## Making Subtractions

Developed by Alison Symonds at Bedford LA Last updated 18th September 2009 The webaddress for this activity is: http://www.collaborativelearning.org/makingsubtractions.pdf

COLLABORATIVE LEARNING PROJECT Project Director: Stuart Scott We support a network of teaching professionals throughout the European Union to promote inclusive education. We develop and disseminate accessible talk-for-learning activities in all subject areas and for all ages. 17, Barford Street, Islington, London NI 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 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 speaking and listening. They provide teachers opportunities for assessment of speaking and listening.

\*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.

## Making Subtractions

Teachers' notes Make your own subtractions aims:

- o Practice subtracting three-digit numbers
- o Use language of prediction and of sorting
- o Work collaboratively

Activity in pairs (after pairing activity)

1. Using only the digits on the card make a subtraction that you think will have an answer that can be made from the digits. Use rough paper to try out your subtractions.

2.You must decide with your partner, which numbers to make. You might say things like "I think it should be ... because...." Or "We can't have ... because..."

3.Next, solve the subtraction and see whether the answer can be made using only the digits on the card.

4. If it can't, try again. If it can see whether you can make a different one. Explain activity.

Ask pairs to explain to each other what they have to do. Ask a pupil to explain to the class what they have to do.

## Making Subtractions

Work in pairs. Each time use the digits below to make correct subtractions. All the numbers involved must be 3 digit numbers. You may want to use rough paper to try out your subtractions. Use the frames below to set out your subtractions.

## 0 1 2 2 3 4 4 5 7 7 9 9

	hundreds	tens	units
-			

	hundreds	tens	units
-			

hundreds	tens	units

tens	units