

Assessment

Guidance
Autumn

A note to say ...

Thank you to everyone who has downloaded our overviews and detailed schemes of learning. We have been overwhelmed with the positive response. We are really pleased that people have found them useful.

Since our schemes were published, we have been working on these assessments. The assessments align with the schemes we produced and cover the work for the autumn term of the relevant year group. There are two assessments for each year group.

We hope these assessments are useful for you and your students. Writing assessments is always a difficult task but we have tried to write questions that will help you identify particular strengths that students have and areas that need additional work.

Please take a little time to read this document as it contains guidance on how to get the best out of the assessments and also how you can work with us going forward.



We would be delighted to receive feedback from you. We always look to improve the work we are doing and we appreciate whatever comments you may have.

The White Rose Maths Hub Team

Two Assessments

The first assessment is an **arithmetic** paper that is largely a test of calculation. Problems involve students finding missing values and solving basic equations.

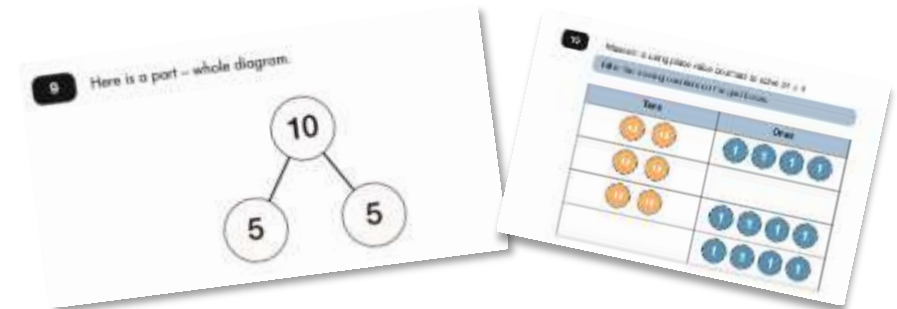
The second assessment is the **reasoning and problem solving** paper that tests students' understanding of the work they have done over the previous term. There are some fluency elements to the assessment, but mainly the second paper is designed to assess whether students can apply the maths they have learnt and understand what they are doing.

The table below shows the number of marks for the KS1 and KS2 papers and the suggested timings.

	Arithmetic	Reasoning
Key Stage 1	10 marks (15 minutes)	15 marks (Y1) or 20 marks (Y2) (25 mins)
Key Stage 2	20 marks (20 minutes)	30 marks (35 mins)

Mastery Methods

The questions you see in these assessments might not reflect previous and future National Curriculum tests. We have designed assessments that use methods that Maths Hubs are promoting. These methods underpin the work we showcase in our schemes of learning. For example, you may see the occasional part-whole diagram, bar model, ten frame or counters within a question. It was important that any assessment we designed had this in mind for ALL year groups.



If you are new to these ideas and concepts then your local Maths Hub can help with advice and training. We also have some Continuous Professional Development events coming up in the New Year. Please visit www.whiterosemathshub.co.uk for further information and additional dates.

Spreadsheets

For each assessment we have provided two spreadsheets that you can use to analyse your results. The spreadsheets will analyse your data question by question. One spreadsheet will RAG the data based on a student's overall mark, the other allows you to apply your own rules.

What does the mark mean?

In terms of interpreting the mark here are a few thoughts.

- ***The key message for us is that the percentage is not the most important thing.*** The areas where students have struggled should be the starting point on which to build.
- If you have a class who have not done well on this assessment, it may be that they have not yet gained a full understanding of the autumn term content. Is there any way you can interleave this content into spring term?

Students who underperform

If you have one or two students who have gaps in their knowledge or have clearly struggled with the assessment, then what support can be given to these students to help them catch up?

Our advice is to avoid separating these students to go over content again and therefore miss out on new material. Instead, if possible, find time outside lessons to allow them to catch up.

