

Remote Learning Autumn 2020: Mathematics

The HIAS maths team has developed the following resource to support teachers should class-based learning need to be blended with remote learning for an individual, a class or a bubble.

It is our intention to support you to:

- identify materials and resources to use as an initial two-day emergency plan for each learning journey / unit of work

This emergency plan can be used alongside similar plans available from HIAS English and the 2-day HIAS primary curriculum projects available on Moodle+

- convert existing plans, when required, into a structured remote teaching sequence to ensure continuity of curriculum learning

First 2 days – emergency plan

As part of medium-term planning, schools might identify school based or online resources which support **a relevant key skill or aspect of knowledge in each unit of work which could support learning for two days**. The two-day window created by these resources allows time for the remaining class-based learning sequence to be adapted to suit remote learning practices. This prepared resource could help reduce the initial workload demands on teachers.

Key sites recommended for online materials which include video material and tasks:

- NCETM <https://www.ncetm.org.uk/in-the-classroom/support-for-schools-addressing-ongoing-coronavirus-impact/>
- BBC Bitesize <https://www.bbc.co.uk/bitesize>
- BBC Teach <https://www.bbc.co.uk/teach>
- Oak National Academy <https://www.thenational.academy/oaks-curricula>
- White Rose scheme of learning task resources <https://whiterosemaths.com/homelearning/>

In June 2020, the DfE produced a guidance document, 'Teaching mathematics in primary schools, Guidance for teaching mathematics at key stages 1 and 2 to help pupils progress through the national curriculum'. DfE <https://www.gov.uk/government/publications/teaching-mathematics-in-primary-schools>

This guidance includes 'ready to progress' (RTP) criteria identifying essential concepts and skills for Years 2 to 6 for use from September 2020. This might also inform planning for the 2-day emergency plan.

During these initial 2 days, pupils can be sent home with instructions to complete the remote activities as planned, or as appropriate to pupil needs.

During this initial day (or two) of activities drawn from English, mathematics and foundation emergency curriculum planning (see Moodle+ for further resources), teachers should plan to adapt the planning from classroom based to remote delivery. This will use the school's preferred approach to remote teaching, in accordance with the relevant expectations in DfE guidance.

It is important that pupils are engaged in relevant learning in the initial two days of an isolation.

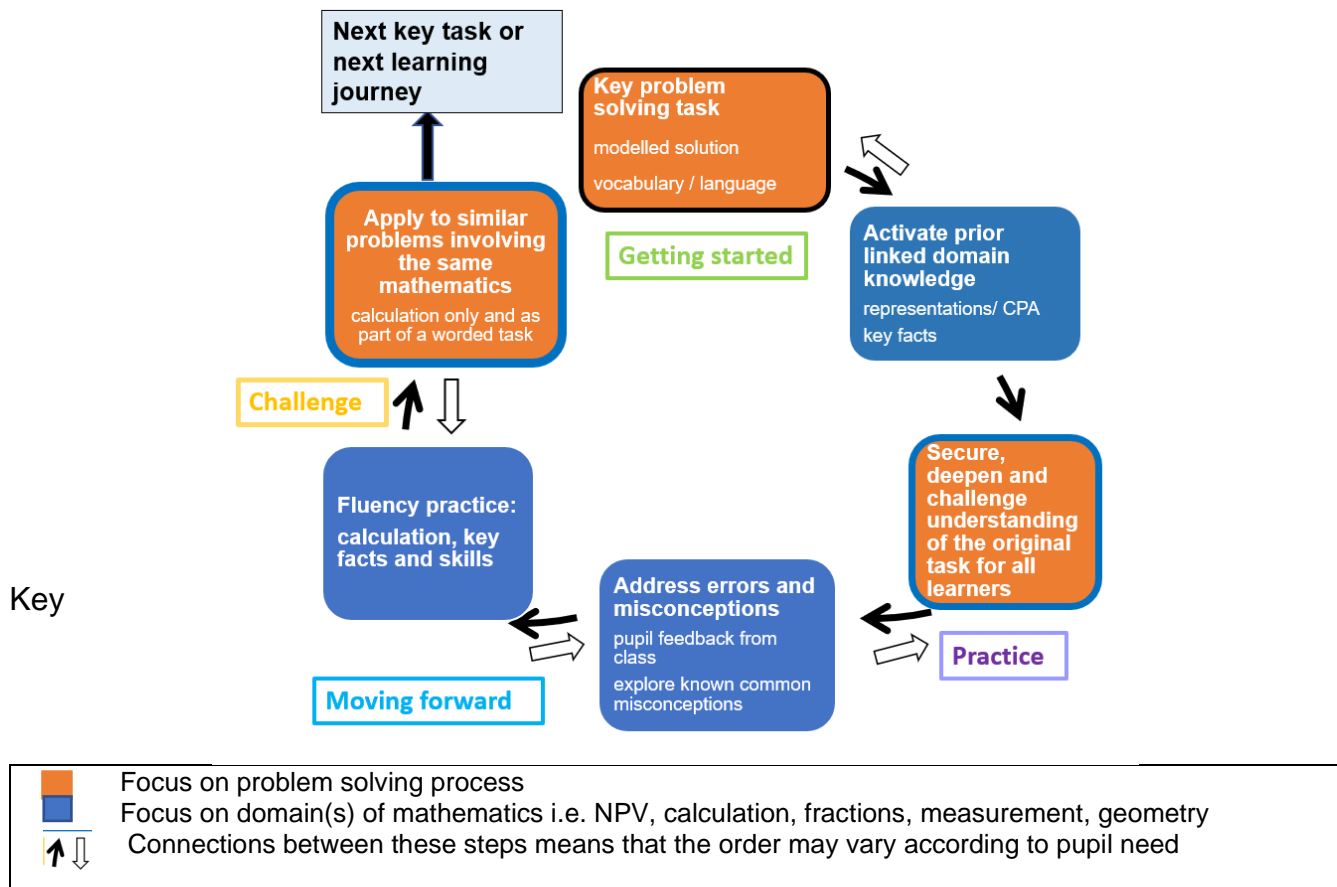
1. Plan a key skill for each learning journey considering what will be a useful focus for all pupils that reinforces an important aspect of the whole learning journey.
2. Choose a linked available remote teaching resource that includes relevant activities that will support pupils key learning or identify a school specific task that will be available for use, if required.
3. Consider the needs of the range of learners in your group/class (Refer to DfE 'Ready to Progress' (RTP) criteria) and how previous learning will be revisited/consolidated.
4. Ensure all pupils have access to remote learning resources they need e.g. internet access if required. If this is not possible, consider how pupils with limited or no access to the internet will access materials during any isolation from school.

