# **Brainstorming**

Brainstorming is a method used by a group to draw out ideas and sometimes find solutions to problems. It is a powerful way of maximising, sharing and generating new ideas. It gives the teacher an insight into a student's theories, understandings and experiences. The process allows students to access their prior experiences, to enhance and extend their knowledge and problem solving skills, and to offer ideas in a supportive environment.

## **Advantages of brainstorming**

- It allows students to look at the world in different ways.
- It models thinking processes to the students.
- The process helps to teach.
- It is fun and exciting.
- Information gained can be used for various other strategies.

### Organising for a brainstorming session

Have materials ready:

- coloured pens
- large sheets of paper
- small pieces of card
- large ruler
- post it notes
- easel/blackboard/whiteboard.

Explain the rules to the students, ensuring they understand and are ready to follow them. Determine whether to conduct the session as a whole class or in small groups. The age of the students and number of adults available will determine how to manage the session.

Allocate an amount of time for the session. Young students will probably cope well with 10 - 15 minutes while those in Year 3 might manage up to 30 minutes. It doesn't matter if there are still more ideas to come. A break between sessions gives students an opportunity to think and build on what has been presented.

#### Rules of brainstorming

It is very important to explain the process to the students, the rules must be explicit and no deviation is allowed (especially by the teacher!) Brainstorming is a strategy to generate ideas, not to analyse problems or make decisions.

- 1. Have a time limit.
- 2. Have materials and work area ready.
- 3. All ideas are accepted. This allows students the opportunity to put forward all their ideas without fear of ridicule or embarrassment.

- 4. Accept no criticism.
- 5. Record everything unless it is repeated.
- 6. Don't discuss ideas in the brainstorming session, this happens later.
- 7. Allow students to build on ideas.
- 8. Write quickly.
- 9. Use questions that encourage thinking and problem solving to stimulate ideas.
- 10. Have follow up sessions to bring out more ideas.
- 11. Use the ideas given for further activities.

#### When several ideas have been generated

- Discuss them
- See what is repeated
- Group them into categories such as habitat, life cycle or description
- Check accuracy of the information
- Remove ideas that are obviously wrong (in consultation with the students)
- Use questionable ideas as a basis for research and questioning

## **Grouping ideas**

This is one method to follow:

- 1. Place each word (or picture for non-readers) on a card. This can be done at the same time as the brainstorming session or after the session to be revisited at a later time.
- 2. The students in pairs, groups or as a class, sort the cards into groups
- 3. Develop headings such as 'habitat' and 'food'. (Ask the students decide these headings.) Use questioning to bring out this information: I wonder how I could group these ideas?
- 4. The students discuss which information belongs to which group
- 5. The cards are displayed for the students to use as a stimulus for further work such as a report, a debate or a question and answer session.
- 6. The cards also stimulate further learning and allow students to revisit ideas that were generated in the brainstorming session.
- 7. Use the cards for association of ideas: one card is the focus for the day and the students think of as many words as they can that are associated with it.