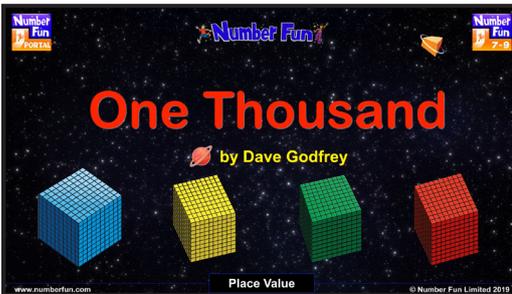


One Thousand

by Dave Godfrey



Teacher Ideas Pack

Concept: Place Value



Pack Contents:



Teacher Ideas Sheet

Music Score & Song Words

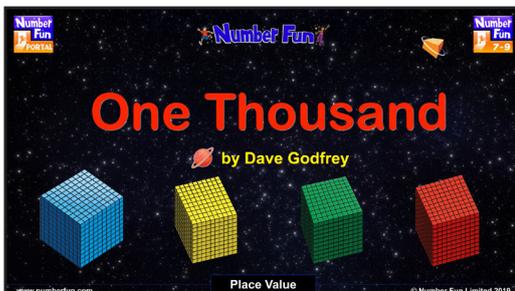
3-digit Blockbuster Gameboard

3-digit Blockbuster Gameboard Interactive PDF

Parent Ideas Sheet (for reference)

Please Note: This ideas pack is for the sole use by the Number Fun Portal Login Owner.

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Teacher Ideas Sheet

Title: **One Thousand**

Concept: **Place Value**

Concept Video Link: *****

Song Type: **Input/Output** (ideal for practicing concepts)



Core Information

Song Overview: One Thousand explores the construction of 3-digit numbers. The video presentation helps children understand how our base 10 system reveals multiple ways of reading 3-digit numbers.

Helpful Resources: Base 10 equipment (thousands, hundreds, tens & ones), digit cards, place value dice, 10 sided-dice.

Key Vocabulary: thousands, hundreds, tens, ones, base 10

Top Teaching Tip: Begin by asking children how many 10s there are in 4265 (most will probably answer 6). Then ask the children to tell you how many 10s there are in 100 (most will answer 10). Then discuss the conundrum that there seems to be more tens in 100 than there are in 4265! After discussion, play the video and reason together!

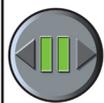
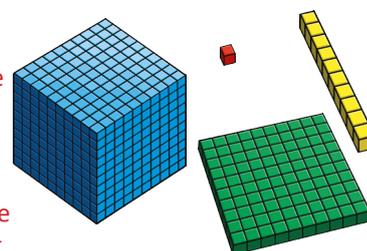


Make it Active!

(utilising the online Video Presentation, Full Track or Backing Track mp3s)

M1: Base 10 Display Give children some base 10 and encourage them to hold up the relevant units as they see them visualised and sung about in the song.

M2: Roaming Whiteboard Challenge Give half the children a whiteboard and the other half a whiteboard pen. During the chorus of the song they sing along whilst finding pen & board partner. At the beginning of each verse, the children listen to the first line. The track is paused and the children face a one minute challenge to predict the alternative ways of expressing the number that might come up on the screen. 1 point for each correct prediction. 2 points for each correct prediction that is not recorded in the song! (Note: where each digit is one or more, there are at least 8 different ways of expressing each number - see V1)



Video Reasoning Ideas

(using online Video Presentation)

V1: How Many Options? After singing and learning the song, pause the video presentation at 0:45. Displayed on the screen are 4 ways of expressing the number 4265. How many other ways are there of expressing that number?

V2: What 3-digit Number? Pause the video at (3:00). Why do you think this number has been chosen? Why might this be someone's favourite 3-digit number? What would your favourite 3-digit number be? Why? How many ways can you express your favourite 3-digit number? Can you create that number using Base 10 equipment?



Song Adaptation Ideas

(see downloadable PowerPoint File and online Backing Track mp3)

S1: New Number Pattern Creation Each verse in the song has the same structure, e.g. the final expression is simply in terms of 'ones'. Use the backing track and the initial representation of a 3-digit number (using a software programme or the downloadable PowerPoint File). Challenge the children to sing the different expressions that follow the pattern.

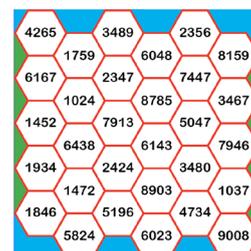
S2: Random Numbers Give pairs of children a stack of digit cards. Encourage them to deal themselves a 4 digit number for each verse. Everyone sings the chorus together, but then pairs declare their options in time with the track.

