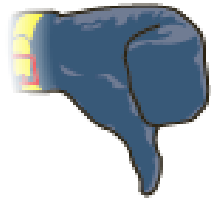


# 7. Diving Environment

## The Buddy System

Teaming up with a qualified partner is appropriate for activities that involve risk, such as swimming, rock climbing, and skin and scuba diving. Safety is the primary purpose of the buddy system, but having a dive buddy also makes diving more enjoyable. The following list describes the duties and responsibilities of a good dive buddy:

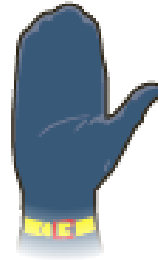
- Helps to plan the dive in advance and after arrival at the dive site
- Reviews signals and emergency procedures
- Assists with the donning of the scuba unit
- Inspects equipment
- Maintains contact while diving and follows procedures for reuniting if separation occurs
- Provides reminders concerning depth, direction, time, air pressure, and ascent rate
- Points out items of interest
- Identifies problems that you are unaware of, such as an air leak
- Provides reassurance and assistance as needed
- Summons additional assistance as needed
- Provides first aid as needed
- Assists with exits and the removal of the scuba unit



1. Descend



2. Ascend



3. Stop

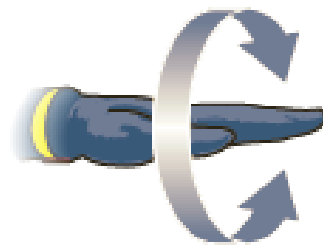


4a. OK

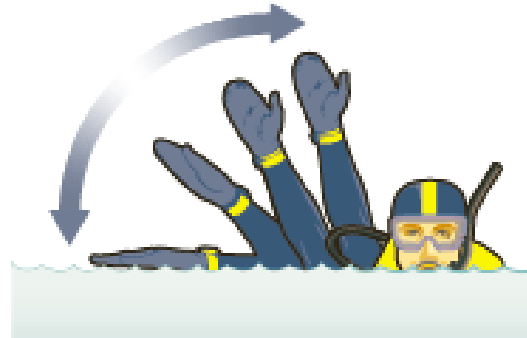
4b. OK



4c. OK



5. Something's not right



6. Emergency



7. Low on air



8. Out of air



9. Give me air



10. Look



11. Danger



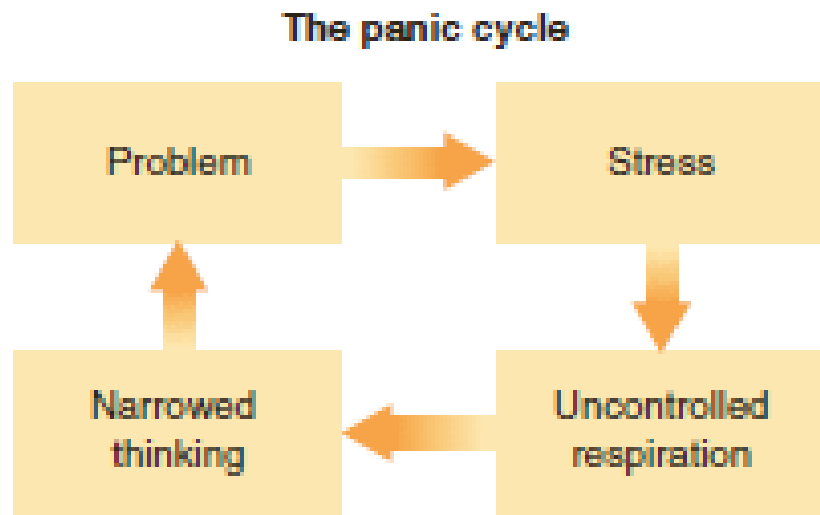
12. Watch me  
(finger pointing to chest)



