

1. Send-A-Problem

Send-A-Problem can be used as a way to get groups to discuss and review material, or potential solutions to problems related to content information.

- Each member of a group generates a question /problem connected with the topic and writes it down on a card (he can know the answer or not). Each member of the group then asks the question to other members.
- If the question can be answered and all members of the group agree on the answer, then that answer is written on the back of the card. If there is no consensus on the answer, the question is revised so that an answer can be agreed upon.
- The group puts a Q on the side of the card with the question on it, and an A on the side of the card with an answer on it.
- Each group sends its question cards to another group.
- Each group member takes ones question from the stack of questions and reads one question at a time to the group. After reading the first question, the group discusses it.
- If the group agrees on the answer, they turn the card over to see if they agree with the first group's answer.
- If there again is consensus, they proceed to the next question.
- If they do not agree with the first group's answer, the second group write their answer on the back of the card as an alternative answer.
- The second group reviews and answers each question in the stack of cards, repeating the procedure outlined above.
- The question cards can be sent to a third, fourth, or fifth group, if desired.
- Stacks of cards are then sent back to the originating group. The sending group can then discuss and clarify any question

Variation: A variation on the “send a problem” is to use the process to get groups to discuss a real problem for which there may be no one set answer.

- Groups decide on one problem they will consider (connected with the topic). It is best if each group considers a different problem.
- The same process is used, with the first group brainstorming solutions to a single problem. The problem is written on a piece of paper and attached to the outside of a folder. The solutions are listed and enclosed inside the folder.
- The folder is then passed to the next group. Each group brainstorms for 3-5 minutes on the problems they receive without reading the previous group's work and then place their solutions inside the folders.
- This process may continue to one or more groups. The last group reviews all the solutions posed by all of the previous groups and develops a prioritized list of possible solutions. This list is then presented to the group.

2. Guided Peer Questioning

The goal of this activity is to generate discussion among student groups about a specific topic or content area.

- Trainer/teacher conducts a brief (10-15 minutes) lecture on a topic or content area. He/she may assign a reading or written assignment as well.
- Teacher then gives the students a set of generic question **stems**. (beginning of questions)
- Students work individually to write their own questions based on the material being covered.
- Students do not have to be able to answer the questions they pose. This activity is designed to force students to think about ideas relevant to the content area.
- Students should use as many question stems as possible.
- Grouped into learning teams, each student offers a question for discussion, using the different stems.

Sample question stems:

- What is the main idea of...?
- What if...?
- How does...affect...?
- What is a new example of...?
- Explain why...?
- Explain how...?
- How does this relate to what I've learned before?
- What conclusions can I draw about...?
- What is the difference between... and...?
- How are...and...similar?
- How would I use...to...?
- What are the strengths and weaknesses of...?
- What is the best...and why?
- Name all possible...



3. Numbered heads together

Numbered Heads Together is a cooperative learning strategy that holds each student accountable for learning the material. Students are placed in groups and each person is given a number (from one to the maximum number in each group). The teacher poses a question and students "put their heads together" to figure out the answer. The teacher calls a specific number to respond as spokesperson for the group. By having students work together in a group, this strategy ensures that each member knows the answer to problems or questions asked by the teacher. Because no one knows which number will be called, all team members must be prepared.

1. Divide the students into groups of four and give each one a number from one to four.
2. Pose a question or a problem to the class.
3. Have the groups gather to think about the question and to make sure **everyone** in their group understands and can give an answer.
4. Ask the question and call out a number randomly.
5. Only the students with that number raise their hands, and when called on, the student answers for his or her team.

4. Pairs work together

Timed Pair Share

1. Teacher announces topic and time limit (1-2 minutes or more)
2. Teacher gives “Think Time”
3. Partner A shares; Partner B listens without interruption
4. Partners switch roles

Paraphrase

Same as above, except that student B has to accurately paraphrase what student A already said before he starts sharing his ideas. After student B has finished, student A has to paraphrase.