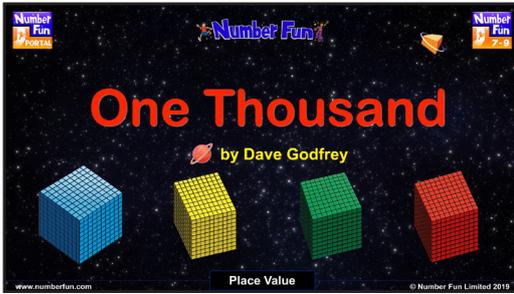


Activity Ideas

A1: 3-digit Number Knockout: Each child starts the game with 4 lives. Children work with a partner to create a 3-digit number using digit cards or place value dice. For each number, players secretly write down 4 of the 8 ways of expressing that number. Player 1 then reads out one of their options. If their partner has that option on their list, their partner loses a life. Player 2 then has a turn. Both players have a second turn. At this point a new 3-digit number is created and the game proceeds. A player loses the game when they lose their last life.

A2: 3-digit Blockbusters: The aim of this game is to create a path across the board (see 3-digit Blockbuster Gameboards) by claiming different hexagons - one player plays vertically, the other horizontally. Each hexagon has a predetermined 4 digit number inside it. Players take it in turns to roll the 10 sided dice to reveal a digit. Players can only claim a hexagon that contains that digit. Players can win that hexagon if they can give provide 3 different ways of expressing that number. E.g. If I roll a '4', I can claim the hexagon containing '4265' by stating, '4265 is 42 hundreds and 65 ones, it's also 426 tens and 5 ones, and it's also 4 thousands, 26 tens and 5 ones.' Player's place a counter on each hexagon they win, only after their partner is happy with their reasoning. The first player to get across the board in their direction wins the game.





Music Score & Song Words



Title: **One Thousand**

Key: **E**

Song Words © Dave Godfrey, Number Fun Limited 2019

A **E** **A** **E** **A** **E**
 One thou - sand is ten hun - dreds, a hun - dred tens and a
B **E** **A** **E** **A** **E**
 thou - sand ones! One thou - sand is ten hun - dreds, a
A **E** **B** **E**
 hun - dred tens and one thou - sand ones!
B **E** **B** **D.C.**
*(breaking numbers down into thousands,
 hundreds, tens and ones)*



**One thousand is ten hundreds,
 A hundred tens and a thousand ones!
 One thousand is ten hundreds,
 A hundred tens and one thousand ones!**

4265
 42 hundreds, 65 ones
 426 tens, 5 ones
 4265 ones!

3489
 34 hundreds, 89 ones
 348 tens, 9 ones
 3489 ones!

2536
 25 hundreds, 36 ones
 253 tens, 6 ones
 2536 ones!

5824
 58 hundreds, 24 ones
 582 tens, 4 ones
 5824 ones!

6023
 60 hundreds, 23 ones
 602 tens, 3 ones
 6023 ones!

9008
 90 hundreds, 8 ones
 900 tens, 8 ones
 9008 ones!

4-digit Blockbusters

Grid 1

4265	3489	2356
1759	6048	8159
6167	2347	7447
1024	8785	3467
1452	7913	5047
6438	6143	7946
1934	2424	3480
1472	8903	1037
1846	5196	4734
5824	6023	9008

Aim: To be the first player to link hexagons from left to right (touching green) or from top to bottom (touching blue).

You need: A set of counters and either a set of digit cards (including digits 0 to 9) or a 10-sided dice.

Rules: Each hexagon has a predetermined 4-digit number inside it. Decide which player is playing horizontally and which player is playing vertically. Players take it in turns to roll the 10 sided dice to reveal a digit. Players can only claim a hexagon that contains that digit. Players can only win that hexagon if they can give provide 3 different ways of expressing that number. For example, if I roll a '4', I can claim the hexagon containing '4265' by stating, '4265 is 42 hundreds and 65 ones, it's also 426 tens and 5 ones, and it's also 4 thousands, 26 tens and 5 ones.' Players can only place a counter on each hexagon after their partner is happy they have reasoned correctly. The first player to get across the board in their direction wins the game.

