Hampshire Services
HIAS SCHOOL IMPROVEMENT

HIAS HOME LEARNING RESOURCE

Year 6 Summer Term 2020 Overview

Resource for Teachers

HIAS Maths Team
Spring 2020
Final version

Hampshire County Council

www.hants.gov.uk

Overview

The HIAS maths team have put together a suggested overview of maths units for the summer term which would enable children to engage in some mathematical thinking across all the domains in the mathematics curriculum. The areas of mathematics suggested are those which children would find easiest to access independently while at home. Each unit has some of the national curriculum statements for that domain but does not include all the statements. The overview and the linked documents are intended to support teacher's in their choices of tasks for home learning over the coming weeks.

For each unit of work we will provide some examples of a problem for the unit, giving a 'model' answer for the task and then similar tasks for further practise with answers.

We welcome feedback on these resources.

Year 6 Summer Term 2020

This document is intended for teachers to use and not for sharing with parents.

This document provides an overview of the areas of mathematics that could be supported at home by parents or carers during the summer term 2020. This is based on the Hampshire Scheme of Learning, which is available to schools subscribing to Moodle Plus (https://maths.hias.hants.gov.uk) and seeks to cover a wide range of key ideas across the domains of the maths curriculum.

Summer 1

Week	Domain	Unit Objectives
1 2 3	Multiplication and division	• Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Construct arrays to show that prime numbers (p) have exactly one array (1 x p) • Recognise and use square numbers and cube numbers and the notation for (^{2}) and (^{3}). Construct arrays for square numbers to show that square numbers have an odd number of factors since one is repeated (e.g. 16 can be constructed as 1 x 16; 2 x 8 and 4 x 4 ~ factors are 1,2,4,8,16) • Solve problems involving all four operations including using their knowledge of factors and multiples, squares and cubes.
4 5	Fractions	• Add and subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions • Multiply simple pairs of proper fractions (show on an array), writing the answer in its simplest form e.g ¼ x ½ = 1/8 • Divide proper fractions by whole numbers e.g. 1/3 ÷ 2 = 1/6

Summer 2

Week	Domain	Unit Objectives
1	Addition and subtraction	• Solve addition and subtraction multi-step problems in contexts, deciding which operations to use and why • Use simple formulae • Express missing number problems algebraically
2	Multiplication and Division	• Perform mental calculations involving all four operations • Use estimation to check answers to calculations and determine, in the context of the problem, levels of accuracy
3 4	Fractions Geometry	• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. • Find unknown angles in triangles, quadrilaterals and regular polygons • Recognise angles at a point, on a straight line, vertically opposite. Find missing angles in these cases.

5	Ratio and proportion	• Solve problems involving the relative sizes of two quantities where the missing values can be found using integer multiplication and division facts (Use a: b notation) • Solve problems involving the calculation of percentages, e.g. 15% of 360 (link to calculating angles in pie charts) and the use of percentages for comparison. • Solve problems involving ratio and proportion.
6	Multiplication and division	• Multiply up to 4-digit numbers by a 2-digit number using a formal written method • Divide up to 4-digit numbers by a 2-digit number using a formal written method • Interpret remainders from division as whole numbers, fractions, or by rounding as appropriate to the context
7	All four operations	• Recognise that shapes with the same areas can have different perimeters and vice versa • Recognise when it is possible to use formulae for the area and volume of shapes. • Convert between miles and km.

HIAS Maths Team

The HIAS Maths team offer a wide range of high-quality services to support schools in improving outcomes for learners, including courses, bespoke consultancy and in-house training.

During the current school closures, we are still offering school support in a variety of ways such as video conferencing, phone calls and bespoke creation of resources remotely. Coming soon will be teacher training via virtual classrooms.

We would be happy to discuss your needs.

For further details referring to mathematics, please contact Jacqui Clifft Jacqui.clifft@hants.gov.uk or Jo Lees: Jo.Lees@hants.gov.uk

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

Tel: 01962 874820 or email: hias.enquiries@hants.gov.uk

HIAS Maths Team

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

Jacqui Clifft – Area Inspector
Email: jacqui.clifft@hants.gov.uk

Jenny Burn – Inspector/Adviser
Email: jenny.burn@hants.gov.uk

Tessa Ingrey – Teaching & Learning Adviser (P/T)
Email: tessa.ingrey@hants.gov.uk

Natalie Ivey – Inspector/Adviser (P/T)
Email: natalie.ivey@hants.gov.uk

Dave Parnell – Teaching & Learning Adviser
Email: dave.parnell@hants.gov.uk

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

Brenda Robertson – Inspector/Adviser
Email: brenda.robertson2@hants.gov.uk

Kate Spencer – Teaching & Learning Adviser
Email: kathryn.spencer@hants.gov.uk

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

Tel: 01962 874820 or email: hias.enquiries@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

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 authority starts when the fee is paid and ends when the subscription period expired unless it is renewed. This file is for personal or classroom use only. By using it, you agree that you will not copy or reproduce this file except for your own personal, non-commercial use. HIAS have the right to modify the terms of this agreement at any time; the modification will be effective immediately and shall replace all prior 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.