Rules are:

- Listen carefully
- Only use paraphrase (it's not allowed to use the other persons exact words).
- Not allowed to add anything to the content.
- Not allowed to ask questions, give advice or tell your own opinion (until it's your turn to speak)

Team – Pair – Solo

Students work on a problem first as a team, then with a partner, and finally on their own. It is designed to motivate students to tackle and succeed at problems which initially are beyond their ability. Students can do more things with help (mediation) than they can do alone. By allowing them to work on problems they could not do alone, first as a team and then with a partner, they progress to a point they can do alone that which at first they could do only with help.



5. “Stray” and “Stir the class”

This method is especially useful to use all the knowledge of the class and activate all students. Students have worked on a certain task together in groups and the teacher has given each student a number. When the task is half way through or when it's finished, the teacher calls out the number of one or more “stray”.

One Stray:

The teacher calls a number; students with that number “stray” to join another team, often to share the outcome or ideas of his/her group or to listen to the new groups ideas and bring them back to their basic groups.

Two Stray: Two students stray to one or two other teams (who have possibly been working on another task), often to share and to listen.

Three stray: Three students stray to another team, often to listen to the one who stayed to explain a team project.

Stir-the-Class

Students are divided into small groups of four or five. Each student is given a number. Teams of students stand in a circle around the room, huddle to discuss a question from the teacher. When they have agreed on an answer they stand in a line, shoulder to shoulder. When their number is called, they share the groups answer. When the teacher claps hands, the ones who answered rotate to next team, and join the new team for next question. There are never two students with the same number in any group.



6. Round Robin

The aim of this simple cooperative task is to encourage discussion and knowledge on a certain topic as well as activating the whole groups experience and understanding. You can either use this task before you start with a certain topic to awake student's interest or after you have finished covering a topic and want to evaluate students understanding of it.

- Step 1 Teacher divides students into groups of 4 or 5 and reminds students that the aim is to collect all possible information and knowledge from the whole class. There is one piece of A-3 paper per table.
- Step 2 The team members at each table are given the same topic on which to respond, e.g. "list all the components of ... " or 'what are the major needs of ... '.
- Step 3 At the given signal the students start discussing the topic and then they start writing on the paper (the teacher selects a student to begin in each team). Students quickly write their answers, or contribution and pass their paper to the team member on the left. The paper continues to go around and around the table as each student adds to the team's solution with help of everyone.
- Step 4 After 2-3 minutes or so, with a signal from the teacher, the pieces of paper move one desk to the left. One member in each team reads the responses from the previous table and then continues to generate and record more ideas on the new piece of paper. This continues until the paper comes back to the first group.
- Step 5 After three or four rotations, the process enters a new phase. The teacher can ask to annotate the various answers in terms of classifications designed by the teacher (or students) such as 'the most creative ideas', 'the most practical ideas', ideas which meet criteria A, then B. Students will then feedback their selections to the teacher who will record these on the board in order to start discussion or debate.

Version 2:

- Step 1 This version is similar to the first version ***except that each group gets a different topic*** to discuss. All group members write down all they can think of about the group's topic. ***Example:*** A task about Scandinavia:
 - Group 1 writes down all names of animals that they know live in Scandinavia (wild or farm animals)
 - Group 2 writes down all names of plants (flowers, trees, vegetables...) that they know grow in Scandinavia.
 - Group 3 writes down all cities and towns they know in Scandinavia.
 - Group 4 writes down all natural resources they know of in Scandinavia.
 - Group 5 writes down all Scandinavian artists they know (musicians, actors, writers...)
- Step 2 After a certain time (5-10 minutes) the papers start rotating between the tables (like above) and each group adds new material on the paper. Each group keeps the paper for ca. 3 – 4 minutes.
- Step 3 In the end the groups get their original paper back, hopefully with more information. Now the original group has the task to make a creative presentation about their topic. Here you can either give each group instructions about what kind of presentation they should use or allow them to decide themselves (with the condition that it is creative and interesting for the class to observe)
- Step 4 If you want to take the task further, you can assign new groups in the last step so that one person from each group creates a new group. Then each group should make an overall presentation about Scandinavia, in a creative and interesting way so that all topics are address.