4-digit Blockbusters

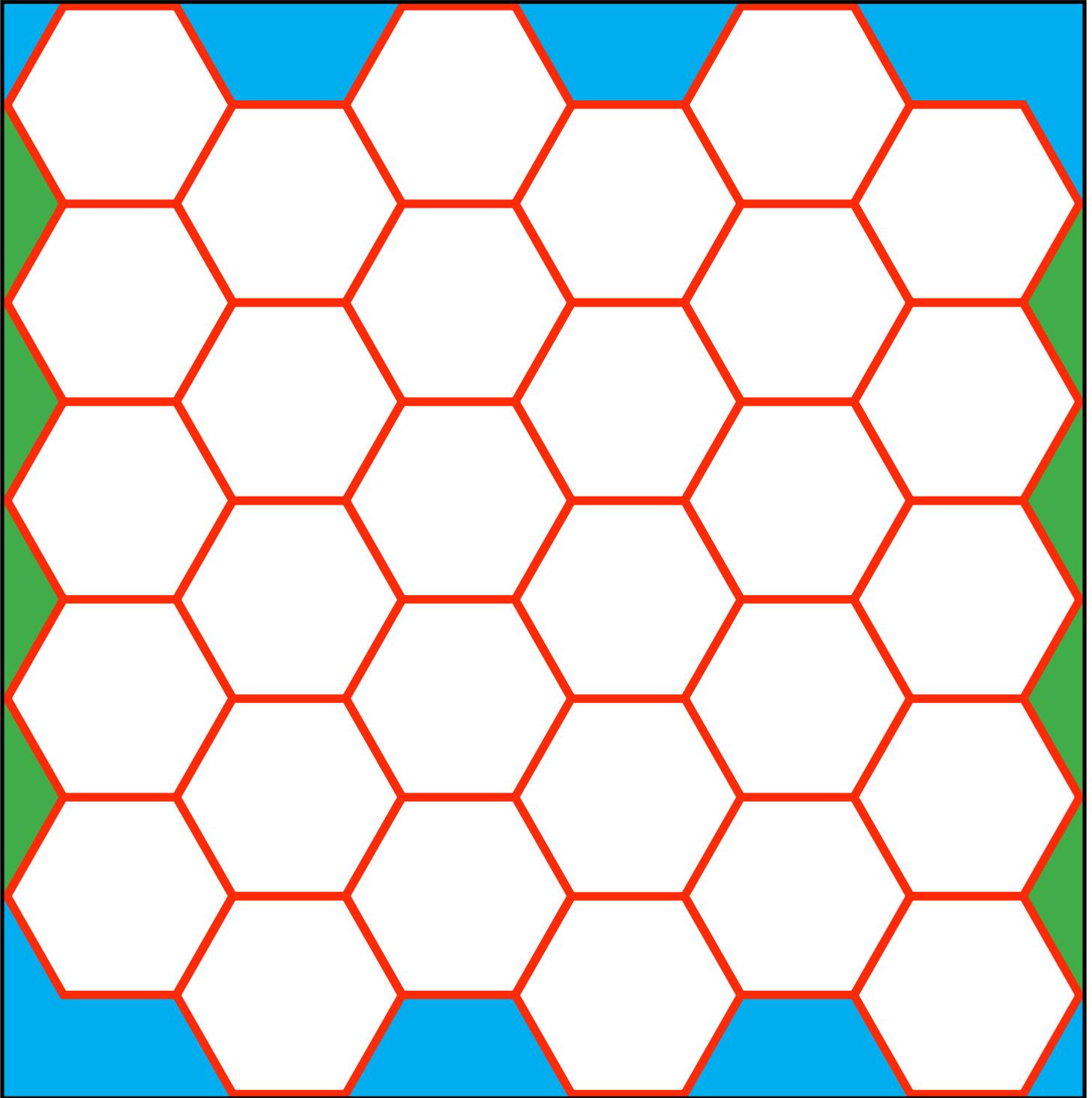
Grid 2

1789	2459	7643
1583	8495	6713
4582	1553	8462
8006	1846	6791
2494	7913	5047
7335	1991	4281
4515	8947	3044
1472	8903	2020
7843	5846	4517
1425	4791	3484

Aim: To be the first player to link hexagons from left to right (touching green) or from top to bottom (touching blue).

You need: A set of counters and either a set of digit cards (including digits 0 to 9) or a 10-sided dice.

Rules: Each hexagon has a predetermined 4-digit number inside it. Decide which player is playing horizontally and which player is playing vertically. Players take it in turns to roll the 10 sided dice to reveal a digit. Players can only claim a hexagon that contains that digit. Players can only win that hexagon if they can give provide 3 different ways of expressing that number. For example, if I roll a '4', I can claim the hexagon containing '4265' by stating, '4265 is 42 hundreds and 65 ones, it's also 426 tens and 5 ones, and it's also 4 thousands, 26 tens and 5 ones.' Players can only place a counter on each hexagon after their partner is happy they have reasoned correctly. The first player to get across the board in their direction wins the game.

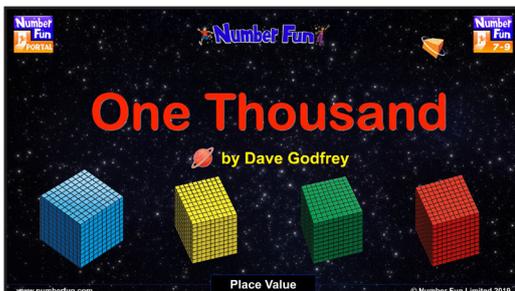


Interactive PDF: Create your own gameboard by inserting your own values before printing.

