

Discussion Problems

Step 9: Dividing by 10, 100, 1,000

Teaching note: For Q1, an A3 copy on card and scissors may be necessary.

National Curriculum Objectives:

Mathematics Year 5: (5C6b) [Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000](#)

About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

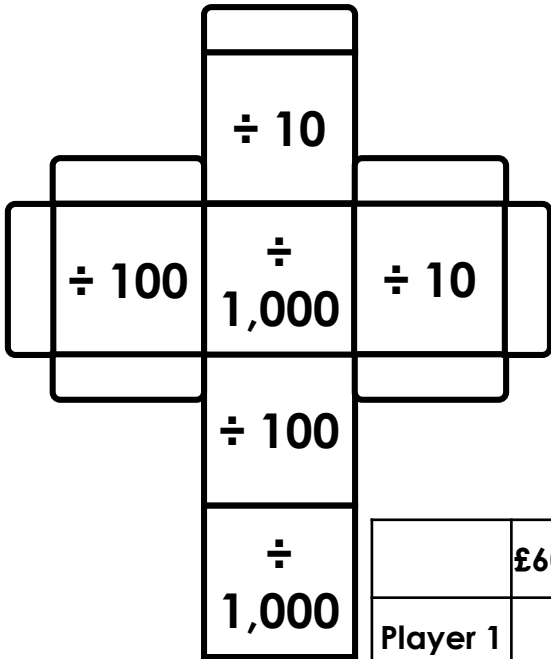
We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 5 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Dividing by 10, 100 and 1,000

1. Create the dice and play 'Money Mystery' with your partner. Use the score card to calculate your total.



Rules:

- Both players start with £600,000.
- Each player rolls the dice once and calculates the total.
- Write your total on the score card.
- Repeat steps 1-3 for each amount on the score card.
- Each player to add their totals.

The player with the greatest amount of money wins!

	£600,000	£500,000	£400,000	£300,000	£200,000	£100,000
Player 1						
Player 2						

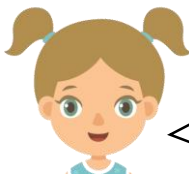
DP

2. Marcel, Freya, Rebekah and Klaus each own food shops. They discuss how much money they made in the year 2018.



Marcel

I made 100 times less than Klaus.



Freya

I made 10 times more than Marcel.



Rebekah

I made 1,000 times less than Klaus.



Klaus

In 2018, I made £10,00 less than £600,000.

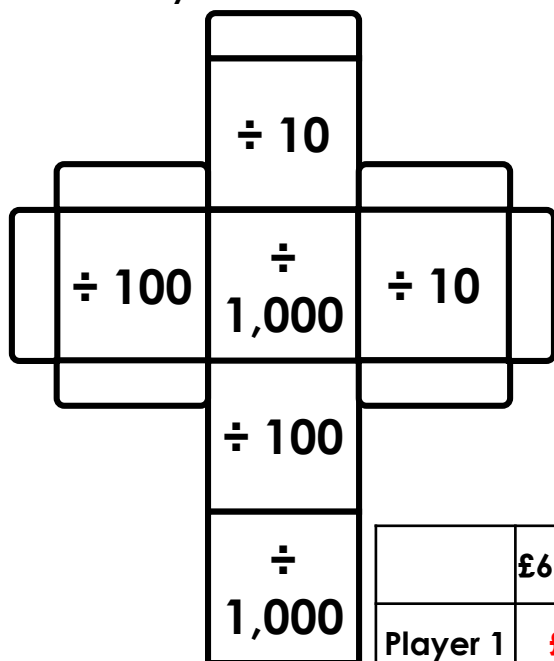
Investigate how much each person earned that year.

Discuss the different ways you can order the amounts.

DP

Dividing by 10, 100 and 1,000

1. Create the dice and play 'Money Mystery' with your partner. Use the score card to calculate your total.



Rules:

1. Both players start with £600,000.
2. Each player rolls the dice once and calculates the total.
3. Write your total on the score card.
4. Repeat steps 1-3 for each amount on the score card.
5. Each player to add their totals.

The player with the greatest amount of money wins!

	£600,000	£500,000	£400,000	£300,000	£200,000	£100,000
Player 1	£600	£50,000	£4,000	£300	£20,000	£1,000
Player 2	£6,000	£500	£40,000	£300	£2,000	£10,000

Various answers, for example: see table.

DP

2. Marcel, Freya, Rebekah and Klaus each own food shops. They discuss how much money they made in the year 2018.



Marcel

I made 100 times less than Klaus.



Freya

I made 10 times more than Marcel.



Rebekah

I made 1,000 times less than Klaus.



Klaus

In 2018, I made £10,00 less than £600,000.

Investigate how much each person earned that year. **Marcel: £5,900; Freya: £59,000; Rebekah: £590; Klaus: £590,000.**

Discuss the different ways you can order the amounts. **Various answers, for example: Rebekah; Marcel; Freya and Klaus.**

DP