7. ZONE OF RELEVANCE

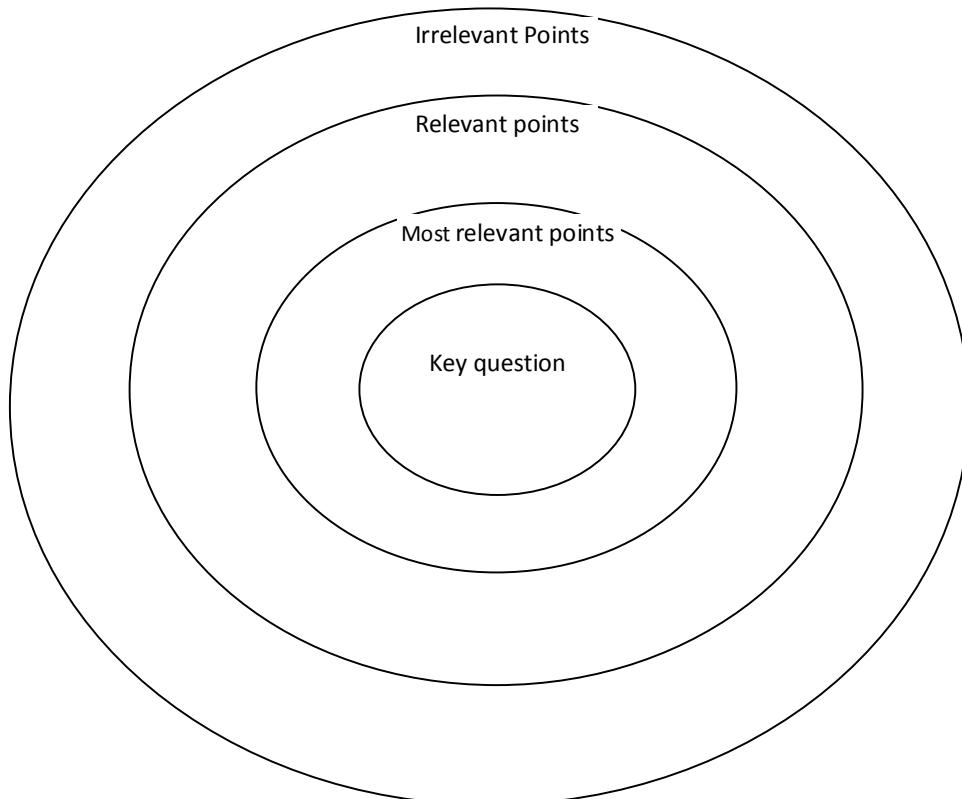
Skills: Working with Others, Thinking, Decision-Making

This activity allows pupils to consider what points may be relevant or irrelevant when considering a key question. It subsequently asks pupils to prioritise ideas and information on the question and discuss justifications for their choices. This might be a useful revision technique for exams, as it encourages pupils to think about the most effective and relevant responses to questions.

Pupils can work at a board or wall space on a large sheet. Alternatively, groups can work around a table using A3 or A4-sized sheets.

How does it work?

1. Pupils are divided into pairs or groups.
2. Each group is given a set of cards with words, phrases or pictures which relate to the key question.
3. Each group is also given the Zone of Relevance Template (see example below) with the key question in the centre. Alternatively, each group might draw their own Zone of Relevance.
4. Pupils work through the cards, deciding whether each one is relevant or irrelevant to the key question. If they decide that a card is relevant, they must consider the degree of relevance in relation to the question and place it at an appropriate place within the Zone of Relevance.
5. Groups present their decisions, justifying their choices if they happen to contrast with the decisions of another group.
6. Whole group discussion about the key question.



8. Pair Read

Objective: Describe accurately

Time: 35 minutes (5 min set up, 2x10 for pair reading, 10 min debrief)

Process:

Individually:

- Silently read each paragraph or section and then

In Pairs (which the teacher decides):

- Take turns describing the content to their partner and name everything you didn't understand or was unclear.
- The pairs discuss all discrepancies in understanding and find out what could have been misunderstood.
- When each pair finishes the class can discuss the entire passage and discuss open questions from the teacher.

Group Success: Both people in the group can describe the passage content.

