

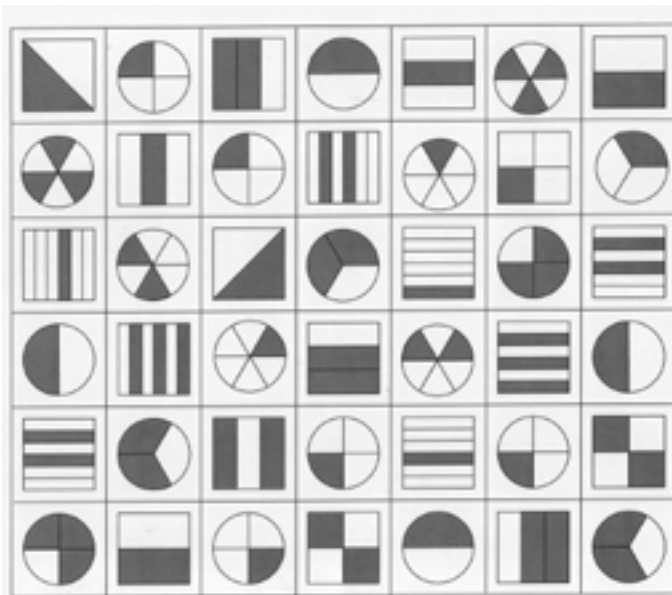
Ratio Connect Four/ 4-in-line Game

Ratio
shaded : unshaded

1 : 5

Ratio
shaded : unshaded

1 : 1



Ratio
shaded : unshaded

1 : 3

Ratio
shaded : unshaded

3 : 1

Ratio Connect Four/4-in-line Game

We are mining the SMILE archive again! SMILE (secondary maths individualised learning experiment) was an extensive and creative maths resource developed by and for teachers with the support of the Inner London Education Authority. A primary version called BEAM was also developed. When the ILEA was closed down in 1989, most of SMILE was scanned and saved and now rests with STEM at the University of York (www.stem.org.uk). You can access it for free if you register with them, but each activity needs a bit of work to bring it back to life. This game was developed in the 1980s by a group of Collaborative Learning Project and SMILE maths teachers who met semi regularly to develop activities suited for collaborative work in multilingual classrooms – those were heady days! Since then, teacher workload has increased so much that creative resource development has been buried under assessment, marking and a lot of other things that do not improve the quality of learning nor the pleasure of teaching. But I digress.. More activities will be mined and tweaked and titivated for your children to enjoy while they are learning.

Webaddress: www.collaborativelearning.org/ratioc4.pdf

Last updated 20th October 2016

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

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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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 and conferences worldwide but mainly in the UK. 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 ideal opportunities for assessment of spoken language.

*They provide scaffolding for 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. We strongly endorse the principles of the Learning Without Limits group to which we belong.

*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 work effectively 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.

