Max’s Magnificent Decimal Discovery

Learning objective: To recognize, write, and compare decimal numbers with tenths and hundredths in the context of money and measurement.

Read each card carefully. Max the monkey has provided these puzzles to help you master decimals. Solve the questions on the back of each card to see if you can think like a mathematician!

What is the value of the digit 7 in the number 0.7?	**Max has £0.50. Write this as a fraction of a pound.**
7 tenths (or 7/10).	5/10 or 1/2 of a pound.
Which is greater: 0.4 or 0.04? Explain your reasoning.	**Convert 0.25 into a fraction.**
0.4 is greater. It has 4 in the tenths column, whereas 0.04 has 0 in the tenths column.	25/100 (which simplifies to 1/4).
If you divide 1 by 10, what decimal do you get?	**Write 'three tenths and five hundredths' as a decimal.**
0.1	0.35
Max buys a snack for £1.20. How would you write this using only pounds and tenths?	**Compare 0.6 and 0.60. Are they equivalent? Why?**
£1.2	Yes, they are equivalent because 6 tenths is the same as 60 hundredths.
What decimal is exactly halfway between 0.1 and 0.2?	**If a caterpillar is 0.09 metres long, how many centimetres is that?**
0.15	9 centimetres.
Complete the sequence: 0.1, 0.2, 0.3, ...	**Justify why 0.8 is larger than 0.79.**
0.4	0.8 has 8 tenths, while 0.79 only has 7 tenths. Even though 79 looks like a larger number, the tenths column determines the size.