Accountability: Randomly answer questions on content.

Debrief: Was this an effective means of covering this material for you? Why or why not?



9. Snowballing

This technique enables pupils to think about their own responses to issues and gradually begin a collaboration process with those around them to consider their thoughts on the same theme. It is a useful way of encouraging less vocal pupils to share ideas initially in pairs and then in larger groups. It also ensures that everyone's views on an issue may be represented and allows a whole class consensus to be arrived at without a whole class discussion.

A large space is needed for ease of movement and interaction. Alternatively, pupils could form clusters around desks and move seats accordingly.

How does it work?

1. A relevant question is asked or scenario described.
2. Pupils individually write down their thoughts, opinions and/or suggestions.
3. Pupils form pairs and compare answers. They discuss their positions and reach an ***agreed or compromised position*** on the issue, which is then recorded.
4. Pupils move into groups of four and undertake a similar process. Another agreed position is reached and noted.
5. The group of four becomes a group of eight and the process is repeated. A further agreed position is reached.
6. A final whole-class position is then discussed and justified.
7. The view of any pupil who objects strongly to the agreed position could be recorded if the individual feels that their opinion is not adequately represented.
8. A debrief afterwards might explore not only knowledge and understanding, but also the process of the activity: how did pupils come to a decision? How was compromise reached? What skills were they using?

Another version – useful to prioritise

Same process as above, except:

1. Students write down all ideas they have about a certain subject/issue and then choose 6 points that they find most important.
2. Joining another student in pairs, they tell each other their ideas and then agree on 4 points that they can both agree on that are most important (may have to compromise)
3. The pairs move into groups of four and undertake a same process. Each pair shares which 4 points they found most important and then agree on 3 points that they can all agree on as most important.
4. The group of four becomes a group of eight and the process is repeated. But in the end they should agree on 1 or 2 things that they should all agree on being the most important.
5. A final whole-class position is then discussed and justified and agreed on.

10. Corners

Teacher announces a topic and gives students a choice of four alternatives. Students then form groups in the four corners of the room and share reasons for their choice with a partner in their corner. Students realize they can be accepted while making choices that are different from their classmates. In the end they answer open questions from the teacher.

Steps:

1. Teacher announces a topic and gives students a choice of four alternatives: (example about the human body: digestive system, respiratory system, vascular system and nervous system.) (5 minutes)
2. Students choose which alternatives they want to choose and write it on a piece of paper (without showing it to others).
3. Four corners of the room have been labeled one of the four alternatives. Students go now in their corner and show each other their paper because they cannot change corners after they have chosen.
4. The corner group discusses the topic and everyone explains why he/she chose this topic and everything they know about it. In the corner there is a large empty poster hanging and there the group should write/draw everything that explains their topic. Students know that they will have to present their outcomes so they have to agree on how would be the best way to explain the topic. They cannot just write their explanation on the poster and expect the visitors to read it – the presentation needs to be oral.
5. After ca. 15-20 minutes the teacher stops the groups. All group members except one or two, distribute to other groups where the reporters that stayed back explain the topic.
6. After 5 minutes the teacher claps hands and every one returns to their original corner. Now two other group members stay back and explain the topic while other group members distribute to other corners than last time. This goes on like this until all students have at least ones explained their subject and seen all other corner presentations.
7. All students come back to their seats and the teacher summarizes all main points that the students learned in the corners.

Tips:

- Have students writes down the number or names of their choice without discussion among themselves.
- Post a title of visual in each corner of the room and hang up an empty poster and have markers available.
- If only one student chooses a corner, validate their choice, but ask them to choose their second favourite group.
- Give equal time to share in pairs.

11. REVOLVING CIRCLE

This method builds up pupil confidence in communication techniques as they engage in short discussions. It also allows pupils to sample a wide range of views without holding a whole class discussion. Pupils may, as a result, refine their ideas or opinions on a particular issue.

A large space is needed for ease of movement and interaction. Alternatively, if pupils are seated at desks in groups of four, two pupils could change group after the allocated time.

How does it work?

