

Diagnostic TASK

FOCUS

Understand Operations

- Key Understanding 5

Finding Factors

Years/Grades 5–7

Purpose

To find out if children understand and can use the inverse relationship between multiplication and division.

Equipment

Worksheet and a calculator for each child

Producing work samples

Individual interview or whole class activity

The question in the box at the bottom of the page is the crucial part of this task and will give you the most significant information about what students know.

It will be necessary to remind students what a factor is and let them practise with easier numbers like 12 or 15. The students could be given some factor activities on the board, which are similar to the first two boxes to enable them to become familiar with the idea of factors.

This task can be used as an individual interview or as a whole class activity. It may be beneficial to give the top part of the task to the whole class but withhold the last box from the sheet and use it in an individual interview.

Finding Factors

Name _____ Year/Grade _____ Date _____

Find factors for these numbers

81 _____

Which numbers did you try? _____

Which ones were hardest to find? _____

How did you work it out? _____

105 _____

Which numbers did you try? _____

Which ones were hardest to find? _____

How did you work it out? _____

Sam wondered if 13 was a factor of 105 but did not know what to put into the calculator to find out. Explain to Sam what he could do to find out.