightest things on top!
<p>I can describe containers using words like <i>full</i>, <i>empty</i>, <i>half full</i>, and <i>nearly full</i>.</p>	<p>Capacity refers to the amount a container can hold. During this step, pupils are expected to recognise and describe how much space is taken up in a container and use everyday language to describe the different levels of fullness. Pupils begin to understand that containers can hold different amounts, even if they look similar.</p> <p>Suggested tasks:</p> <ul style="list-style-type: none"> • Provide a variety of clear containers and a water tray. Pupils fill containers to different levels and describe them use the correct vocabulary. Add challenges like “can you make this container half full?” and “find a container that is nearly empty.” • Prepare picture cards or real containers showing different levels of fullness, which pupils can sort into groups. • Fill it up relay: in teams, pupils race to fill a container to a specific level (e.g. half full) using small containers.

10 Sessions – Addition and Subtraction

I can recognise parts within a whole (6, 7, 8, 9)

To help pupils see and understand numbers beyond 5, use a ten frame. It allows them to place 6 as five filled spaces and one more.

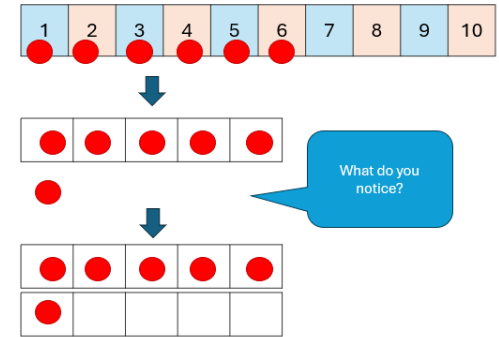
Once pupils have grasped that 6, 7, 8, and 9 are made up of 5 and some more, the next step is to help them recognise and explore the different parts that make up these numbers. This deepens their understanding of part-whole relationships, which is essential for developing fluency with number bonds and early addition.

Suggested tasks:

- Dot patterns (e.g. dice or dominoes)
- Ten frames (e.g. 5 filled, plus 1, 2, 3, or 4 more)
- Part-whole models

Key Questions

- “Can you break this number into 2 parts?”
- “Can you break it into more than 2 parts?”
- “What do you notice about the parts?”
- “Can you find a different way to break it apart?”



I can represent and use number bonds within 10.

Number bonds are pairs of numbers that add up to a given total. When exploring number bonds up to 9, encourage pupils to use their subitising skills rather than counting in ones. This will help pupils see number relationships quickly and builds a stronger understanding of how numbers are made up.

Developing conceptual understanding:

“Can you show me 7 in your tens frame?” “Can you show me 7 on your part-whole model?”

“Can you break this number into 2 parts?”

“Has someone done this a different way?”

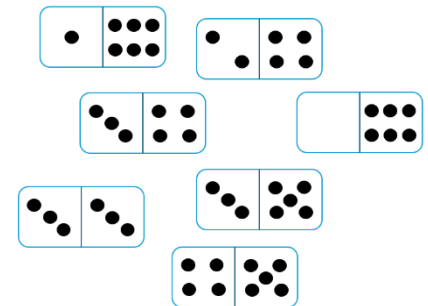
“Can you find a different way to break it apart?”

Developing fluency:

- Find dominoes that show 6, 7, 8 or 9.
- Matching pairs game
- Ten frame flash – flash a partially filled in tens frame. Pupils to show using fingers how many more to make 10.

Application/Problem solving:

Use real life scenarios or games to support deep understanding and flexible use of number bonds within 10.

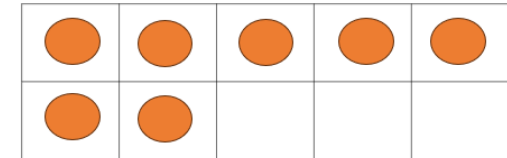


I can represent and use number bonds to 10.

Once pupils are confident with number bonds within 10, the next step is to focus on number bonds to 10. This is a key milestone in Year 1.

Consider tasks that develop conceptual understanding, enable fluency practice and application into problem solving contexts

- We need to make 10.
- How many more do I need?



I can solve problems involving addition within 10.
(aggregation – add together)

Pupils should learn to compose and partition numbers within 10 (1AS–1) before moving on to formal addition and subtraction. Aggregation is the first concept of addition encountered. It builds the foundation for mental strategies, number bonds, and problem solving, e.g. I have 3 apples in one tray and 2 apples in another tray. How many altogether?

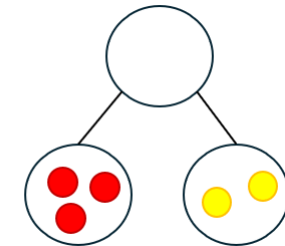
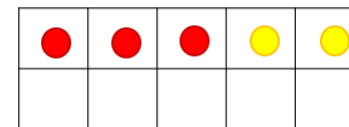
___ is the whole.