1. Pupils divide into two groups.
2. One group forms an inner circle and the other group forms an outer circle. Pupils face each other.
3. The teacher gives out a subject to discuss (example: find everything that you both remember from last lesson..., name all the advantages of knowing how to in everyday life, agree on one organ that you could the least be without....)
4. The pairs exchange views for approximately one minute on a particular issue.
5. Teacher claps hands and then the outer circle rotates clockwise one step and then face a new partner.
6. Teacher calls out a new question/topic and the new pair discusses it for another minute.
7. The rotation may continue until pupils have had the opportunity to discuss different questions with a wide range of partners.
8. To make it more fun, the last pair can be asked to act out their outcome to the last statement which might be personal (common hobby, common interests, common favourite food etc) Other students have to guess what they are acting out.
8. A debrief afterwards is beneficial.



12. ODD ONE OUT

Skills

Thinking, Decision-Making, Problem-Solving, Working with Others, Managing Information

What is it?

Odd One Out is a useful activity which can be incorporated at any point of a topic – as a springboard for initial exploration of the topic or as a tool to consolidate knowledge. It obliges pupils to think about the characteristics of words, sentences, ideas, places, people or things – depending on the learning area in question. They are encouraged to explore for themselves the similarities and differences between these things, to foster an understanding of any other relationships between them and to categorise accordingly.

How does it work?

1. Teacher divides students into groups and gives them roles.
2. Material manager picks up a set of key words/ideas/places/things or people, depending on the learning area and topic. These may come, for example, in the form of a list or grid on an Overhead Projector, hand-out or on small post-it notes so that the students can move them around when categorizing. (If you use post-it notes its best to give each student a set of labels that they have to put out and discuss about, so that the dominant students don't dominate the information.)
3. Teacher can either give all groups the same task or different tasks to each group (which then rotates between the groups).
4. Students must find the odd one out on each grid or list. Often there may be no right or wrong answers and any word might be the odd one out. Pupils must, therefore, give a justified and valid response as to why they chose a particular word and the nature of the relationship between the other words on the list.
5. As an extension activity, pupils could suggest another related word to add to those which are not odd ones out.
6. Alternatively, pupils could think of their own *odd one out list* or grid and rotate their list to the other groups.
7. A debrief afterwards might concentrate on how pupils made the connections between the words, the processes involved and whether the group work has helped pupils to see different connections which they otherwise might not have considered.



13. CONSEQUENCE WHEEL

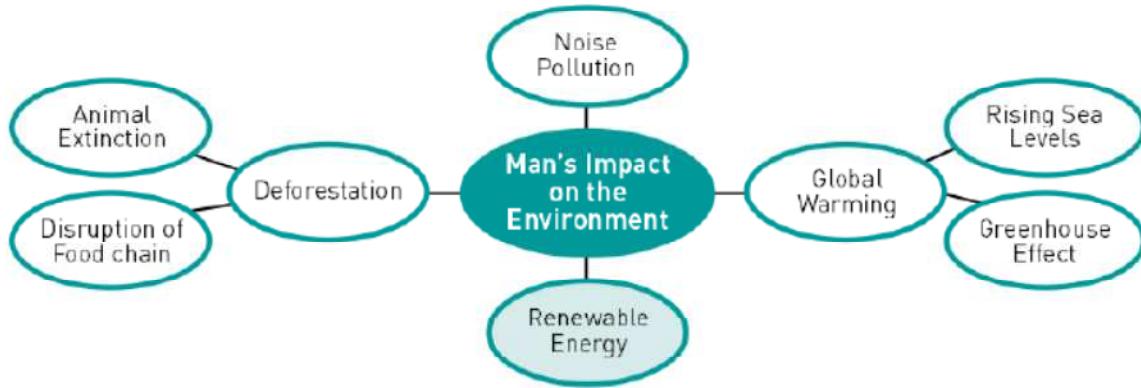
Skills: Thinking, Decision-Making, Problem-Solving, Managing Information

What is it?

This activity encourages pupils to think about the direct and second order consequences of a particular event or action. Pupils map these consequences in a visual manner.

How does it work?

