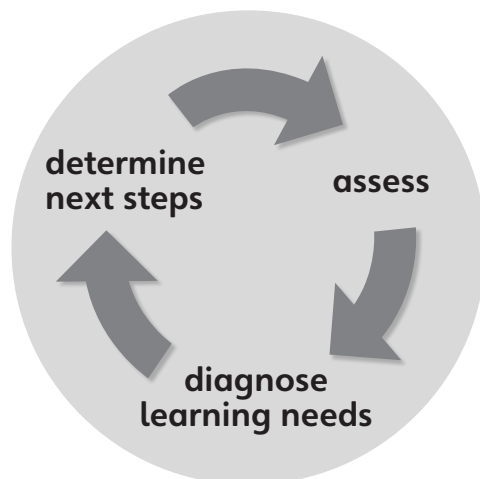


This is the **Year 5 Autumn 1 Problem solving and reasoning test**. It is accompanied by the Year 5 Autumn 1 Arithmetic test. This test is made up of 15 questions which are positioned both in and out of context. In this test, mathematical problems are presented in different formats to ensure children can fully demonstrate mathematical fluency, problem solving and reasoning. This test assesses Abacus Autumn Term 1 teaching.

This test can be used for both formative and summative assessment. It supports a teacher's own professional understanding of each child's development and helps to diagnose their future learning needs.



To accompany the test you will find:

- A **Commentary chart**. This contains information on the Abacus and English National Curriculum objectives being assessed, answers to the questions, a detailed diagnostic commentary for each question which highlights common difficulties, and advice on what to do if a child doesn't grasp a concept. It also contains a marking guidance section to help you mark 1, 2 and 3 mark questions.
- A **Class achievement record**. This document lists all of the Abacus and English National Curriculum objectives assessed in a table format so that you can record and view class achievement against these objectives.
- A **Class overview sheet**. You can use this to record marks and next steps for your class.

This test assumes that you have followed Abacus Autumn Term 1 teaching. If you have not taught some of the Autumn Term 1 lessons, we suggest you look through the test materials to ensure that all questions relate to the teaching you have done.

Using this test with your class

- Print a **Problem solving and reasoning test** for each child in your class, and hand them out. Children should write their name and the date on the cover of their test.
- Ensure children have the resources they need to complete the Problem solving and reasoning test (see *Equipment list*).
- Introduce children to the Problem solving and reasoning test and explain how long they have to work through the questions.
- There is no time limit for this test, but it should take between 30–45 minutes to complete. It is important that children have enough time to demonstrate what they can do. Teachers should adjust this time depending on the needs of their class and should decide whether children require breaks throughout the assessment.

- If necessary, all questions should be read aloud so that reading ability does not impair a child's mathematical attainment.
- A grey margin containing circles runs down the right-hand side of the Problem solving and reasoning test. You can use this space when marking the test. Alternatively you could ask your class to indicate how they found each question using a smiley face or a traffic light system, and use this self-assessment to inform your professional understanding of each child's ability.
- Use the **Commentary chart** and your own professional judgement to mark this test, recording marks in the **Class achievement record** so that you can see where your class performed well and where they need further support. Diagnose future learning needs and identify next steps in the **Class overview sheet**.
- Record individual pupil marks and feedback on the cover of the Problem solving and reasoning test. Feed back to children on their performance, recognising what they did well and where they can improve.

Equipment list

Children may need access to the following equipment:

- a pencil
- a black pen
- an eraser
- a ruler (mm and cm)
- an angle measurer/protractor
- a mirror

Children should not have access to a calculator.

