

Montessori Primary

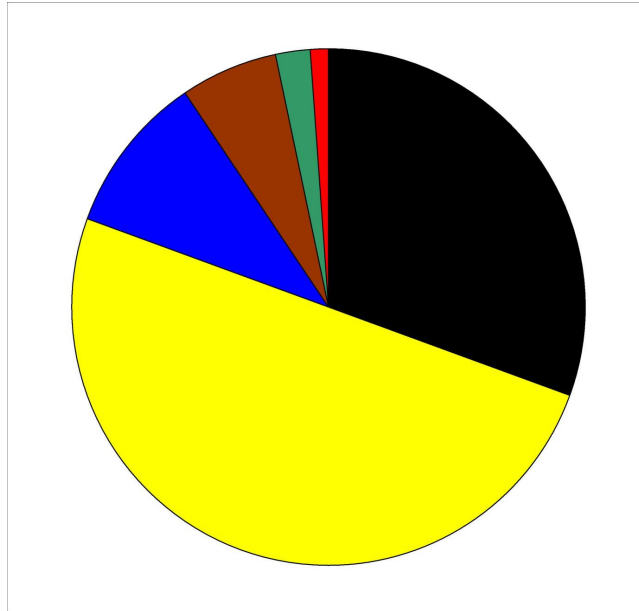
MONTESSORI PRIMARY

Curriculum Integration 1



Addla Montessori

The Clock of Eras



Key:

Cosmic Era (Black)

Archeozoic Era (Yellow)

Paleozoic Era (Blue)

Mesozoic Era (Brown)

Cenozoic Era (Green)

Neozoic Era (Red)

‘Remember when we were talking about the coming of the universe, the coming of plants and animals and the special story of the coming of Humans. Today we are going to look at how long all this took. This material tells us how long it took, it tells us about time. Remember when we were doing the Black strip, that also told us that it took a very long time before human beings appeared, it really is a very short time since they appeared.

Curriculum Integration 1

1. Formative Era also called Azoic/Cosmic Era. (Black Section)

Now here we have a clock, it really is like any ordinary clock: instead of the black strip we are going to use this special clock. It's as if all the very long time that has passed, of History, took twelve hours. Do you see this black part, the part between twelve and four, we call this the Formation of the Crust, during this time it was very, very hot, by the end of this time the rocks, the air and the water had appeared and the rains began

2. Archaic Era (Yellow section)

Now let's count the yellow part, between four and ten o'clock, that's six hours. We don't know when exactly but some time in here, the little blob of jelly appeared, the one called creature, we call this time the Archaic Era, this means the time of very, very, very old life. We've only got as far as ten o'clock, we've not finished yet.

3. Palaeozoic Era (Blue section)

The next part of the clock from ten o'clock till twelve minutes past eleven is the Palaeozoic Era. This is the time when the animals experimented with life in the water, going all the way up to the time when the fish appeared, very few of those animals are still here today, or they have changed to look very different.

4. Mesozoic Era (Brown section)

From twelve minutes past eleven to eleven forty-three and eleven seconds is the part we call the Mesozoic Era, Meso means 'middle', so this is the time of the middle life, between the Palaeozoic and the Cenozoic Eras. By now the amphibians had appeared, and this is also the time of the huge dinosaurs this is the time when they appeared and disappeared. We are quite a long way past eleven o'clock

5. Cenozoic Era (Green section)

The next kind of animals to appear were the mammals, they came during this time, the Cenozoic Era, which means the time of recent life, it is called this because it is so close to the time when humans appeared.

6. Neozoic Era (Red section)

Then we come to this tiny little red strip here, this is called the Neozoic Era. Neo means new, this is the time of a completely new period of life, the time of the humans, the men, the women and the children just like us. Just look at it, it is so tiny, it is not even a minute on our clock, it is not even half a minute, not even a quarter of a minute, it is only fourteen and a half seconds. Just look at it, all this time of preparations before the humans appeared, just fourteen and a half seconds ago!

They barely arrive before midnight. Now they could come because everything was prepared, everything was ready for them.'

The Evolution of the Universe, the Galaxies and the Solar System

Introduce the children to the Universe. Study the Planets, let them research into the differences of the planets their suns and moons. They should be aware of the Galaxies in our universe. This awareness can grow over the years.

There are lots of materials available to us to enable the child study the world.

The Solar System (There are lots of lessons about our Sun, Moon, the tides etc. in the Montessori primary school.) if this is something you would like to explore in your school do let me know.

The globes

The Puzzle Maps

Flags

Landforms

These can be studied by

1. Models from plasticine, clay or plaster of Paris
2. Pictures
3. Diagrams or Drawings
4. Coloured diagrams to emphasise facts
5. Definition cards
6. Books or booklets
7. Charts of the world showing different landforms etc. e.g. mountains
8. Work cards:
9. What areas in Africa is over 2000m high?
10. Use the reference books to find the highest mountains in Africa.
11. What is the name of the highest hill in Nigeria?
12. How high is it?
13. Which state is it in?

The use of books, the internet, magazines, pictures and television programs all help.

Curriculum Integration 1

By the time the child is eleven they should be aware and able to understand the pattern of evolution of our planet and the solar system as a whole. We need to at least prepare them to understand the world, the universe, life on earth and how it continues to evolve. They need to be aware of their responsibility as custodians of earth and all that lives in it. They should be ready to pursue the subject of evolution in depth and realise that the Big Bang is still just a theory though supported by some evidence.