1. Pupils are divided into groups or pairs and given a large flip-chart paper.
2. They write the main event or action in a centre circle in the middle of the page.
2. Pupils write a direct consequence of the event in a circle which is linked to the main circle with a single line. Pupils try to think of as many direct consequences as possible.
3. Pupils then consider second order consequences. These are drawn once again in circles and linked to the direct consequences with double lines. Third order consequences have a triple line, etc.
4. Pupils could colour circles depending on whether the consequence is positive or negative.
5. Feedback afterwards could compare and contrast pupils' consequences as well as lead into deeper exploration.
6. A debrief after this activity may be beneficial.



14. MEMORY GAME – Together we remember more!

Skills: Thinking, Working with Others, Managing Information

What is it?

Much learning depends on active and effective use of memory and memory skills. This activity provides pupils with relevant contexts in which they can become aware of memorisation strategies and therefore helps make them more effective learners. The memory game focuses pupils' attention on the importance of accuracy and detail, and it can be a more interesting way to deliver factual information. It also promotes teamwork, communication and concentration.

Pupils work in groups and there must be easy access for each pupil to the front of the room.

How does it work?

1. Pupils are divided into groups of three or four.
2. Three copies of the same sheet are placed at the front of the room. The sheet might contain 8 to 10 sentences containing factual information about a particular topic or issue. Different colours and images may also be used.
3. Pupils from each group come to the front to view the sheet. Each person might be allowed to view the sheet only once, for thirty seconds. For example, if there are four people in a group, the group will have four chances to view the sheet, with each person taking a turn for 30 seconds (timings and frequency may need to be changed depending on the difficulty of the sheet).
4. Pupils must write out the sheet as accurately as possible in their groups, including any images, words underlined, different colours, etc. This should be done against-the-clock.

Example:

Topic: Modern Languages – Food and Drink Context (statements in the target language).

On Mondays I eat fish.

On Tuesdays I eat chicken and rice.

On Wednesdays I eat potatoes, vegetables and meat.

On Thursdays I eat pasta, fruit, crisps and chocolate and drink milk.

On Fridays I do not eat!

.....

Pupils from each group come to the front to view the sheet. Each person might be allowed to view the sheet only once, for thirty seconds. For example, if there are four people in a group, the group will have four chances to view the sheet, with each person taking a turn for 30 seconds (timings and frequency may need to be changed depending on the difficulty of the sheet).

Pupils must write out the sheet as accurately as possible in their groups, including any images, words underlined, different colours, etc. This should be done against-the-clock.

15. Talking Chips

Talking Chips/beans provide students opportunities to refine their **communication skills** as it allows them to focus on speaking and listening (NYC Standards).

Teachers form groups of three, four, or five whatever meets the needs of the students. Each student receives a designated number of chips. When a student wants to speak, he must place a chip in the centre of the table. The student may not speak again until everyone has placed his chip in the centre of the table. When all the chips have been used, the process starts again.

Talking Chips is a very effective structure as

- it provides boundaries for the extremely vocal student;
- it encourages the reticent student to speak;
- it makes students more reflective about what they say as they hear other perspectives and their opportunities to speak are highlighted and limited;
- and it gives the teacher an opportunity to monitor student participation and collect data on noteworthy observations. The data will inform future planning and teaching.



17. Diamond ranking

Skills: Working with Others, Thinking, Decision-Making

What is it?

This is a small group activity aimed at prioritising information and ideas. It can be a follow-up activity used after information-gathering sessions. It encourages pupils to consider and express their justifications for placing certain issues above others.

How does it work?

1. Students are divided into pairs
2. Each pair are given more than 9 items, they first have to select 9 items, in relation to the criteria.
3. Each pair ranks the items in layout as below with the most 'valued' item, in relation to the criteria, at the top and the least 'valued' at the bottom.
4. After a given time, each pair links up with another pair and shares their own rankings with the other. They then try to create a common diamond together.

