B. Detailed description of considered conceptual options

I. The Box Kite- by Elaina Durnack
   a. **Use for task**: Various tools and multiple instruments can be attached to the box kite to measure different conditions relating to weather and meteorology.
   b. **Suitable for task**: The kite can carry a considerable amount of weight, which is why it is perfect for carrying meteorological instruments.
   c. **Helps managing resources**: It is a relatively simple design, and as such would require minimal resource.
   d. **Technology feasible**: The kite is practical as it has been used in meteorological applications before. It provides stability and lift, two key features needed for its intended use.
   e. **Possible cost**: Since it is a relatively simple kite, the materials needed for construction and fabrication would be low.
   f. **Safety**: The impressive stability would ensure that the design is safe, and the kite would have little risk of causing damage.
II. The Sled Kite- by Shea Transue
   a. **Use for task:** The sled kite would be used to carry meteorological tools into the sky.
   b. **Suitable for task:** The kite would be effective at carrying tools, as its large surface area creates a lot of lift.
   c. **Helps managing resources:** It uses a lot of material because of its large surface area, but will only require minimal material for the small frame.
   d. **Technology feasible:** The sled is feasible because of its simple design that has been used countless times before.
   e. **Possible cost:** The cost to construct the sail portion of the kite would be expensive, as it requires a lot of material, but the cost to create the frame would be low.
   f. **Safety:** The kite is very safe.
III. The Diamond Kite - by Ryan Custer
   a. **Use for task**: Various tools and multiple instruments can be attached to the box kite to measure different conditions relating to weather and meteorology.
   b. **Suitable for task**: The diamond kite may not provide suitable lift and stability to carrying scientific instruments.
   c. **Helps managing resources**: The kite is simple, two bars and a diamond-shaped cloth, and would require minimal resources.
   d. **Technology feasible**: It would be feasible to construct the diamond kite, as it is arguably the simplest kite design. There may be some concerns over the carrying capacity of the kite.
   e. **Possible cost**: Since it is a relatively simple kite, the materials needed for construction and fabrication would be low.
   f. **Safety**: The kite is lightweight, so there are no safety concerns regarding the kite.
IV. The Winged Box Kite - by Brendan Hocker
   a. **Use for task:** The winged box kite would be used to carry meteorological tools into the sky.
   b. **Suitable for task:** The kite could carry the considerable weight of the instruments, and the wings would provide additional stability to the kite.
   c. **Helps managing resources:** The kite includes the additional material needed for wings, so it will require more resources than the simple box kite.
   d. **Technology feasible:** The kite is practical as it has been used in meteorological applications before. It provides stability and lift, two key features needed for its intended use.
   e. **Possible cost:** The kite would most likely be more expensive than the simple box kite, due to the extra material needed to construct the wings.
   f. **Safety:** The wings create additional stability, making it very safe.
V. The Power Kite- by Aaron Veness
   a. **Use for task:** Various tools and multiple instruments can be attached to the box kite to measure different conditions relating to weather and meteorology.
   b. **Suitable for task:** The power kite would generate a significant amount of lift, allowing it to easily carry instruments into the air.
   c. **Helps managing resources:** The sled kite is quite large, and would require a large amount of resources to build.
   d. **Technology feasible:** Such a complex design would be very difficult to construct.
   e. **Possible cost:** The amount of resources needed to build the power kite would incur a large cost.
   f. **Safety:** The power kite is stable and would be quite safe.