3 is a part and 2 is a part.

3 plus 2 equals ___

Key questions:

- How many parts are in the first group?"
- "How many parts are in the second group?"
- "What happens when we put them together?"
- "Can you show it in a picture or with objects?"
- "Can you write a number sentence to match?"



Language focus

"There are 5 flowers in one bunch. There are 2 flowers in the other bunch. There are 7 flowers altogether."

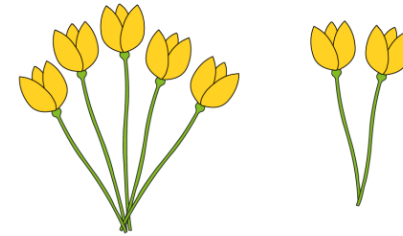
"We can write this as 5 plus 2 is equal to 7."

"The 5 represents the number of flowers in 1 bunch."

"The 2 represents the number of flowers in the other bunch."

"The 7 represents the total number of flowers."

How many flowers are there altogether?



$$5 + 2 = 7$$

Figure 26: addition as aggregation

[Mathematics guidance: key stages 1 and 2 \(covers years 1 to 6\)](#) – **1AS-2**

Contains material developed by NCETM and licensed under Open Government Licence v3.0' <http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3>

HIAS Resources to support:

- Reasoning and Intelligent Practice Tasks: [Reasoning and Intelligent Practice Tasks](#)
- Faded Scaffolds and Intelligent Practice: [Faded Scaffolds and Intelligent Practice](#)
- Paired Examples: [Paired Examples](#)
- Entry and Exit tickets: [Entry and Exit Tickets](#)
- Interleaving, Recall and Retrieval: [Interleaving, Recall and Retrieval \(hants.gov.uk\)](#)
- Connect4Maths: [Connect4Maths - Primary](#)
- Moderation Documents: [Moderation Documents](#)
- KS1 Key Facts: [Key Stage 1 Key Facts Document](#)
- Mastering Times Tables: [Mastering Times Tables](#)

NCETM Resources to support:

- Exemplification of ready -to -progress criteria (RTPS): [Exemplification of ready-to-progress criteria | NCETM](#)
- NCETM Professional Development materials spine 1: [Number, Addition and Subtraction | NCETM](#) ;
- The NCETM Mastery Task booklets can be used as a source of tasks to support end of year teacher assessment for both EXS and GDS [Teaching for Mastery Booklets Yr1-6](#)

HIAS Maths Team

Jo Lees – Lead Inspector
Email: jo.lees@hants.gov.uk

Kate Spencer – Lead Inspector
Email: kathryn.spencer@hants.gov.uk

Rebecca Vickers – Teaching & Learning Adviser
Email: rebecca.vickers@hants.gov.uk

Nikki Barber – Teaching & Learning Advisor
Email – nicola.barber@hants.gov.uk

Olivia Goodburn – Teaching & Learning Advisor
Email – olivia.goodburn@hants.gov.uk

For further details on the full range of services available please contact us using the following email:

hias.publications@hants.gov.uk

Upcoming Courses

Keep up-to-date with our learning opportunities for each subject through our Upcoming Course pages linked below. To browse the full catalogue of learning offers, visit our new Learning Zone. Full details of how to access the site to make a booking are provided [here](#).

- [English](#)
- [Maths](#)
- [Science](#)
- [Geography](#)
- [RE](#)
- [History](#)
- [Leadership](#)
- [Computing](#)
- [Art](#)
- [D&T](#)
- [Assessment](#)
- [Support Staff](#)
- [SEN](#)
- [TED](#)
- [MFL](#)

Terms and conditions

Terms of licence

Moodle+ subscribers are licenced to access and use this resource and have agreed to pay the annual subscription fee. This licence begins once the fee is paid and remains valid until the subscription period expires, unless renewed. This resource is intended solely for personal or classroom use. By using it, you agree that you will not copy or reproduce this file except for your own personal, non-commercial use.

This document/file must be used and shared in its original form. The use of artificial intelligence (AI) tools (Copilot, Gemini, Chat GPT etc) or automated systems to alter, rewrite, translate, or otherwise modify its content is strictly prohibited without prior written permission from the original author(s) or publisher. Unauthorised use of AI in this way may result in misrepresentation, loss of context, or breach of intellectual property rights, and may lead to corrective or legal action.

HIAS reserves the right to modify these terms at any time. Any changes will take immediate effect and supersede all previous agreements.

You are welcome to:

- download this resource
- save this resource on your computer
- print as many copies as you would like to use in your school
- amend this electronic resource so long as you acknowledge its source and do not share as your own work.

You may not:

- claim this resource as your own
- sell or in any way profit from this resource
- store or distribute this resource on any other website or another location where others are able to electronically retrieve it
- email this resource to anyone outside your school or transmit it in any other fashion.