

## Studies Show that We Learn:

**10% of what we READ**

**20% of what we HEAR**

**30% of what we SEE**

**70% of what is DISCUSSED with others**

**80% of what we EXPERIENCE personally**

**90% of what we TEACH**

- 1. Carousel Brainstorming:** Post charts on the wall with key questions or ideas at the top. Groups are formed and one person scribes for the group and adds to the chart as they brainstorm. Groups move to a new chart, read other groups' responses and then add to the chart. Teams may use a different color of felt pen.
- 2. Card Sort:** Students or teacher can prepare cards with terms on one color and definitions on the other. Students work in teams to find matches.
- 3. Circle the Sage:** The teacher polls the class to see which students have special knowledge to share on a topic. Those students become the sages stand and spread out in the room. The teacher divides the remaining students evenly into teams and teams send members to different sages, (so no two members of the same team going to the same sage). The sage explains what they know while the classmates listen, ask questions, and take notes. All students then return to their teams. Each in turn, explains what they learned from their sage.
- 4. Four Corners:** Teacher poses a question and gives four potential responses and points to a corner for each one. Students decide which they agree with or would like to discuss move to that corner. They discuss the topic with those who also move to that corner.
- 5. Gallery Walk:** After teams have generated ideas on a topic using a piece of chart paper, they appoint a "docent" to stay with their work. Teams rotate around examining other team's ideas and ask questions of the docent. Teams then meet together to discuss and add to their information so the docent also can learn from other teams.
- 6. Graffiti:** Groups receive a large piece of paper and felt pens of different colors. Students generate ideas in the form of graffiti. Groups can move to other papers and discuss/add to the ideas.
- 7. Human Continuum:** Teacher poses a question or problem and students line up according to their opinion on the answer.
- 8. Jigsaw:** "Home groups" with a small number students are formed. Each group member is assigned a number. Students move to an "expert group" containing others who have the same number. They work on the same sub-section get together to decide what is important and how to teach it. After practice in these "experts" return to the home group and each expert teaches their section of material
- 9. Inside/Outside Circle:** Divide class in half. One group forms a circle facing outward, the others find one person in the circle to stand opposite, so there are two circles of people facing each other. Information can be shared and reviewed, and outer circle can move easily to generate more responses or discuss new information.
- 10. Number Heads Together:** Students sit in groups and each group member is given a number. The teacher poses a problem and all four students discuss. The teacher calls a number and that student is responsible for sharing for the group.

- 11. Pass a Problem:** Teacher creates problems for teams to solve and writes or attaches them to envelopes. Teams read the problems, place their solutions in the envelope and then exchange with another team to check their solution and to determine if they solved the problem in a different way.
- 12. Round Robin Brainstorming:** Class is divided into small groups with one person appointed as the recorder. An open-ended question is posed and students are given time to think about answers individually. Next, members of the team share responses with one another, round robin style. The recorder writes down the answers of the group members.
- 13. Say and Switch:** Partners take turns responding to topics at signaled times. The times will be unpredictable and the person listening must pick up from their partner's train of thought before adding new ideas.
- 14. Send a Problem:** Students write a review problem on a card and ask teammates to solve their problem. Teammates solve and the question-writer determines if they have come up with a good solution. Other team members repeat the process.
- 15. Talking Chips:** Each student is given a certain number of chips. Each time they talk they must submit a chip, but once their chips are gone they may no longer talk. Students must use all their chips.
- 16. Team-Pair-Solo:** Students do problems first as a team, then with a partner, and finally on their own. 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.
- 17. ThinkPad Brainstorming:** Requires students to individually brainstorm and write down their answers on a sheet of paper. Once they are all done they are to share their information with a partner or team.
- 18. Three-minute Pause:** Teachers stop any time during a lecture or discussion and give teams three minutes to review what has been said, and to ask clarifying questions.
- 19. Three Stay, One Stray:** In a group of four (or could be more), students solve a problem. While they work, they send one member to "stray" to another group to compare teams' solutions.
- 20. Three-Step Interview:** Partners interview each other than share what they have learned with another team of two.
- 21. Think-Pair-Share:** First, individuals think silently about a question posed by the teacher. Individuals pair up and exchange thoughts. Finally, the pairs share their responses with the whole class.
- 22. Think-Pair-Square:** The same process as think-pair-share, except that partners share with another set of partners before the whole-class discussion.
- 23. Two Facts and a Fib:** Students or the teacher write down two facts and one fib, the job of the team is to identify which is which.
- 24. Visible Quiz:** Teacher poses questions with multiple choices responses and students sit in teams and discuss the responses. When the teacher asks, they hold up their answers and may be called on to explain their team's reasoning.