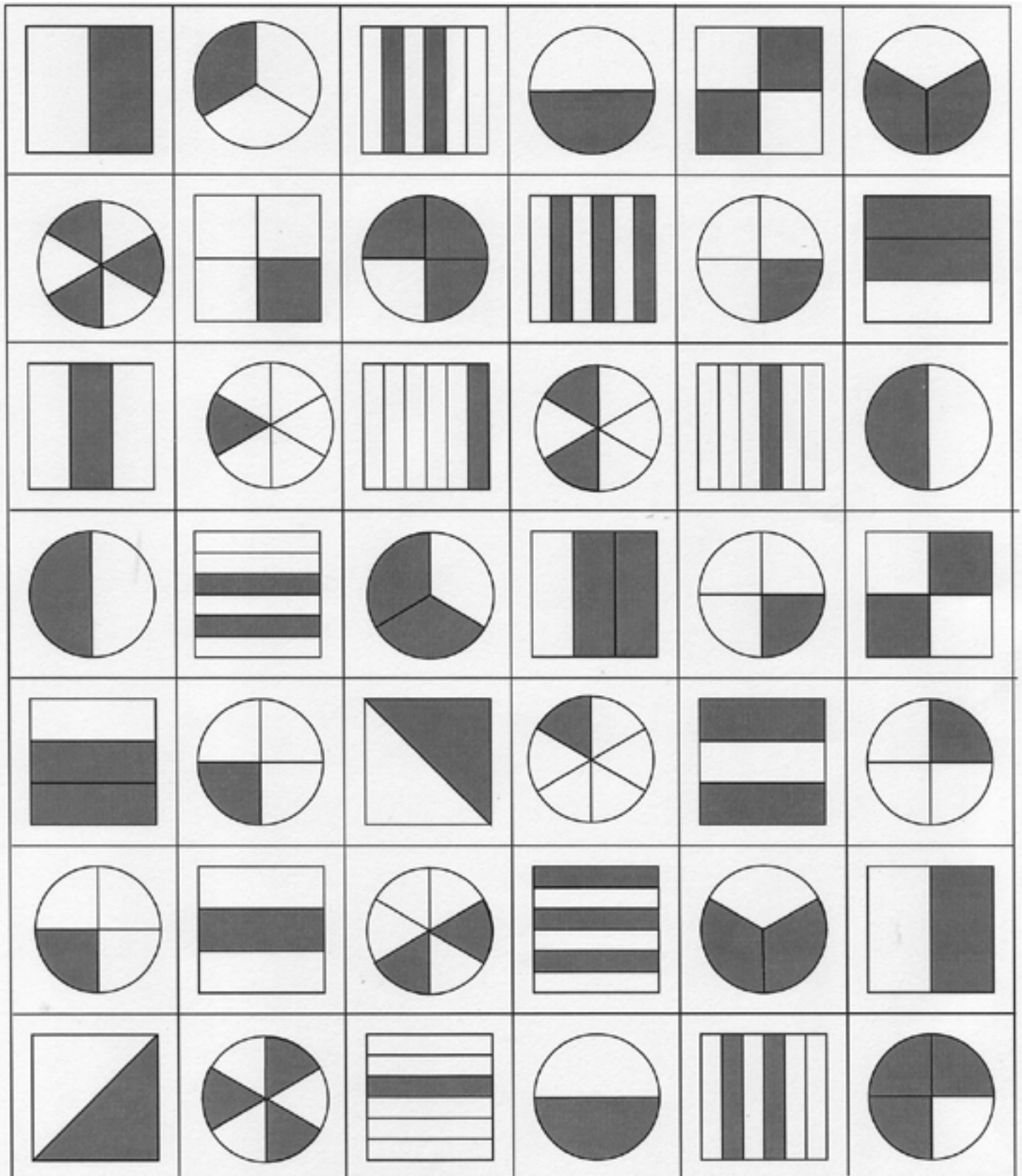
*All project activities were planned and developed by teachers working together, and the main reason they are disseminated is to encourage teachers to work with each other inside and outside the classroom. They have made it possible for mainstream and language and learning support teachers to share an 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.

Ratio Connect Four/4-in-line Game

A game for 4 players split into two teams, You will need 20 counters for each team with a different colour for each team and two or three sets of Ratio 4-in-a-line cards.

Rules:

- Shuffle the cards and place them face down on the table.
- Each team takes it in turn to turn over a Ratio 4-in-a-line card. Say the ratio out aloud. Then they place a counter on the shape on the board which matches the ratio on the card.
- The winning team is the first to make a line of four, either vertically, horizontally or diagonally. Please note! If there is no new place for their counter they lose a turn.



Ratio

shaded : unshaded

Ratio

shaded : unshaded

Ratio

shaded : unshaded

1 = 1

1 = 2

1 = 5

Ratio

shaded : unshaded

Ratio

shaded : unshaded

Ratio

shaded : unshaded

1 = 3

3 = 1

2 = 1

Ratio

shaded : unshaded

Ratio

shaded : unshaded

Ratio

shaded : unshaded

1 = 1

1 = 2

2 = 1