A year group emergency plan overview for autumn term might look like this:

Year 1: Unit/ length		Unit 1.1 (4 weeks)	Unit 1.2 (3 weeks)	Unit 1.3 (3 weeks)	Unit 1.4 (4 weeks)
Domain focus		NPV; add/sub	Measurement (money/ length); add/sub	Multiplication/ division Fractions, Geometry	NPV; add/sub
2 days	Key skill focus	<ul style="list-style-type: none"> Position numbers on number lines up to 30 Represent numbers different ways 	<ul style="list-style-type: none"> Know coins/ Pennies = 2p, 5p, 10p Represent as addition facts 	<ul style="list-style-type: none"> Count in 2s, 10s on number lines Cut and fold shapes for half/ not half 	<ul style="list-style-type: none"> Position numbers on number lines up to 50 Represent numbers different ways Show all bonds 6-10
	Focus for application of a previous skill	<ul style="list-style-type: none"> Represent number bonds problem context 	<ul style="list-style-type: none"> Identify addition facts to solve simple problem/ pictures (diagrams), number sentences 	<ul style="list-style-type: none"> Solve simple multiplication problems using pictorial representations 	<ul style="list-style-type: none"> Identify addition and subtraction facts to solve simple problem/ pictures (diagrams), number sentences
Linked remote learning resources including relevant activities (carefully chosen online published and /or specific school-planned tasks)		Add/sub lesson 1 https://www.ncetm.org.uk/classroom-resources/vl-key-stage-1-number-addition-and-subtraction-video-lessons/ (unit 1.1) Oak Acad Unit 1 https://classroom.thenational.academy/subjects-by-year/year-1/subjects/maths BBC bitesize https://www.bbc.co.uk/bitesize/articles/zt4ytrd	Add/sub lesson 9 (unit 1.2) https://www.ncetm.org.uk/classroom-resources/vl-key-stage-1-number-addition-and-subtraction-video-lessons/ Oak Ac. Unit 2 https://classroom.thenational.academy/subjects-by-year/year-1/subjects/maths	Multiplication lesson 2&3 (Unit 1.3) https://www.ncetm.org.uk/classroom-resources/vl-key-stage-1-multiplication-1-video-lessons/ Oak Acad: Unit 3 https://classroom.thenational.academy/subjects-by-year/year-1/subjects/maths	Add/sub lesson 10 (Unit 1.5) https://www.ncetm.org.uk/classroom-resources/vl-key-stage-1-number-addition-and-subtraction-video-lessons/ Oak Acad: Unit 5 https://classroom.thenational.academy/subjects-by-year/year-1/subjects/maths

Remote Learning sequence guide

A six-step remote learning sequence has been developed to support you in converting a ‘typical’ teaching sequence into blended / remote learning (8/9 days after initial 1/2 days). These are not “fill-in” tasks but should be planned to provide for appropriate curriculum coverage and progress in key skills. The six-steps suggest a focus for some essential key tasks and activities for a unit of work. This is intended as a prompt for re-shaping the purpose of each lesson or sequence of lessons **at the point of the need for remote learning**. Refer to DfE ‘Ready to Progress’ (RTP) criteria to consider **inclusion needs of pupils** in emergency 2- day planning for a unit of work for Year 2, Year 3, Year 4, Year 5 and Year 6. A suggested sequence of planned learning steps is as follows: getting started, practice, moving forward and challenge.



A typical learning journey / unit of work is often composed of a **sequence of key tasks** developing both **conceptual understanding and skills** in a maths domain(s) and **application** of the maths to **solve problems**. Each problem-solving task can be used as a context and purpose for developing mathematical **reasoning** across several lessons.

Specific guidance for the re-planning of Mathematics curriculum content for remote delivery (available in Moodle plus) comprises

1. 6-step planning process for adapting from classroom to remote delivery
2. Applying effective strategies supporting recall of learning identified through cognitive psychology research
3. Converting between class-based learning and remote learning
4. Specific worked examples for year 1, 4 and 6