A sample handout for learners

Discussing maths

Why discuss maths?

Many people think that there isn't much to discuss in maths. After all, answers are just right or wrong aren't they?

There is more to learning maths than getting answers. You need discussion in order to learn:

- what words and symbols mean;
- how ideas link across topics;
- why particular methods work;
- why something is wrong;
- how you can solve problems more effectively.

Teachers and trainers often say that they understand maths better when they start teaching it. In the same way, you will find that, as you begin to explain your ideas, you will understand them better.

As you begin to understand maths, you will remember it more easily and, when you do forget something, you will be able to work it out for yourself.

Some don'ts

• Don't rush

It is more important to get a better understanding than to finish the activity.

• Don't be a passenger

Don't let someone in your group 'take over'.

Stick to these basic rules and you will find that:

- you begin to enjoy maths more;
- you learn more from others;
- you find that your difficulties are the same as those experienced by others;
- you can help others too.

Some dos

• Talk one at a time

Give everyone a chance to speak. Take it in turns to put forward ideas, explanations and comments. Let people finish.

• Share ideas and listen to each other

If you don't understand what someone has said, keep asking 'why?' until you do understand. Ask them to give an example, draw a diagram or write down their explanation.

• Make sure people listen to you

If you have just said something and are not sure if people understood you, ask them to repeat what you have just said in their own words.

Follow on

Try to say something that follows on from what the last person said.

Challenge

If you disagree with what people say, then challenge them to explain. Then put your point of view.

Respect each other's opinions

Don't laugh at other people's contributions (unless they're meant to be funny).

Enjoy mistakes

Don't worry about making mistakes. If you don't make mistakes, you cannot learn anything. It is sometimes interesting to make deliberate mistakes to see if your partner is listening.

• Share responsibility

If the teacher asks your group to report back, make sure anyone in your group can do so.

• Try to agree in the end