

Fraction Frolics

This activity was developed by colleagues from schools in the Shetland Islands after completing a collaborative learning workshop in 1995. Now sound enabled by Mantralingua www.mantralingua.com

The webaddress for this activity is:

<<http://www.collaborativelearning.org/fractionfrolics.pdf>>

Last updated 22nd October 2008

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 0QB 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.

Fraction Frolics

Teacher notes:

If more than four children are playing you may want to enlarge the board up to A3, but keep the cards fairly small (we have provided three sets getting progressively more difficult and printed in six different colours to help with classroom organisation) so that the words on the board are slightly visible when covered by a card.

Aide memoire for teachers!

Once you have cut up the three sets of the cards, you will need to remember which colours go together. This will help you.



Let the children keep collaborative resources tidy!

How to Play Fraction Frolics

The game is best played by two or three players against two or three players.

You need a game board and two sets of cards in two colours.

Shuffle the cards and place them face down.

Each team takes turns to pick their colour card and place it correctly on the board, discussing the best way to achieve four in a row and/or block their opponents. If you cannot place a card you should either miss a turn or pick another card. You need to decide this rule before you start.

The winner is the first team to get four in a row, vertically, diagonally or horizontally.

How to Play Fraction Frolics

The game is best played by two or three players against two or three players.

You need a game board and two sets of cards in two colours.

Shuffle the cards and place them face down.

Each team takes turns to pick their colour card and place it correctly on the board, discussing the best way to achieve four in a row and/or block their opponents. If you cannot place a card you should either miss a turn or pick another card. You need to decide this rule before you start.

The winner is the first team to get four in a row, vertically, diagonally or horizontally.

Fraction Frolics Connect Four Board

more than half	less than one, but more than a half	more than a quarter	less than a quarter	less than three quarters	less than a quarter
more than a quarter	less than a quarter	less than three quarters	less than one but more than half	more than a quarter	less than half
more than a quarter	more than a quarter but less than one	more than half	less than half	less than one	more than a quarter but less than a half
more than a quarter but less than a half	less than three quarters	less than a quarter	less than one but more than a half	more than half	more than a quarter but less than one

Fraction Frolics connect four cards -Set 1

1	$\frac{3}{4}$	five fifths	$\frac{1}{2}$	a quarter	three fifths
one third	two thirds	three sixths	four sixths	a half	three eighths
two quarters	$\frac{2}{3}$	three quarters	two fifths	$\frac{1}{4}$	two halves
$\frac{8}{8}$	$\frac{1}{5}$	seven eighths	four quarters	one eighth	six sixths

Fraction Frolics connect four cards - Set 1

1	$\frac{3}{4}$	five fifths	$\frac{1}{2}$	a quarter	three fifths
one third	two thirds	three sixths	four sixths	a half	three eighths
two quarters	$\frac{2}{3}$	three quarters	two fifths	$\frac{1}{4}$	two halves
$\frac{8}{8}$	$\frac{1}{5}$	seven eighths	four quarters	one eighth	six sixths

Fraction Frolics connect four cards - Set 2

1	$6/8$	$5/5$	$5/10$	$2/8$	six tenths
$2/6$	$8/12$	$3/6$	four sixths	a half	three eighths
two quarters	$6/9$	three quarters	four tenths	$1/4$	four quarters
$20/20$	$3/15$	fourteen sixteenths	four quarters	$1/8$	six sixths

Fraction Frolics connect four cards - Set 2

1	$\frac{6}{8}$	$\frac{5}{5}$	$\frac{5}{10}$	$\frac{2}{8}$	six tenths
$\frac{2}{6}$	$\frac{8}{12}$	$\frac{3}{6}$	four sixths	a half	three eighths
two quarters	$\frac{6}{9}$	three quarters	four tenths	$\frac{1}{4}$	four quarters
$\frac{20}{20}$	$\frac{3}{15}$	fourteen sixteenths	four quarters	$\frac{1}{8}$	six sixths

Fraction Frolics connect four cards - Set 3

one whole	$12/16$	$50/50$	$25/50$	$25/100$	six tenths
$20/60$	$80/120$	$33/66$	four sixths	a half	$30/80$
two quarters	$12/18$	$75/100$	$20/50$	$20/80$	eight eighths
$40/40$	$9/45$	$80/100$	forty fortieths	$5/40$	a hundred hundredths

Fraction Frolics connect four cards - Set 3

one whole	$12/16$	$50/50$	$25/50$	$25/100$	six tenths
$20/60$	$80/120$	$33/66$	four sixths	a half	$30/80$
two quarters	$12/18$	$75/100$	$20/50$	$20/80$	eight eighths
$40/40$	$9/45$	$80/100$	forty fortieths	$5/40$	a hundred hundredths