Why you need a tripod

1. Maximize image quality by keeping camera at base ISO.
2. Increase sharpness and depth of field.
3. Place for resting heavy camera gear while wildlife/nature shooting.
4. Improve composition and framing.
5. Shoot HDR, focus stacked images and panoramas that require precision framing.
6. Nighttime photography
7. Portraits of self and others
8. Shoot close-ups such as macro or product photography
9. Hold remote flashes, reflectors, etc.
10. Shoot difficult or next-to-impossible hand-held positions.
11. Shoot with very slow shutter speeds – water (waves, waterfalls)
12. Shoot pre-focused action shots

Components

1. **Legs -** Typically aluminum or carbon fiber
2. **Head** - Holds the camera or a lens via a collar – popular types are ball or pan/tilt
3. **Center Post** - Separate tube that allows for an increase in head rise
4. **Feet** - Some tripods allow for changing tripod feet: rubber, spikes, etc.

Disadvantages

1. **Weight** – there are lightweight carbon-fiber tripods; however, once you add a head the system becomes heavier.
2. **Inconvenient** – No matter how small or collapsible a tripod is, it occupies space and adds a level of inconvenience.
3. **Difficult** – to use in crowded environments.
4. **Expensive** – a good tripod system can set you back $450.00 to $2,500.00.
5. **Set-up Time** – you may miss the optimal moment.

Materials

Carbon Fiber

- Extremely light weight
- Dampens vibration
- Thermally non-conductive
- Most Expensive

Aluminum

- Light weight
- Less Expensive than carbon fiber

- Thermally, mechanically and electrically conductive

Basalt (made from fine fibers of basalt and significantly cheaper than carbon fiber)

A Good Tripod and Head Should (credit Thom Hogan)

1. Set up in seconds.
2. Hold it's position no matter what the angle of the camera.
3. Be completely field cleanable.
4. Go from ground level to full height without compromise.
5. Lock all positions securely enough that you're comfortable walking away from the tripod even on windy days.
6. Be able to follow action and still provide support.
7. Resist all attempts to bend and break
8. Allow the camera to go from horizontal to vertical orientation instantly.
9. Be dragged over rocks, through mud, sit in the ocean, or any other environment you want and how nothing more than a few scratches for the effort.
10. Be light enough to always carry with you.
11. Be heavy enough to hold your heaviest lens and body secure in the worst possible conditions and at the worst possible angle.

Factors to consider

1. **Weight** – how much do you want to carry?
2. **Height** – how tall are you and how are you going to use it?
3. **Construction** – tube size, number of tubes, material.
4. **Center Post** – allows for increased height; however reduces stability.
5. **Weight Rating** – what's going to be placed on the tripod? (DSLR, Telephoto, Flash, etc.)
6. **Legs** – Carbon fiber or aluminum?
7. **Feet** – Fixed or interchangeable?
8. **Head** – Ball, tilt/pan or gimble?

Tripod and Head Manufacturers:

www.reallyrightstuff.com
www.gitzo.us
www.manfrotto.us
www.slik.co.jp/slik_com
www.benrousa.com
www.indurogear.com
www.feisol.net
www.argraph.com

http://www.giottosusa.com/

Head Manufacturers:

www.reallyrightstuff.com
www.arca-shop.de
www.tripodhead.com (Wimberly)
www.kirkphoto.com
www.markinsamerica.com

Thom Hogan back in 2003, wrote the definitive article on ***tripods*** where he states that he can save you at least $700.00 if you buy the right stuff the first time. You can find his full article here.