## Multiples and Factors Decision Game

Developed in 2002 by Ann Caroline Coles from Weatherfield School at the Talking Maths Workshop in Bedfordshire organised by Barbara Conridge.

You might prefer to cut the instructions off the top of the base board to make it easier for children to work out for themselves how to play. You also need to cut up the factor cards. If you make several copies in two different colours you can swap baseboards and cards for contrast with the board and for players to identify their cards.

The game needs a little fine tuning to make it work best. If each player has nine or ten cards the game seems to work best but children might like to experiment. Too many cards means the game doesn't finish, too few and it is over too quickly.

The webaddress for this activity is:

http://collaborativelearning.org/multiplesandfactors.pdf

This activity was last updated 15th February 2007

## 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.

17, Barford Street, Islington, London N1 OQB UK Phone: 0044 (0)20 7226 8885 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 "PAPERCLIP" is also updated regularly.

- \*These activities were 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 and other formative assessment.
- \*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 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.

## Multiples and Factors Decision Game

## Instructions:

http://www.collaborativelearning.org/multiplesandfactors.pdf

Two players need a set of different coloured factor cards each. They place them face down in two piles. Each player takes a turn to pick up a card from their pile and place it on a matching multiple on the board.

Some of the factor cards can be placed on more than one multiple. If one player needs a multiple that has already been covered, then they remove the factor card and give it back to the other player, replacing it with their own factor card which must be a different number from the one already placed. The winner is the first person to place all their cards.

Multiples and factors Game - Baseboard			
20	10	35	72
49	27	60	56
36	16	40	27
130	64	48	18
3	7	6	2
8	4	10	9
8	2	4	6
7	5	3	5