Reflection

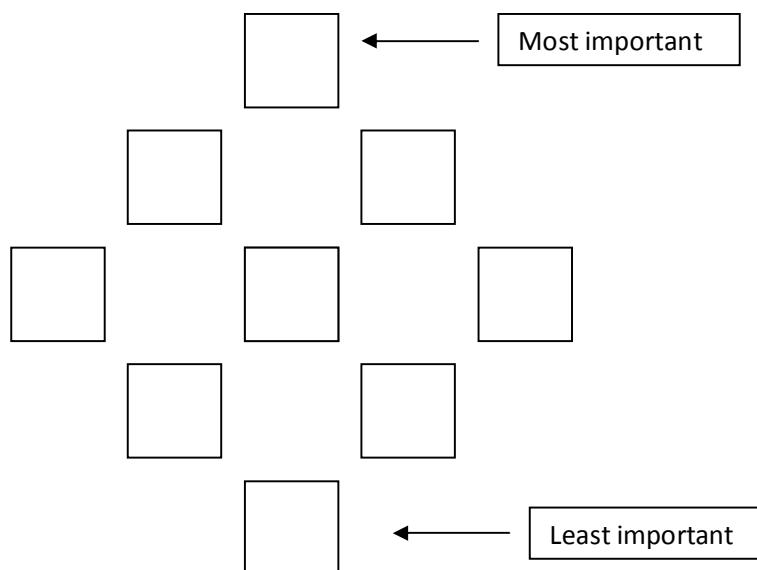
1. At first, what were the differences and similarities between the two diamonds?
2. In developing a third diamond, how did your group arrive at consensus?
3. Was it hard or easy to reach consensus? Why do you think that was?
4. Did everyone feel that their ideas were listened to?

Example Ideas for Discussion:

How to reduce crime

Measures to prevent environmental pollution

Making our roads safer.



18. Speed date

This method is useful when you want to introduce many topics in a short time (without giving a long lecture about it)

Students are divided into pairs that sit opposite each other in a row.

The instructions are as follows:

1. Read about your topic for 10 minutes and write down main points and make up an example to explain it.
2. Tell your partner about your topic and your example. (5 minutes)
3. Now partner explains, you listen and ask questions (5 minutes)
4. Thank your partner and exchange topics.
5. Everyone in one row move one seat and now partner A explains (without thinking time) the topic he has and makes up a new example, then partner B does the same. After 10 minutes partners exchange tasks and the same row moves one seat again.
6. This is repeated until all tasks have been listened to and explained by all students.



19. Paper plane

Students are divided into pairs and together they compose a question about the topic. The questions should start with either: “explain ...“concept”... with your own words” or “why do you think that....?“.

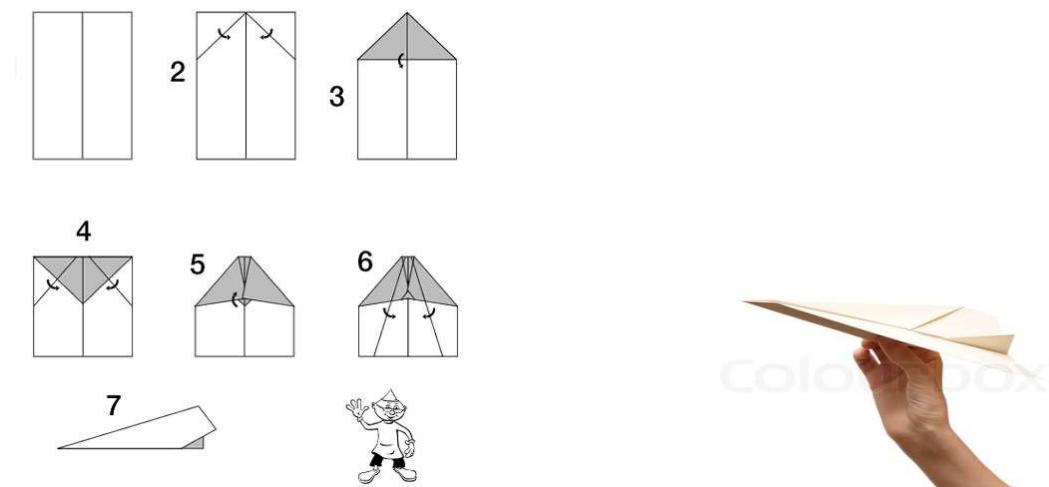
They write the question in clear letters on a A4 paper and then make a paper plane with it.