If nothing is done to support them with their understanding of the autumn term content, they are going to continue to struggle. As a school it will be about finding the right balance.

Administration FAQ

The following is suggested guidance and but we expect schools to make their own decisions on the issues below.

Can I read the questions to students?

- Our recommendation for the Year 1 assessment is for the teacher to sit with no more than six children, but do not read it to them unless they ask.
- Students in any year group should have a question read to them should they request it.

Can students use manipulatives?

- We do not see any issue with manipulatives being made available for children to use throughout the test.
- We also do not think manipulatives should be restricted to Key Stage 1. You might want to put the manipulatives in the middle of desks so that students can use if they want.
- We recommend making them available for all students not just the students that are tend to struggle.

When should I deliver the tests?

We have made the assessments available for the last two weeks of term.

- We recommend using them once ALL the content is covered.
- We recommend that students do the papers separately, potentially on different days.

I have a student who is much 'more able' for their age. Shall I give them the assessment for the next year group?

We totally advise against this and this goes against the aims of the new National Curriculum. We recommend that students stay within their year group. We hope that the questions in the assessments provide stretch and challenge for all students.

Equally we do not recommend teachers using the assessment from the year group below for those students who have struggled.

However, schools are in a position to use the assessments how they wish. School choices will be based on the circumstances of individual schools.

Frequently Asked Questions

I have a student who did well on the arithmetic but not on the reasoning. What's your advice?

It sounds like this student has a good grasp of the mechanics of the subject but maybe does not understand why things happen or the methods. If this is a common theme, perhaps it is the strategies that have been used in the classroom. The student could be trying to simply memorise methods they have been shown rather than understand why they are performing a calculation. Encourage the student to use manipulatives to help them verbally explain what they are doing step by step. A possible barrier in the reasoning paper could also be the student's ability to read and interpret the question. Give support with this if necessary.

Can you advise us how to track progress?

Many schools are using commercial tracking software to monitor students' progress. Although each piece of software is different, the common theme is that teachers are being asked to enter whether a child has achieved particular aims of the National Curriculum.

We would encourage you to look at their performance on particular questions; if they have done well on the arithmetic elements but struggled with reasoning, you might want to say that a student has only partially met this objective.

Unfortunately we do not have the capacity to offer guidance for schools on their particular systems and decisions. However we are very keen to hear about what software you are using and how you are using it as we would like to share this with other schools.

Is there a pass mark?

We have avoided setting a pass mark for the assessment. We wanted to avoid also equating a certain score to anything (e.g. secure, developing, mastery, emerging). We feel it is important that a classroom teacher looks at the performance of each individual student on both papers and use this alongside their classroom performance to make a decision whether or not a student is secure in the autumn term concepts.

We feel schools can use whatever system they would like to use for reporting to parents. Many already have systems in place and hopefully our assessments can be used to help you make a decision about whether or not a student has really grasped a particular topic.

NCETM Mastery Booklets

In addition to the schemes and assessments we have produced, the NCETM have developed a fantastic series of problems, tasks and activities that can be used to support 'Teaching for Mastery'. They have been written by experts in Mathematics.

It will also give you a detailed idea of what it means to take a mastery approach across your school.

Information can be found on the link below.

<https://www.ncetm.org.uk/resources/46689>



Everyone Can Succeed

As a Maths Hub we believe that all students can succeed in Mathematics. We don't believe that there are individuals who can do maths and those that cannot. A positive teaching mindset and strong subject knowledge are key to student success in mathematics.

More Information

If you would like more information on 'Teaching for Mastery' you can contact the White Rose Maths Hub at mathshub@trinityacademyhalifax.org

We are offering courses on:

- Bar modelling
- Teaching for Mastery
- Year group subject specialism intensive courses – become a Maths expert.

Our monthly newsletter also contains the latest initiatives we are involved with. We are looking to improve maths across our area and on a wider scale by working with the other Maths Hubs across the country.