

Teacher's Guide

Purpose

Students can begin practising with Tectonic Number even if they cannot count to five or recognise the digits. With support and consistent practice, it should allow them to master the four operations (+-x÷). That means much faster acquisition of new mathematics concepts.

It is the result of eleven years of teacher development, involving three previous apps (Banufa, Number Mine, and Numble) and countless paper-based systems. It is currently being tested to find problems and establish effectiveness.

Access

You can access it through a web-browser on a tablet, phone or laptop. Go to <u>gotectonic.org</u> and click on 'Launch app'. Students need to be able to hear the sound, which means using headphones if they are doing it in a group.

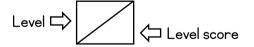
Motivation

Each time students start from Level 1. They will quickly move up levels if they can answer questions quickly and accurately. This means they get more practise on the levels they have not yet consolidated. Once students reach Level 26, the first multiplication level, they can use the 'Boost Start' button to skip the early levels.

Intensive number facts practise can be frustrating, and it's worth being honest with students about that. The motivation to continue practising comes from achieving a personal best. That's either a higher 'Level' or if they haven't achieved a new level, a higher 'Level score'.

When students finish, they click how they felt about practise (sad to happy which is recorded as mood: 1-5). You can show students an example of this by clicking the 'Teacher Mode' button and then 'Finished Screen'. The mood rating and level scores will then go into the log at the bottom of the screen.

Print, fold, and name a treasure chest for each student (see below). After each practise write down their level and level score in a box, like this:



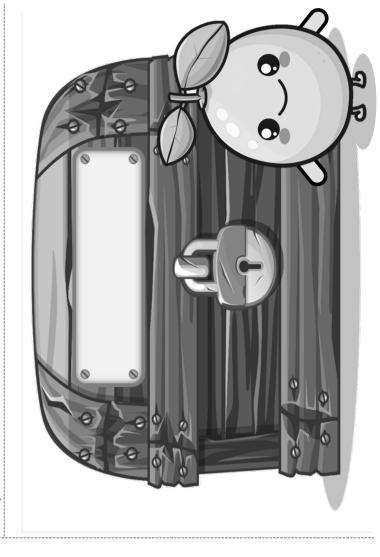
Give students a sticker if they achieve a new 'Level' or a higher 'Level Score' on their personal best level. For younger students or students with additional needs, you may choose to give them a sticker every time they practise.

Intervention

Intervention is important to keep students engaged if they are stuck on a level, complaining, or regularly rating their mood as 1. Sit down with them and click on 'Teacher Mode'. That disables the timer and allows you to skip to any level. Start by seeing what they usually do on the level they find challenging. Then you can encourage students to press the question mark to show the training and listen to the instructions. The key to passing level 3 (addition within 5) is visualising the apples coming down.



Tectonic Number



Fold 2

