

Divisible Connect Four

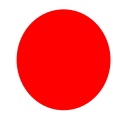
574

**/2 and
/3** ●

673

**..is not
divisible by
3 nor by 5**

111

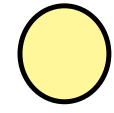
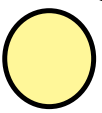


**.. is not
divisible
by two**

285

735

340



891

**Explore the language and
symbols of divisibility!**

Divisible Connect Four

This was dug out of our paper archive for Year 5 at Fleecefield in the London Borough of Enfield. The game board works better when it is enlarged to A3 if four players are involved, but can stay small for two players. Please encourage your children to produce more gameboards which could be more difficult or more easy. Would you like to join us in testing this out and feeding back?

Webaddress: www.collaborativelearning.org/divisiblec4.pdf

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COLLABORATIVE LEARNING PROJECT

Project Director: Stuart Scott

Supporting a cooperative network of teaching professionals throughout the European Union to develop and disseminate accessible interactive teaching materials in all subject areas and for all ages.

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Website: <http://www.collaborativelearning.org>

BRIEF SUMMARY OF BASIC PRINCIPLES BEHIND OUR TEACHING ACTIVITIES:

The project is a teacher network, and a non-profit making educational trust. Our main aim is to develop and disseminate classroom tested examples of effective group strategies that promote talk across all phases and subjects. We hope they will inspire you to develop and use similar strategies in other topics and curriculum areas. We want to encourage you to change them and adapt them to your classroom and students. We run teacher workshops, swapshops and conferences throughout the European Union. The project posts online many activities in all subject areas. An online newsletter is also updated regularly.

*These activities are influenced by current thinking about the role of language in learning. They are designed to help children learn through talk and active learning in small groups. They work best in non selective classes where children in need of language or learning support are integrated. They are well suited for the development of speaking and listening. They provide teachers opportunities for assessment of speaking and listening.

*They support differentiation by placing a high value on what children can offer to each other on a particular topic, and also give children the chance to respect each other's views and formulate shared opinions which they can disseminate to peers. By helping them to take ideas and abstract concepts, discuss, paraphrase and move them about physically, they help to develop thinking skills.

*They give children the opportunity to participate in their own words and language in their own time without pressure. Many activities can be tried out in mother tongue and afterwards in English. A growing number of activities are available in more than one language, not translated, but mixed, so that you may need more than one language to complete the activity.

*They encourage study skills in context, and should therefore be used with a range of appropriate information books which are preferably within reach in the classroom.

*They are generally adaptable over a wide age range because children can bring their own knowledge to an activity and refer to books at an appropriate level. The activities work like catalysts.

*All project activities were planned and developed by teachers working together, and the main reason they are disseminated is to encourage teachers to work more effectively with each other inside and outside the classroom. They have made it possible for mainstream and language and learning support teachers to share an equal role in curriculum delivery. They should be adapted to local conditions. In order to help us keep pace with curriculum changes, please send any new or revised activities back to the project, so that we can add them to our lists of materials.

Our collaborative talk for learning activities are designed to:

...build on prior knowledge.

...move from concrete to abstract thinking.

...ensure everyone works with everyone else.

...extend social language into curriculum language.

...provide motivating ways to go over the same topic more than once.

For more details go to:

www.collaborativelearning.org

Divisible Connect Four

How to prepare the game

You have a game board, but you have to decide on your own numbers to play. Write your numbers on cards (a template is provided or you may already have a set of number cards that you can use) and place these cards in a pile face down. You can start your first game using two figure numbers and when that goes well you can then write three figure numbers. You need two sets of counters in two different colours for each player or pair of players. If four players are involved you might find it easier to enlarge the game board to A3.

How to play Divisible Connect Four

Two players or two pairs of players can play. Take turns to pick a card. Decide which description on the board fits the number and place your coloured counter on the description. There may be more than one place on the board so choose the best one for you to win a row. However, if you cannot find a suitable description you miss a turn. The aim is to get four of your coloured counters in a row. Put the card back at the bottom of the pile. Then the other player(s) take a turn. The first player(s) to get four in a row win the game.

Divisible Connect Four

My number..

..is not divisible by 5,3 nor 2	..is not divisible by 3	..is not divisible by 5	..is divisible by 2	not /4
/2 and /3	not /2 not /3	..is divisible by 3 and 5	..is not divisible by 3	.. is divisible by 3
/2 and /4	/4	..is not divisible by 3 nor by 5	..is divisible by 5, 3 or 2	.. is not divisible by two nor by four
/5	not /5	/2 and /4	..is not divisible by two	..is divisible by 2 and 4