Aim: To be the first player to link hexagons from left to right (touching green) or from top to bottom (touching blue).

You need: A set of counters and either a set of digit cards (including digits 0 to 9) or a 10-sided dice.

Rules: Each hexagon has a predetermined 4-digit number inside it. Decide which player is playing horizontally and which player is playing vertically. Players take it in turns to roll the 10 sided dice to reveal a digit. Players can only claim a hexagon that contains that digit. Players can only win that hexagon if they can give provide 3 different ways of expressing that number. For example, if I roll a '4', I can claim the hexagon containing '4265' by stating, '4265 is 42 hundreds and 65 ones, it's also 426 tens and 5 ones, and it's also 4 thousands, 26 tens and 5 ones.' Players can only place a counter on each hexagon after their partner is happy they have reasoned correctly. The first player to get across the board in their direction wins the game.



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Song Overview

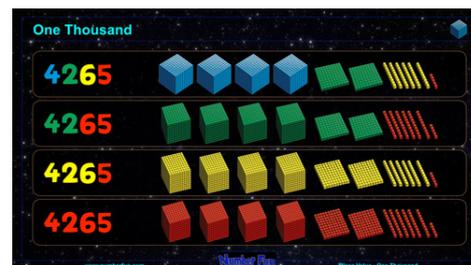
One Thousand explores the construction of 3-digit numbers. The video presentation helps children understand how our base 10 system reveals multiple ways of reading 3-digit numbers - see the section below for explanation.



Did You Know?

When I was at school and someone asked me the question, 'How many tens in 4265?', I would have answered 6. This is the number of tens in the tens column, but there are a lot more tens in 4265 than 6! There are 10 tens in one hundred, and there are a lot of hundreds in 4265! In fact, there are 426 tens in 4265. This song helps children (and adults) explore a deep understanding of place value. This screen grab from the video uses some Base 10 equipment to explore four of the eight different ways of expressing this number. What year were you born in? My sister was born in 1969.

You could reason that say the year 1969 in the style of the second option in the image. I.e. 19 hundreds and 69 ones! It is also worth noting that many of us are used to talking about the number 69 in terms of tens and units. The deeper understanding and vocabulary used in schools today talks about 69 having 6 tens and 9 ones (instead of units).



Top Tips (using online Video File or Full Track mp3)

T1: How Many Options? After singing and exploring the song, pause the video presentation at 0:45. Displayed on the screen are 4 ways of expressing the number 4265. Can you think of any other ways are there of expressing that number?

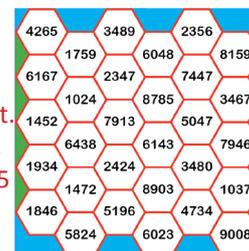
V2: What 3-digit Number? Pause the video at (2:39). Why do you think this number has been chosen? Why might this be someone's favourite 3-digit number? What would your favourite 3-digit number be? Why? How many ways can you express your favourite 3-digit number?



Activity Ideas

A1: 3-digit Number Knockout: Each player starts the game with 4 lives. Players work with a partner to create a 3-digit number using digit cards or place value dice. For each number, players secretly write down 4 ways of expressing that number (there are at least 8 options), using the video to give them some clues to different options. Player 1 then reads out one of their options. If their partner has that option on their list, their partner loses a life. Player 2 then has a turn. Both players have a second turn. At this point a new 3-digit number is created and the game proceeds. A player loses the game when they lose their last life.

A2: 3-digit Blockbusters: The aim of this game is to create a path across the board (see 3-digit Blockbuster Gameboards) by claiming different hexagons - one player plays vertically, the other horizontally. Each hexagon has a predetermined 4 digit number inside it. Players take it in turns to roll the 10 sided dice to reveal a digit. Players can only claim a hexagon that contains that digit. Players can win that hexagon if they can give provide 3 different ways of expressing that number. E.g. If I roll a '4', I can claim the hexagon containing '4265' by stating, '4265 is 42 hundreds and 65 ones, it's also 426 tens and 5 ones, and it's also 4 thousands, 26 tens and 5 ones.' Player's place a counter on each hexagon they win, only after their partner is happy with their reasoning. The first player to get across the board in their direction wins the game. Use the editable interactive PDF version to create your own gameboards.



Recommended Songs

One Hundred This song is an adaptation of One Thousand, and explores 3-digit numbers

Sense of Number An opportunity to demonstrate your knowledge and understanding of numbers

Digit Zero This song celebrates the uniqueness of Zero, and how important that digit is a place value holder.