Camera Modes Reference

Remember: You are smarter than your camera, even if you don't think so, if for no other reason than you know what you're taking a picture of. Your camera has to guess based on the light coming through the lens.

Manual Mode (M)
- Full control of the camera
- You adjust:
  - Shutter speed
  - Aperature (Fstop)
  - Sensor Speed (ISO)
- The photographer has complete control of the results

Shutter Priority (S, Tv)
- You adjust
  - Shutter speed (optimized for motion)
  - Sensor Speed (ISO) (remember to turn Auto ISO off)
- The Camera adjusts
  - Aperature (Fstop) based on it's metering mode and detected light
- Useful for getting some auto help from the camera while still optimizing for the effects of motion in your images

Aperature Priority (A, Av)
- You adjust
  - Aperature (Fstop) (optimized for DOF)
  - Sensor Speed (ISO) (remember to turn Auto ISO off)
- The Camera adjusts
  - Shutter Speed based on it's metering mode and detected light
- Useful for getting some auto help from the camera while still optimizing for the effects of depth of field in your images

Priority, Programmed Priority (P)
- Think of as guided auto
- Camera determines multiple sets of settings for sufficient exposure with different values for each setting
- You select the prechosen combinations most suitable to the shot you want
  - Generally you rotate a control dial to scroll through setting combinations

Camera Modes
Reference

Scene Modes

Cameras may have some, all, unlisted or none of these scene modes. Scene modes can be a good tradeoff because they allow the camera some "auto" behavior but permit the photographer to retain some control by choosing the optimization of the auto parameters

Sports	Optimized for capture of motion. Fast shutter speed. Aperature and sensor speed adjusted to accomodate
Landscape	Optimized for large depth of field (think Grand Canyon) and often low ISO for best image quality. Shutter speed adjusted to accomodate
Night	Optimized for low light. Generally high ISO and large aperature (low fstop). Shutter speed adjusted to accomodate. May have forced flash
Night Landscape	Optimized for low light. Generally high ISO. May try higher Fstop for better depth of field. Shutter speed adjusted to accomodate. Flash likely disabled since ineffective at distance
Portrait	Optimized for best quality (low ISO) and shallow depth of field (large aperature/low Fstop). Shutter speed adjusted to accomodate
Museum	Flash disabled. Optimized for best quality in low light conditions (lowest possible ISO)
Macro	Affects focal distance of lens. Likely optimizes for largest aperature (low Fstop) for a shallow depth of field.
Fireworks	Optimized for low light, but faster shutter speed to stop action. Generally high ISO. Flash likely disabled since ineffective at distance
Underwater	Optimized for low light, but faster shutter speed to stop action. Generally high ISO. Flash may or may not be disabled. Probably alters white balance to compensate for filtering effect of water