Mini Review:

WEIRD NUMBER

Reviewed by Swati Sircar

his is a 13 minute story set in a village of natural numbers. A thief appears and is clearly not a natural number. It turns out that he is a (positive) rational number. Since all the characters (and hence the numbers) are positive, it is fair to say that this video is about natural numbers and fractions and their relation! The part-whole model is invoked and is used to define a (positive) rational number, explain equivalent fractions and that any natural number is also a rational number.

But more importantly, it indicates most of the difficulties children face when they encounter fractions. This includes going beyond counting into measuring; it mentions that fractions (and rational numbers) look like two-storeyed numbers and can't be simplified further. The reactions of some of the characters (read natural numbers) on seeing the first fraction are similar to how children feel when they first see fractions. The fact that any given fraction can have infinitely many equivalent forms has been brought out well along the story line.

It ends with an indication that there may be numbers beyond rational numbers, but the characters (i.e., positive rational numbers) find it unimaginable. This reminds the viewer of the Pythagorean School which refused to accept anything beyond the rational numbers and where the person who discovered the irrationality of $\sqrt{2}$ (i.e., the length of the diagonal of a unit square) faced dire consequences.

This is a great video to share with teachers. It can be shown to children as an introduction to fractions with some follow-up activities.

https://www.youtube.com/watch?v=SbjtIRp9C6A

Keywords: Natural Numbers, Rationals, Story, Video