

# HITCHES A DEFINITION



Hypothesis: A hitch requires a **host** in order to assume a geometric form, and function when loaded.

If the host is removed, the hitch loses structural integrity and can no longer function. In some cases, when the host is removed, it triggers total structural collapse. In other cases, structural integrity is lost but, it doesn't result in total collapse (eg Round turn and 2 half hitches).

A hitch can co-exist with a knot, which then creates a *composite structure* (hitch + knot).

Examples to illustrate concepts:



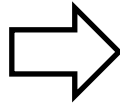
A hitch requires a 'host' to form around - in a type of symbiotic relationship (commensalism). If the host is removed, the hitch loses structural integrity. Hitches can take the following forms:

- [ ] slide and grip progression hitch
- [ ] noose hitch
- [ ] binder hitch
- [ ] load control hitch

**Slide and grip progression hitch**  
Formed from 2 independent textile materials

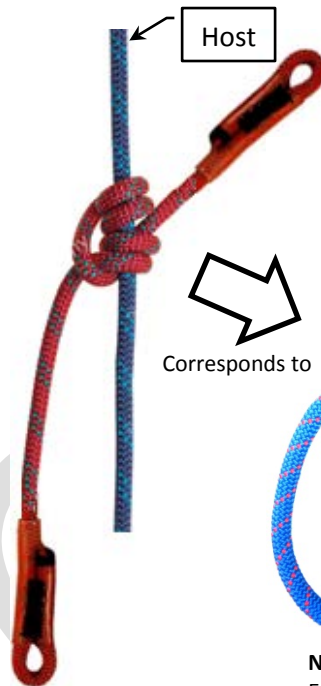


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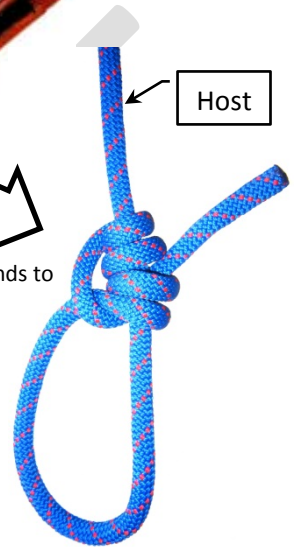


**Noose hitch**  
Encircles and grips its own SPart – forming an adjustable eye. No independent 'host' is required.

**Slide and grip progression hitch**  
Formed from 2 independent textile materials



Corresponds to



**Noose hitch**  
Encircles and grips its own SPart – forming an adjustable eye. No independent 'host' is required.

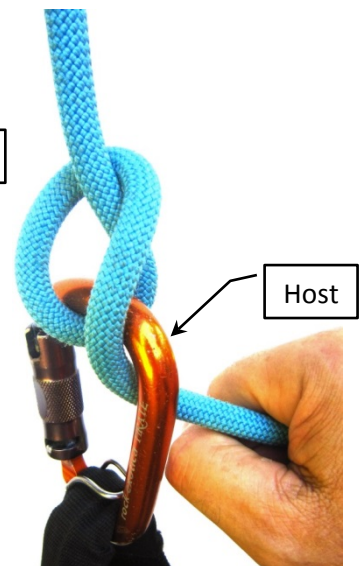
**Noose hitch**  
Encircles and grips its own SPart – forming an adjustable eye. No independent 'host' is required.



**Gnat hitch**



**Binder hitch**  
Progressively crushes its host as load increases



**Load control hitch**  
Rope flows around the host. The hitch maintains its integrity while flowing under load.