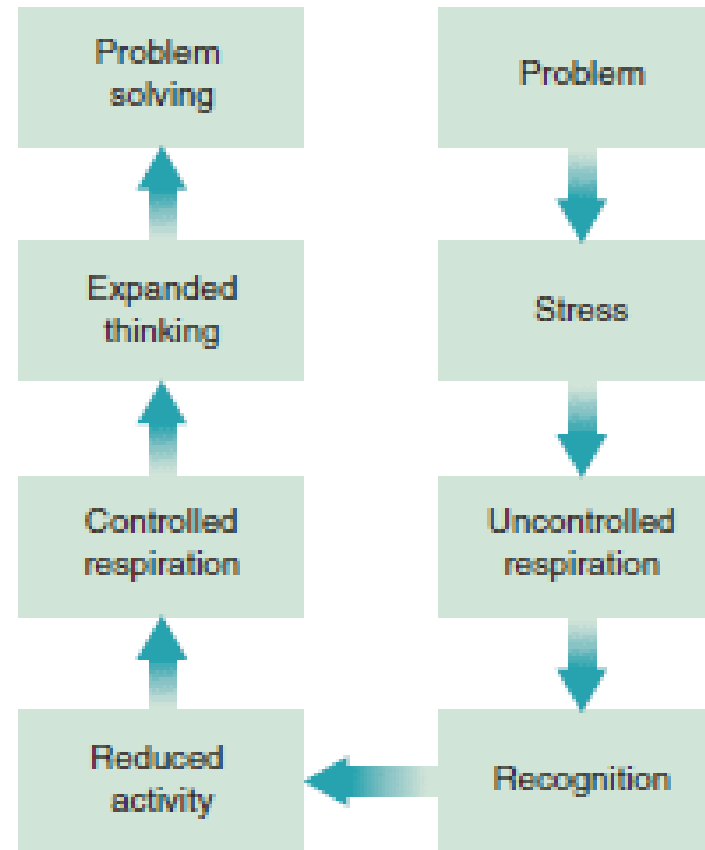
13. You lead, I follow



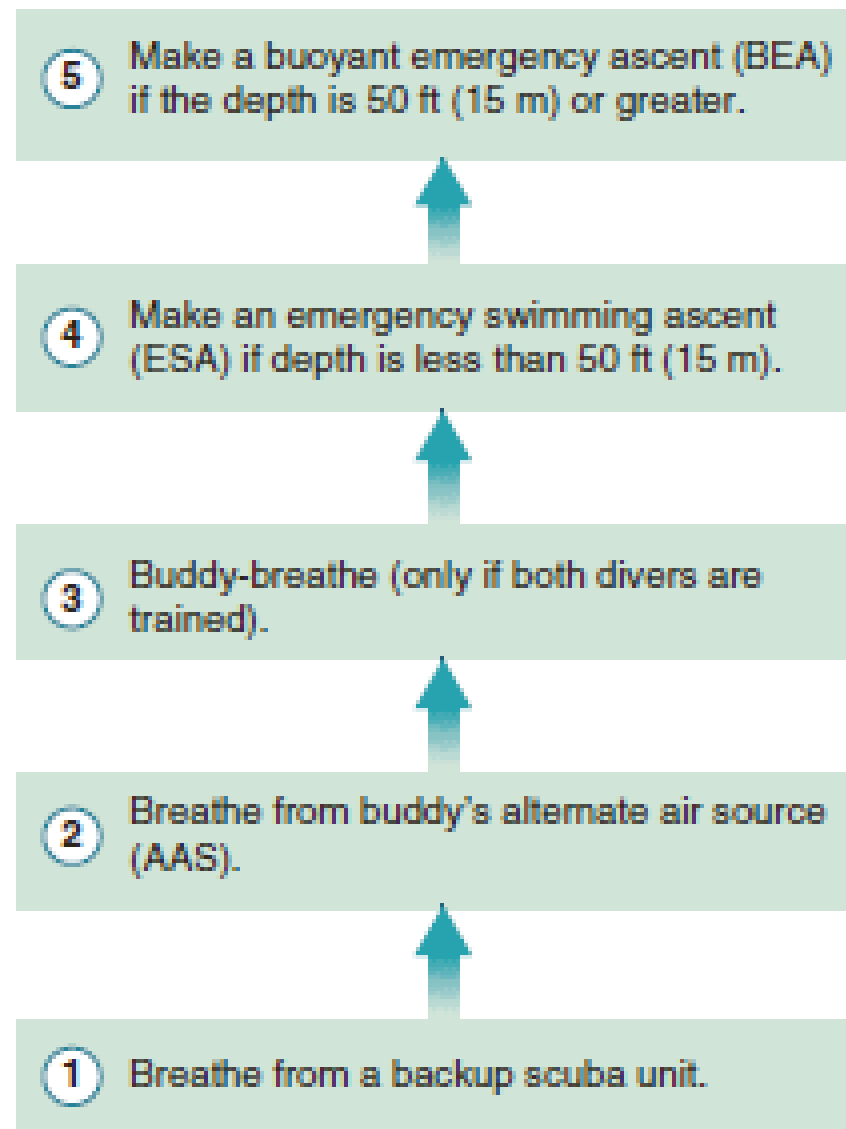
14. Get with your buddy



### Breaking the panic cycle



## Emergency ascent option hierarchy



Emergency preparedness includes having emergency equipment and information available. The emergency equipment available at a dive site should include these items:

- Diving first aid kit (see the checklist of kit items in chapter 4)
- Oxygen delivery system
- Blanket (if appropriate)
- Drinking water

- Confusion
- Seizure
- Loss of consciousness
- Nausea or vomiting
- Shortness of breath
- Sudden, extreme weakness
- Numbness or a pins-and-needles sensation
- Inability to do simple motor skills
- Paralysis
- Unequal pupils



People are creatures of habit, and habits are the result of repetition. If you repeat an action correctly enough times, you form a good habit. On the other hand, if you repeat an action incorrectly enough times, you create a bad habit. Divers need good habits to avoid accidents, but sometimes they fail to take the time to develop them. I often watch divers on charter boats and at dive sites as they prepare to dive. I notice that some fail to inspect their equipment adequately, some fail to plan their dive properly, and some fail to follow the practices outlined in this chapter. They usually know what to do, but because they have bypassed many steps every time they go diving, they have a habit of skipping important items. How safe is a pilot if he ignores the preflight checklist? Taking the correct action requires concentration initially, but when repeated until the action becomes a habit, the process becomes automatic. People can make complex processes simple by repeating them. When a skill is executed properly every time, it not only becomes habit but also is easier to recall when you really need it, such as in an emergency. I strongly encourage you to take the time to form good diving habits. If you do, I assure you that the odds of being injured are extremely small.

The skills of diving range from simple skin diving procedures to complex scuba skills to problem management. You need to learn the skills correctly the first time, practice them until you can do them easily, and renew them frequently to stay proficient. You also need to be trained and prepared to handle a diving emergency. As mentioned previously, visualization of skills can help you develop skills. This is especially important for problem-management skills. Some problems are not common, and you may never encounter them; but you need to be prepared to manage them. If you visualize a problem vividly in your mind, you will be able to remain relatively calm when that problem occurs because you will know what actions to take. Knowing what to do helps you remain relatively calm, which allows you to think and to better manage your situation.

1. What are ways in which you can control buoyancy?
2. What do you need to remember to do while ascending from a scuba dive?
3. What can you do to minimize the chances of becoming separated from your buddy while scuba diving?
4. The inflator valve on your BC sticks when you open it to add air. What actions can you take to prevent a rapid ascent?
5. What should you do if your regulator begins free flowing while you are underwater and cannot be stopped?
6. When preparing to exit the water into a small boat, what is the correct order for the removal of your equipment?
7. While swimming against a current at the bottom in 40 feet (12.2 m) of water, you begin to experience air starvation. What is the proper way to manage this problem?
8. If you become entangled underwater, what can you do to get free of the entanglement?