Safety/Risk Management/Dealing With Emergencies

Suggestion as well as putting the following into your own words try and give examples hypothetical, from your own experience, or from others experiences.

- 1. Why do we need to be careful when using the word "safe" or variants of that word? It's all relative, some things are safer than others but very few things in life (not just adventure sport) can be guaranteed to be with out risk. One of the key components of adventure sport is a level of risk often with a perceived risk higher than the actual risk. If we use words such as safe a.) we might diminish the value/adventure element of the activity b.) it implies that we are making a guarantee that nothing can go wrong and if it does we might be liable c.) if we are giving misleading advice to others it reduces their ability to make good decisions.
- 2. What are the components of a risk management plan (RMP)? IDENTIFY make sure you identify all components not just the big/obvious ones (example of an example checking for traffic before crossing the road but tripping over an untied shoe lace half way across). ASSESS generally done on two axis_how likely is it to happen and how serious will the consequences be (hint make a diagram/graph with an x an y axis). A low score in both of these (not likely to happen not that bad if it does) might need little attention but should still be considered as it might be the critical grain of sand in the sand pile (google Sand Pile Effect) or add to a snow ball effect (ask google if you don't know). Higher score on either or both of the axis indicate that the next stage is of increasing importance. MITIGATE or AVOID at some point the risk becomes too serious or too likely to happen and the best course of action is to avoid it, stay home, take another route, go do something different etc. However, that could seriously limit what we get done, we can also mitigate the risk i.e. make it less likely to happen and or less serious if it does. IDENTIFY, ASSESS, MITIGATE, AVOID.
- 3. What happens to an RMP in the field? Answer: it changes. Common question "if it's going to change why have one in the first place?" Possible answers
 - you need a point from which to measure things
 - it probably won't change completely and modifying a RMP is generally easier than coming up with one on the spot for a risk you could have expected
 - you have the time to use classical decision making (CDM) when creating a RMP. This often leads to finding the "best" solution rather than Naturalistic Decision Making which (if successful) finds a solution that works but not necessarily the best solution
 - it forms the basis of good reflective practice which is the only way you will get better at making good/successful NDM decisions which are kinda important.

- 4. Protocols vs. decision making. Go / no go. 30 /30. Linking in with #2 and 3 a RMP could be seen as a set of protocols created through a CDM process in a calm stress free environment while drinking a cup of tea and coming up with the best possible solution. However, sticking rigidly to protocols when they obviously aren't working could be problematic. Having protocols is great when they work because it frees up brain space for other stuff, like being aware of the environment. One (well supported) theory states that we can only focus on three plus or minus two things at a time, stress is one factor that reduces the number of things we can focus on and guess what is present in a lot of adventure sport/expedition situations - stress. At some point we need to make decisions in the field, we might have the luxury of the time needed for another CDM process but it is quite likely that would cause more problems than it could solve, decisions often need making quickly/instantly which requires a NDM process. Organizations, especially large ones with lots of staff to train, tend to like protocols as it is essentially a list of instructions that can be given to a staff member and as long as they follow them all will be well (we already know it won't), and are easy to defend in court. While this is great in some circumstances and works well for some functions, if the staff following them are not involved in creating and evolving them they may have little to fall back on when decisions need to be made in the field whether CDM or NDM. Historically the military and many businesses had a similar system, i.e. chain of command, follow your orders, read the instructions, etc. increasingly they are looking at other structures. Check this out as an example https://www.youtube.com/watch?v=OqmdLcyES_Q Go/NoGo (if it looks like this go, if it doesn't nogo) and 30/30 (lightning, try google), are examples of protocols, try and find/examine these and or other examples.
- 5. What do we mean by "mitigation"? We can do this is several ways but TTPP might be a way to think about it i.e. do it differently, at a different time, use equipment or outside support, different technique/practice and improve, getting fitter/stronger, stress inoculation, focusing exercises, etc.
- 6. What are "heuristics" and what is their relationship to risk assessment? This links to decision making and NDM, read the Decision-Making Wiki on useful stuff or google it. Common error most people involved in adventure sport first heard about heuristics through the paper "heuristic traps in recreational avalanche accidents" by McCammon. It is a great paper, read it if you haven't already. However, it has led a number of people to associate heuristics with bad things happening. Heuristics are essential, we probably couldn't exist without them and they get us out of a lot of trouble, the paper simply points out some of the ways in which they can get us into trouble as well. A similar thing sometimes happens with CDM and NDM, "CDM must be better, it comes up with the best solution not just one that works", however how little would we get done and how much trouble would we get into if we had to sit around drinking tea, scratching our heads, and stroking out chins for half an hour every time we needed to make a decision?

- 7. **Emergency protocols / response.** Refer to/build on info from the communication chapter.
- 8. **10 directives.** They are in useful stuff. Don't just cut and paste them into your chapter, examine them, discuss them, give some examples.