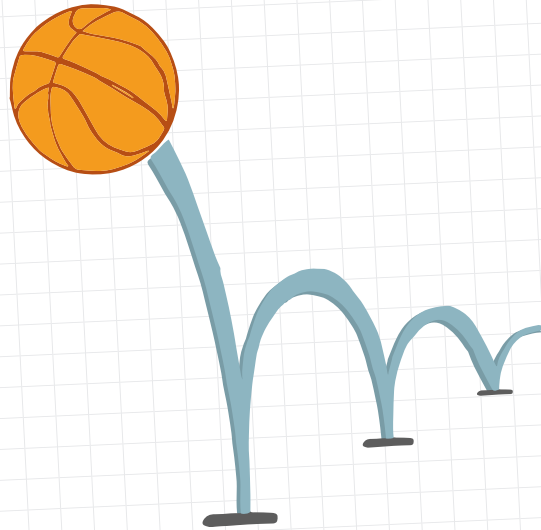


My favourite problem is...



A ball is dropped and bounces up to a height that is 75% of the height from which it was dropped. It continues to bounce, each time to a height that is 75% of the previous height.

How many bounces does it make before it bounces up to less than 10% of the original height? How many for less than 1%?

The first part can be solved with decimals and percentages. It leads on to exploring a sequence of numbers with powers and using logarithms for solving equations.