# Which function?

This morning there are sixty-eight hopeful travellers waiting to cross on the Roseland ferry. The boat only holds a quarter of that number and will have to make four journeys. How many does the boat hold?

Does it go here?

Addition



Subtraction

\_

Multiplication X

Division



Does it go here?

The Emperor Titus always
keeps sixty-eight gladiators at
the Colosseum. He immediately
replaces any that are eaten by
lions. Each gladiator kills four
lions every year. How many
lions are killed each year at the
Colossseum?

### Which function?

This activity is designed to help children to see through the forest of words that often surround maths problems. A lot of maths testing often makes more demands on language than on arithmetical knowledge. You may want to encourage your children to make up some more maths questions to test out each other. Do please send us your most entertaining ones!

This activity was last updated 15th February 2016.

The webaddress for this activity is: <a href="http://www.collaborativelearning.org/whichfunction.pdf">http://www.collaborativelearning.org/whichfunction.pdf</a>>

Our activities are designed to:

- ...build on prior knowledge.
- ...move from concrete to abstract.
- ...ensure everyone works with everyone else.
- ...extend social language into curriculum language.
- ...provide motivating ways to go over the same topic more than once.

#### COLLABORATIVE LEARNING PROJECT

Project Director: Stuart Scott

Supporting a cooperative network of teaching professionals throughout the European Union to develop and disseminate accessible 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 across all phases and subjects. We hope they will inspire you to use similar strategies in other topics and curriculum areas. We run teacher workshops, swapshops and conferences throughout the European Union. The project publishes a catalogue of activities plus lists in selected subject areas, and a newsletter available by post or internet: "PAPERCLIP'.

- \*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 mixed 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.

## Which function?

Sort the problem cards into the mathematical function needed to solve them. Relax! You do not need to solve the problems!

Addition Subtraction
+

Multiplication

Division

÷

Today's delivery at the
Fasttrolley Supermarket
includes vegetable samosas.
There are four samosas in
each box, and there are sixtyeight boxes. How many
samosas does the
supermarket have to sell?

It is sixty-eight kilometres between Venice and Vicenza. Every day the train does the journey four times. How far does the train travel?

At 7am Sid Small delivers four bottles of milk to every house in Cereal Street. There are sixty-eight houses. How many bottles does he deliver altogether?

The Emperor Titus always keeps sixty-eight gladiators at the Colosseum. He immediately replaces any that are eaten by lions. Each gladiator kills four lions every year. How many lions are killed each year at the Colossseum?

Four robots sew jeans in Indira Indigo's little factory in Leicester. They each drink four cans of oil every day. How long will sixty-eight cans of oil last?

Alf Carrot has a vegetable farm. He has sixty-eight hectares. He is going to retire next year and divide it between his four sons. How many hectares will each son receive?

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to cross on the Roseland ferry.
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of that number and will have to
make four journeys. How many
does the boat hold?

This year Sam Crusty has baked sixty-eight currant buns. He sells them four to a bag. How many bags of buns can he sell?

Delia Dollop needs six dozen eggs for the giant cake to celebrate her daughter's wedding. Her busy red hens have laid sixty-eight brown eggs. How many more do they need to lay?

The secretary at Dunkirk
Primary School has ordered
sixty eight dinners. Two more
children arrive late and want
dinners. Two other children
forgot their lunch boxes and
need a dinner. How many
dinners have to be ordered?

There are thirty-four children in Class 3. They have two apples each. Miss Sprog, their teacher, has four apples. How many do they have altogether.

Twenty migrating swallows land on a telephone wire. The same number arrive two hours later and twenty-eight arrive five minutes after that. Just before they leave for Africa four more squeeze into the tiny space left. How many birds left the telephone wire that day..

The ghost story has sixtyeight pages. Unfortunately
the candle blows out, when
the last four really
frightening pages are still to
be read. How many pages have
been read so far?

Miss Sprog has two
bananas for each of the
thirty four children in her
class. Unfortunately four
have turned black and gone
soggy. How many does she
have to give out?

The battery in Nashima's bicycle rearlight is supposed to last for sixty-eight minutes. Nashima is not happy because it goes out four minutes earlier. How long has the battery lasted?

Grace needs sixty-eight shiny stickers to complete her football album. She only needs four more to finish. How many are there in her book so far?