

# Discussion Problems

## Step 5: 1,000s, 100s, 10s, 1s

### National Curriculum Objectives:

Mathematics Year 4: (4N3a) [Recognise the place value of each digit in a four-digit number \(thousands, hundreds, tens, and ones\)](#)

Mathematics Year 4: (4N4a) [Identify, represent and estimate numbers using different representations](#)

Mathematics Year 4: (4N6) [Solve number and practical problems that involve 4N1 - 4N5 and with increasingly large positive numbers](#)

### 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 4 Place Value](#) resources.










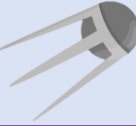















Did you like this resource? Don't forget to [review](#) it on our website.









# 1,000s, 100s, 10s, 1s

1. Draw a possible pathway through space for the astronaut. Planets are neutral zones.

### SPACE RULES:

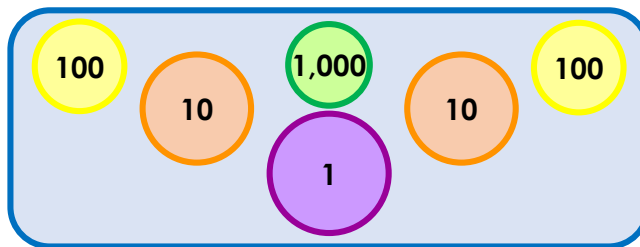
- Start score is 500 points
- End score between 1,000 and 2,000
- Must pass through at least 8 squares
- Move horizontally, vertically and diagonally

				 END
				
				
				
 START				

KEY	
	+ 1,000
	- 1,000
	+ 100
	- 100
	+ 10
	- 10
	+ 1,100
	+ 500

DP

2. Jamie and Dan take penalty kicks at the target board below. If they each take six shots, find possible combinations for their scores.



Draw place value counters in the place value charts below to compare their scores.

Th	H	T	O

>

Th	H	T	O


























DP









# 1,000s, 100s, 10s, 1s

1. Draw a possible pathway through space for the astronaut. Planets are neutral zones.

Various answers, for example:

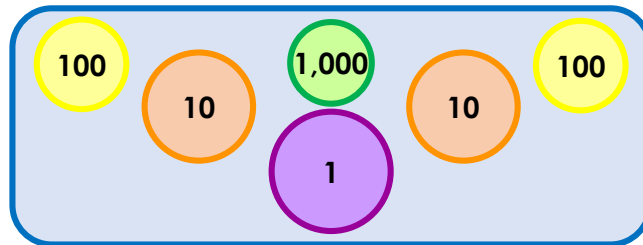
$$500 + 10 + 1,000 + 1,100 - 1,000 - 10 + 1,000 - 1,000 + 10 = 1,610$$

				 END
				
				
				
 START				

KEY	
	+ 1,000
	- 1,000
	+ 100
	- 100
	+ 10
	- 10
	+ 1,100
	+ 500

DP

2. Jamie and Dan take penalty kicks at the target board below. If they each take six shots, find possible combinations for their scores.



Draw place value counters in the place value charts below to compare their scores.

Various answers, for example:

Th	H	T	O		Th	H	T	O
1,000				>	1,000			1
1,000	100	10			1,000	100		1
1,000					1,000			1
1,000								1

DP