## Junior Discussion Plan

Year 1 Quarter 1 Week 9

Aim:

**Note:** I am no expert in genetics, below is a summary of my own understanding, in my own words, after reading about the topic on the Creation Ministries website and from other articles and books etc.

Take: A copy of the pictures from this article: https://creation.com/3-rs-of-evolution

From Patriarchs and Prophets:

After the dispersion from Babel [idol worship] again became well-nigh universal, and the Lord finally left the hardened transgressors to follow their evil ways, while He chose Abraham, of the line of Shem, and made him the keeper of His law for future generations. Abraham had grown up in the midst of superstition and heathenism. Even his father's household, by whom the knowledge of God had been preserved, were yielding to the seductive influences surrounding them, and they "served other gods" than Jehovah. But the true faith was not to become extinct. God has ever preserved a remnant to serve Him. Adam, Seth, Enoch, Methuselah, Noah, Shem, in unbroken line, had preserved from age to age the precious revealings of His will. The son of Terah became the inheritor of this holy trust. [Idol worship] invited him on every side, but in vain. Faithful among the faithless, uncorrupted by the prevailing apostasy, he steadfastly adhered to the worship of the one true God. "The Lord is [near] unto all them that call upon Him, to all that call upon Him in truth." Psalm 145:18. He communicated His will to Abraham, and gave him a distinct knowledge of the requirements of His law and of the salvation that would be accomplished through Christ.

## Read the promise given to Abraham in Genesis 12:1-3

Abraham was especially chosen by God, and had the promise of God. But did he fully trust God yet?

Read Genesis 12:10-13

Read Genesis 20:12 (Sarah really was his half sister)

Could Abraham have trusted God to protect him?

Read Genesis 12:17 (God was perfectly capable of protecting Abaraham without Abraham having to lie.

Notice that Abraham married his half-sister? Sometimes people wonder who Noahs' grandsons married, or who Adam's sons married. Adam's sons married their sisters. Noah's grandsons married their sisters or cousins. It was ok for them to do this back then. It was not until the time of Moses (Leviticus 18:6, 9) that God told them not to marry close relatives, including, sisters and half-sisters. We now know that the problem with two people who are closely related marrying, is that their DNA is closely related and so when they have children, the chance of them inheriting genetic diseases and disabilities is much greater.

(My classed asked to learn more about where all the animals came from and how they got to the various places in the world – but other topics may be covered instead depending on your group)

Animals, like people also inherit one copy of DNA from each parent. And like people, all the land animals we find today originally came from the 'two of each kind' of animal that were on the ark.

Read Genesis 6:19- 20, 7: 2-3. Note: How were the animals chosen? (verse 20 – they came to Noah. God chose them)

Creation Scientists believe that what the Bible calls a 'Kind' means a group of animals that can successfully breed together and whose children can also breed.

Scientists today classify animals according to their similarities, into families and then smaller groups called Genus, and then into species. A scientific name is the Genus, followed by the species name. For example, the scientific name for domestic dogs is "Canis familiaris." When doing this, scientists were not considering which animals can breed, so in some animals the individual species is equivalent to the 'Kind' mention in the Bible, but in other cases, certain animals which are considered to be the same Genus but different species, can interbreed and so are actually the same kind.

The Canidae family contains the Canis genus, which includes domestic dogs, dingoes, wolves, coyotes, and jackals and many other types of wild dogs, all of whom could potentially interbreed. All of the dog breeds that we find in the world today, both domestic and wild, came from the pair of dogs that Noah had on the ark. The differences between all these types of dogs came about through what we call 'Natural Selection'.

The Creation Ministries Article, 'The 3 R's of Evolution' states that genetic information can be Rearranged, Removed, and Ruined – but it cannot be added, and so, as the article goes on to say, what we see is not actually evolution after all. Evolution would require adding and improving genetic information which does not happen.

**Rearranging** refers to which DNA you get from each of your parents. We talked about this last week. Here is another very simplified example with dogs this time.

(Have a look at the picture in <a href="https://creation.com/3-rs-of-evolution">https://creation.com/3-rs-of-evolution</a>)

The two parent dogs have both the gene for long and short hair and as a result their hair is medium length. Their children can inherit any combination of short or long hair genes, so some may have short hair, others medium, and others long. If there is time, discuss what will happen if the various combinations of short, medium or long haired dogs breed together.

**Removal** of genes occurs when certain genes or gene combinations have an advantage over others, for example because of their environment.

(Look at the second picture in https://creation.com/3-rs-of-evolution)

The dogs with long hair have the best chance of surviving in snow, if the others die off, only the long hair genes will be left

in the group. What type of hair will their descendants have?

This is called natural selection, adaptation or speciation.

Hence wolves and huskies live in cold climates and dingoes have short hair etc.

**Ruined** – sometimes when DNA is copied it is not copied properly – like a typo in writing – the genes are damaged or ruined. Dogs with floppy ears have a genetic mutation which causes weak cartilage in the ears – their ears are faulty, and it affect their hearing and makes them prone to ear infections, so they wouldn't be able to survive in the wild.

How did animals get to various continents and islands in the world? This is a question that has been studied by both Creation and Evolution scientists. Here are some of the ideas currently proposed..

**Land Bridges:** In some places there is evidence that natural bridges existed at one time between some lands. For example, across the English Channel between the UK and Europe, and across the Bering Straight between Russia and North America. The bridge might be formed by ice, debris, lower sea levels or earthquakes etc.

**Log Rafts:** When Mt Saint Helen exploded in 1980, it uprooted thousands of trees and dumped them into Spirit Lake, covering 70% of the lake. 40 years later, 20% of the lake was still covered in logs. The position of the logs on the lake changes depending on the wind. Log rafts could certainly explain the transportation of some animals, particularly for short distances, or for those who can tolerate salt water and don't need much food.

**Floating Islands** can be made of floating aquatic plants, mud and peat (peat is made from decaying plant matter. Note that the decaying matter also releases gasses which help the islands float.) Floating islands can also be formed when plants grow out over water like a mat eg. certain types of reeds or moss. The oxygen in their root mass also helps to float them. If a wind breaks their connection to the shore they become a floating island.

Another type of raft or island can be made from pumice rock. Pumice is formed by an explosive volcanic eruption, and although it is a rock it is lighter than water and floats.

Have you ever seen trees growing in strange place? (eg. In gutters, cracks in rocks, I've seen a tree growing in the fork of another tree...) Larger floating islands can also end up with trees growing on them.

In December 2016 Uwe Fritze who works at the Museum of Zoology, Dresden, Germany, was doing field work in Colombia. In the wetland, he passed and enormous floating island - about the size of 2 Olympic swimming pools - complete with tall trees and a resident colony of large howler monkeys.

Today, most floating islands form in wetlands, lakes and rivers, and if they are washed down to the ocean, they are broken apart by the waves. So evolutionists have trouble explaining how there could be big enough islands surviving in the ocean to transport animals and their food sources. This is not a problem for Creation scientists however because both the action of the water in the flood and the volcanoes at that time, uprooted the whole world worth of trees and dumped them in the ocean. For a decades after the flood there would have been masses of floating logs, pumice, mud, peat and dead plants floating around as large islands in the ocean. Moss, vegetation and even trees would have grown on some of these islands, making them substantial and proving food for animals and transporting them wherever the winds and ocean currents took them.

**Boats:** There is another option that Creation Scientists can also consider, although we have no way of finding out until we get to heaven. There is a possibility that some animals may have been transported by Noah's family, or by his descendants when they left Babel.