**SMHK Evolution**

Transfer of genetic information from one generation to the next can ensure continuity of species or lead to variation within a species and possible formation of new species. Reproductive isolation can lead to accumulation of different genetic information in populations potentially leading to formation of new species (speciation). Sequencing projects have read the genomes of organisms ranging from microbes and plants, to humans. This allows the sequences of the proteins that derive from the genetic code to be predicted. Gene technologies allow study and alteration of gene function in order to better understand organism function and to design new industrial and medical processes.

Read the information on these websites (you could make more Cornell notes if you wish):

http://www.bbc.co.uk/education/guides/z237hyc/revision/4

http://www.s-cool.co.uk/a-level/biology/evolution

And take a look at these videos:

http://ed.ted.com/lessons/how-to-sequence-the-human-genome-mark-j-kiel

http://ed.ted.com/lessons/the-race-to-sequence-the-human-genome-tien-nguyen

**Task:**

1. **Complete the worksheet attached**
2. **Produce a one page revision guide for an AS Biology student that recaps the key words and concepts in this topic. Your revision guide should:**

•Describe speciation

•Explain what a genome is

•Give examples of how this information has already been used to develop new treatments and technologies.