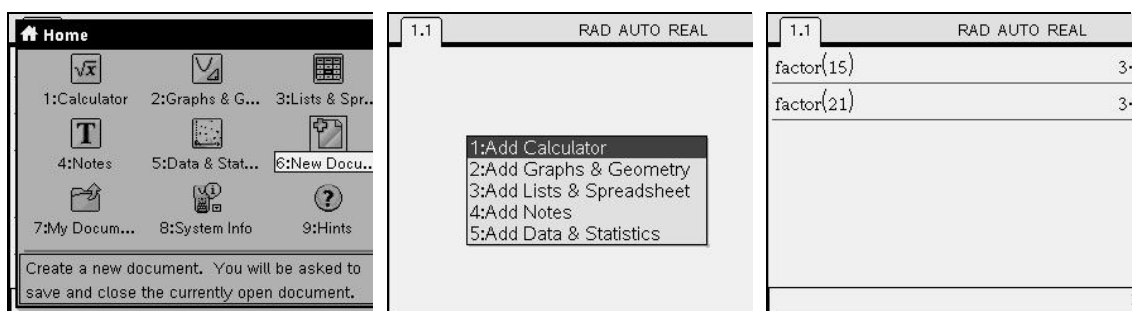


Getting the handhelds out of their boxes

Annie teaches in an inner city school where the need to provide engaging mathematics tasks to maximise her students' motivation and engagement in lessons is paramount. Consequently, in designing the very first lesson for a middle ability year 9 group she wanted an activity that would allow the students initial curiosities to be satisfied whilst also offering a rich mathematical learning opportunity. Annie did not want to be standing at the front of the class giving lengthy key press instructions for the handheld, so decided on a simple starting point.

Annie wanted the students to learn about the basics for using the handheld device – how to switch on their TI-Nspire handheld and choose a *New Document* and a Calculator page. She also had set the mathematical aims for the lesson as the consolidation of the students' understanding of prime numbers and the concept of prime factorisation through an exploratory approach. The students would use the built-in command *factor* with a number and see what happened.



The students were supported in the lesson with a recording sheet devised by Annie, which led them through a sequence of questions. They were asked to record what they noticed as they were working through the questions to try and encourage them to generalise and notice patterns.

An Introduction to TI-nspire

Press ON

Press Home - The House

The 'donut' is the circle - scroll to highlight number 5 - New Document

Press 'enter' or the centre of the 'donut'

Do you want to save the document ?

Press NO

Scroll to highlight number 1 - 'Calculator'

Press 'enter' or the centre of the 'donut'

We are now ready to begin.

Type the following: Factor(15)

Press 'enter'

What do you see? factor of 15 3 5

Annie wrote about the students attitudes to the lesson "They were enthusiastic about using the handheld and were sensible about it – Most students worked through the sheet after a little initial guidance. Students were able to work at their own pace and this lesson

reinforced previous lessons on lowest common multiples etc.” She also added “I was very nervous to use the device even though I am a very experienced teacher of maths. I needed the worksheet for me as well as for them. I was able to refer to the sheet and that helped my confidence. The sheet also allowed pupils to continue with the work whilst I went around to help students with a problem.” With the hindsight gained from the lesson Annie also considered how she would redo the worksheet next time, “Next time I would investigate the meaning of factor by getting pupils to find factors of 1, 2, 3 4 etc. and predict the next.”

Annie did not use the TI-Nspire Teacher Edition Software (it was not available at the time) and had not set up the overhead projector panel to project the TI-Nspire handheld screen to the class – she mentioned that this was an oversight on her part and used it for all of the subsequent lessons. The arrival of TI SmartView Emulator within TI-Nspire Teacher Edition Software has meant that a fully functioning TI-Nspire key pad and an enlarged screen make it much easier for the teacher to share the essential first key presses with students at the beginning of the lesson and hold a meaningful plenary at the end of lessons.

