

Properties of Numbers Connect Four

A colleague has posted a challenging task for those about to attempt KS2 SATs on the TES resource bank. It's called "Properties of Number Puzzle" and involves constructing a chart/grid where numbers share more than one property. You can easily find it by searching its name on the TES site or if you want to browse through other activities search for "Maths" and "Game/Puzzle" and sort by "Date Submitted". It is an excellent activity for numerate EAL pupils in being challenging and stimulating a lot of purposeful talk when attempted in small groups. It will be appropriate for KS3 too.

I felt that many of the pupils I work with might find it too challenging and have thought up a prequel to build up their stamina. I have produced a (surprise, surprise) Connect Four game. At the moment it only uses the numbers in the original activity. It will work better if the blank cards were filled either with the same numbers or extra numbers. I would be interested if any colleagues might like to try the activities out with their pupils and/or suggest other numbers/other combinations of properties, or even in the white heat of SATs preparation come up some more similar activities that practice properties.

I have produced a coloured version on the principle that most of you have colour printers and it will save you time photocopying onto card in two colours. I laminate a paper version, and find it thick enough use for a game.

When I have your feedback I'll post the activity on the clp site and put a link into the TES resource bank

Webaddress: <http://www.collaborativelearning.org/propertiesc4.pdf>

Thanks to feedback from you, there are some slight revisions to the gameboard done on 5th May 2008

Square and a triangular number	Even and square number	Multiple of seven and square number
Multiple of three and even number	Prime number	Multiple of five
Multiple of five and an even number	Odd number	Square number
Multiple of three	Even number	Even and triangular number

cut this margin off and join boards 1A and 1B to make your baseboard

Multiple of five and an odd number	Square and a triangular number	Multiple of five and seven
Prime number	Multiple of seven and a triangular number	Odd number
Multiple of seven	Prime and a triangular number	Square and an odd number
Multiple of three and a triangular number	A triangular number	Square number

49

11

2

3

5

25

36

6

10

six

1

7

28

21

35

4

9

nine

Connect Four cards

49

11

2

3

5

25

36

6

10

six

1

7

28

21

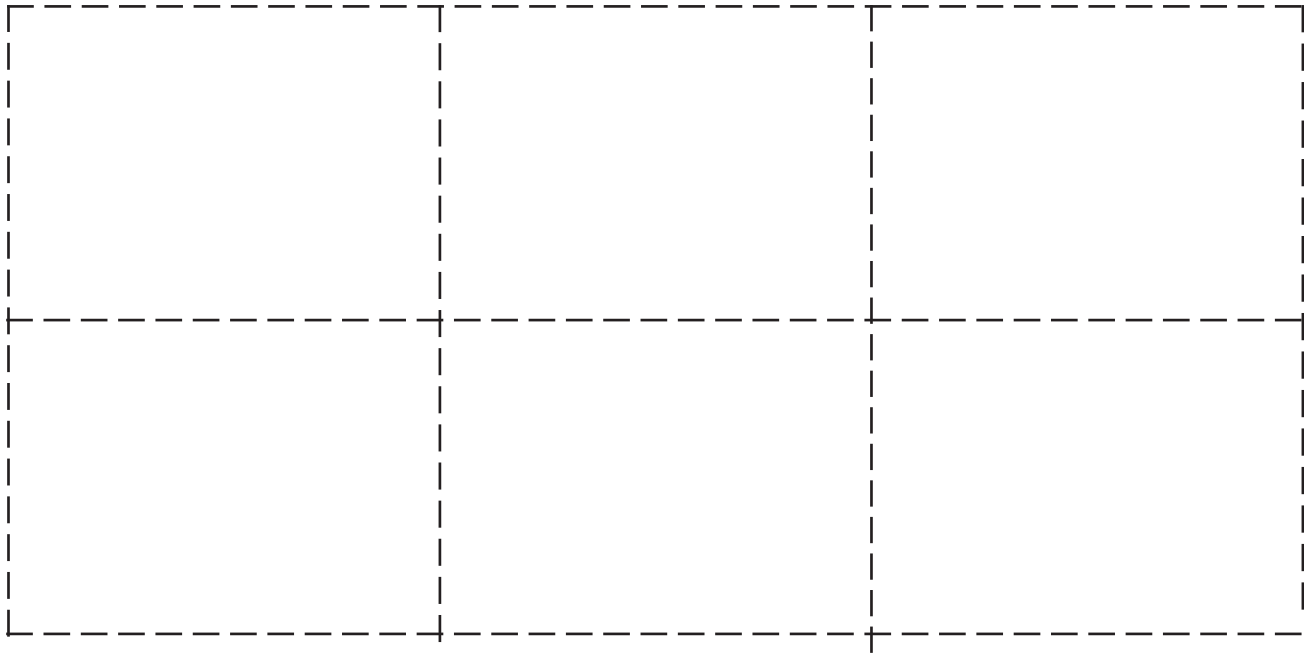
35

4

9

nine

Connect Four cards



Connect Four cards

HOW TO PLAY CONNECT FOUR

You need 4 people, one baseboard and two sets of cards (different colours.)

Work with a partner to make a team of two.

Shuffle your cards and place them in a pile facing down.

Take it in turn to turn over your top card and decide where to put it on the board.

The winning team gets four in row.

Before you start to play you should also :

Decide whether to have challenges or a checking system.

Decide what to do if there is no place for a card. For instance you can either not be able to put the card on the board, or you can cover a card already on the board. This makes the game last longer.