

Discussion Problems

Step 2: Numbers to 1,000

National Curriculum Objectives:

Mathematics Year 3: (3N2a) [Read and write numbers up to 1000 in numerals and in words](#)

Mathematics Year 3: (3N4) [Identify, represent and estimate numbers using different representations](#)

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.



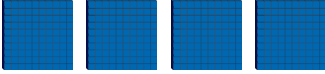
We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

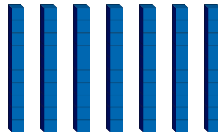
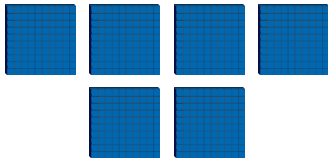
More [Year 3 Place Value](#) resources.

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

Numbers to 1,000

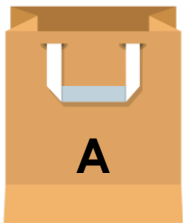
1. Joshua is creating numbers in ascending order using Base 10. Explore the possible numbers he can create using all of the Base 10 provided.



DP

2. Kelly puts Base 10 into bags. She gives her friends clues as to what is in each bag.



A

7 pieces

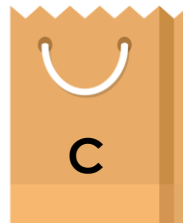
hundreds and tens



B

6 pieces

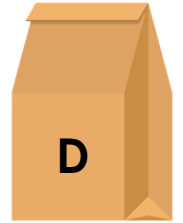
ones and tens



C

9 pieces

hundreds and ones



D

7 pieces

ones, tens and hundreds

Investigate the possible value of each bag. Find as many possibilities as you can.

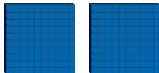
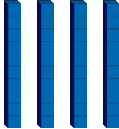

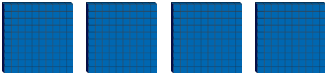


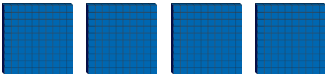


Using your findings, discuss which bag is the most valuable. Explain your answer.

DP

Numbers to 1,000

1. Joshua is creating numbers in ascending order using Base 10. Explore the possible numbers he can create using all of the Base 10 provided.

Various combinations, for example:

Numbers must be in ascending order with all remaining Base 10 used.

DP

2. Kelly puts Base 10 into bags. She gives her friends clues as to what is in each bag.



A

7 pieces

hundreds and
tens



B

6 pieces

ones and tens



C

9 pieces

hundreds and
ones



D

7 pieces

ones, tens and
hundreds

Investigate the possible value of each bag. Find as many possibilities as you can.

Various answers, for example: Bag A – 160, Bag B – 15, Bag C – 504, Bag D – 133

Using your findings, discuss which bag is the most valuable. Explain your answer.

Bag C is the most valuable as this is the bag with the greatest number of hundreds available. The greatest number that can be made is 801.

DP