Basic Life Support

Assessment
Mnemonic: DRAB
- Danger: check around patient and environment for danger
- Response: question (e.g. hello, can you hear me?), shake and command (e.g. open your eyes)
  - Shout “help, help, help” if unresponsive
- Airway: Open airway with head-tilt chin-lift (if no risk of spine injury) or jaw thrust (if risk of spine injury) and look for obstructions
- Breathing: assess breathing for up to 10 seconds by listening and feeling with your ear, watching for chest movements; you should also palpate the carotid pulse simultaneously.
  - Shout “help, help, help” if unresponsive
  - If no breathing, ask a helper to call 999 (or 2222 in hospital) and explain there is a cardiac arrest and the location.
  - If there are no helpers, you must leave the scene now and do this yourself.
  - If in hospital, ask the helper to call (specifying there is adult/paediatric/neonatal/trauma cardiac arrest and the location) and bring the defibrillator trolley back with them (so you can perform advanced life support)
  - NB. if patient is breathing, put in recovery position unless there is risk of spine injury

Cardio-Pulmonary Resuscitation
Repeat cycles of 30 compressions then 2 breaths (if there is another trained helper, take turns. If not continue until you tire and can no longer physically continue)
- 30 chest compressions: perform at a rate of 100-120/min and a depth of 5-6cm. You must fully extend your elbows, wrists and fingers. Have both hands palm downwards and interlock fingers. Place the carpals area of the lower hand over the mid-sternum and apply all the compression pressure over this point.
- 2 rescue breaths: at the patient’s side, place the lateral part of your palm and little finger firmly on the patient’s forehead and occlude the nostrils with the index finger and thumb of the same hand. Perform a head-tilt, and lift the chin with the other hand.
  - NB. if you have a pocket mask, position yourself at the head of the patient and firmly press the mask around the patient’s face with the index finger and thumb of each hand on either side. Place your little fingers either side around the angle of the mandible to pull it up into the mask and then perform the 2 breaths while watching the chest

Special Cases
Algorithm differences in children
- Pulse check
  - Infant (<1 year): feel brachial pulse
  - Children (>1 year): feel carotid pulse
- Compression:ventilation ratio
  - At birth: 3:1 ratio
  - Infants/children: start with 5 rescue breaths, then 15:2 ratio
- Compressions
  - Compress to at least one-third the A-P chest diameter
  - Infant:
    - Lone rescuer: compress the sternum with the tips of two fingers
    - Two or more rescuers: encircling technique – performed by placing both thumbs flat on the lower sternum pointing towards the infant’s head and the fingers around the rib cage
  - Children: as in an adult but only use one hand
- If you are on your own, perform CPR for 1 minute before leaving to get help (unless it was a witnessed, sudden collapse – more urgent defibrillation required)

Drowning
- Give 5 initial ventilations first, then continue at normal 30:2 ratio
- If there is a delay getting the victim to land:
  - <5min: give 10-15 rescue breaths in the water over 1 minute then continue rescue breaths while towing
  - >5min: give 10-15 rescue breaths in the water over 1 minute then stop and get them to shore ASAP without further attempts
- Dry the patient’s chest prior to defibrillation