# Maths Functions Game

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Webaddress: http://www.collaborativelearning.org/firsttotwenty.pdf

Last updated 3rd November 2010

COLLABORATIVE LEARNING PROJECT Project Director: Stuart Scott We support a network of teaching professionals to develop and disseminate accessible talk-for-learning activities in all subject areas and for all ages.

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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 oracy. They provide teachers opportunities for assessment of talk.

\*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 pupils' first languages 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.

# Maths Functions Game – First to 20!

## Learning Objective

To practise using basic maths vocabulary for the four rules of number and the numbers 1–20

Each child has a pack of cards 1-20.

The idea is to get rid of the cards by making up a sum, the answer of which must equal the number on the card.

#### Materials

Pack of cards 1–20 for each player 5 dice Sheet with number function words

### How to play.

Arrange the cards in a pack, in order, face up with number 1 on the top.

Throw 3 dice.

Use the numbers, with any maths functions, to make the number on the card. Say the sum.

If you make the number, discard that card and attempt the next number with the same dice numbers.

When you cannot make the next number, play passes on.

The next person throws the dice and starts their turn.

The winner is the first person to get rid of all their cards.

When you get to number 9 you can use 4 dice. When you get to number 15 you can use 5 dice.

#### For example:

A player throws 3, 2 and 1. He says "3 take away 2 equals 1, 1 multiplied by 1 is 1." He can discard card number 1. He says "3 and 1 is 4, 4 minus 2 equals 2." He can discard card number 2. And so on until he cannot make the next number.

#### NB

You can make the game easier or harder by amending the rules. e.g. You have to/don't have to use all the dice each turn.

You have to/don't have to go up to 20.

BASIC MATHS FUNCTIONS GAME FIRST TO 20!

- + plus, add, and
- minus, subtract, take away
- x times, multiplied by
- ÷ divided by, shared by
- = makes, is, equals

Numbers	1-8	3 dice
Numbers	9–13	4 dice
Numbers	14-20	5 dice

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
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