When the teacher says “go”, everyone throws their paper plane in the air. The pairs pick up the plane landing closest to them and answer that question together on the same paper.

Again the teacher says “go” and the pairs throw the plain again.

The pairs pick up the plain closest to them and review the question and answer on it and correct it if they think the answer can be improved.

Now all pairs take turns, reading out the question and the first answer on the paper and their improvement if they found it necessary.



20. Mix-Pair-Share

- 1) Guidelines: Walk at all times; don't stick with friends; only pair with the same person once.
- 2) Tell students to "Mix": This simply means that students begin walking around the room. (You can also use music to indicate that it is mixing time.)
- 3) Tell students to "Pair": Students freeze and pair up with the person closest to them.
- 4) Finally, have students "Share." Students take turns as both a listener, and speaker to share information they have on a specific subject. Give students clear instructions for what they are to do when finished.

21. Clustering

CLUSTERING

Skills

- Thinking, Decision-Making
- Working with Others

What is it?

- This activity might be a useful tool for transferring factual information amongst pupils and for encouraging pupils to seek connections and links between statements and/or facts. See **Each One Teach One** for another activity useful for transferring information.

Implications for classroom layout

- A large space is needed for ease of movement and interaction. Alternatively, if there is not enough room, small groups of pupils could cluster the cards around a desk. Each group might then present and compare their clusters.

How does it work?

1. A piece of card with a particular statement or fact is distributed to every pupil. Ideally there should be a different statement for every pupil.
2. Pupils read their statement to ensure that they understand its meaning.
3. Pupils move around and compare their statement with other pupils' cards.
4. If two pupils decide that there is a link between their statements they form a cluster.
5. Another pupil might join the cluster if their statement is connected to other statements in the cluster.
6. Pupils might decide to break into sub-clusters if they see patterns within the connections.
7. Pupils might want to give their cluster a name.
8. Pupils might introduce their cluster and explain why they have formed a group and/or sub-group.
9. Main findings might be written on a board or flip chart whilst pupils are presenting their formations.
10. A **debrief** afterwards is beneficial.

22. Fact or opinion

FACT or OPINION

Skills

- Thinking, Decision-Making, Problem-Solving
- Working with Others

What is it?

- This activity asks pupils to judge whether something is a fact or just an opinion (value-laden). In an increasingly pluralistic society, distinguishing fact from opinion based on evidence is an important skill. This challenging activity encourages pupils to consider the nature of knowledge – often there may be no clear-cut answer. Pupils work in groups to discuss their stance. An effective approach to this activity will include a **debriefing** session afterwards.

How does it work?

1. Pupils are presented with a series of statements which are based on a particular issue. These may often include the position statements of key stakeholders on both sides of the issue in question.

Topic: Geography – Wind Farms

- At present less than 3% of Britain's electricity comes from alternative sources.
- Almost all the UK's electricity generated from renewable sources comes from the two hydroelectric dams in Scotland.
- The UK is one of the windiest countries in Europe so it makes sense to harness the energy.
- The wind does not blow all the time so we would need to use a battery technology to store the energy, which is expensive to do.

2. Pupils analyse the statements and decide whether they are fact or opinion. Pupils consider the justifications for their choice and present these to the class during a whole-class feedback session. Pupils could further explore any similarities and differences in judgement between groups.
3. In a **debrief** afterwards pupils could concentrate on the processes which led to judgements being made. How did groups arrive at a judgement? Where there a variety of opinions? Was consensus reached? Were judgements justified effectively? Were judgements articulated effectively? Were there allocated roles within the group?

Sources:

Kagan, Spencer – Cooperative learning – 1994

http://www.nicurriculum.org.uk/docs/key_stage_3/ALTM-KS3.pdf

<http://www.kaganonline.com/index.php>

http://www1.umn.edu/ohr/prod/groups/ohr/@pub/@ohr/documents/asset/ohr_89185.pdf

Guðrún Pétursdóttir – Allir geta eitthvað, enginn getur allt - 2003