

## **THE COSMIC SPIRAL WALK**

The Cosmic Walk was created in 1985 by Sr. Miriam MacGillis of Genesis Farm, NJ. It was designed to provide some sense of the awesomeness of the time, space and creativity of the universe. My hope is that this meditative walk will assist you in falling more deeply in love with life and awaken your sensitivities to the amazing, wondrous universe. The story of the universe encompasses the story of each and every life form, reminding us that we all are sacred, unique and interrelated.

Most dates were found in "The Universe Story" by Brian Swimme and Thomas Berry. You may want to adapt the events highlighted according to the nature of your group. Thanks to Jean and Larry Edwards, Kym Farmer and Miriam MacGillis for help with the text. 150 feet of rope is needed, each 10 feet = 1 billion years. Mark each event with a piece of tape/yarn/marker. Place something in the middle of spiral to represent the flaring forth and a candle/symbol/object/card (let your creativity shine!) should represent each event. Thomas Berry refers to these events as, "moments of grace".

How delightful it would be to see this walk painted in parking lots, planted in gardens, placed in libraries, sanctuaries, city halls, homes, classrooms, etc.! Please let me know about your experiences.

BYA = Billion Years Ago

MYA = Million Years Ago

YA = Years Ago

### 1. 15 BYA PRIMORDIAL FLARING FORTH

The universe was dreamed into being. Time, space, matter and energy whirl out the eternal matrix of creativity. From pregnant darkness the 4 fundamental forces emerge as the universe expands and cools. If the rate of expansion would have been 1 trillionth of 1 trillionth of 1 trillionth of one percent faster or slower the universe would not exist.

### 2. 14,700,000 BYA HYDROGEN & HELIUM ATOMS

At some perfect moment when the universe was big enough and cool enough, atoms of hydrogen and helium revealed themselves. Matter could come and join the story in a new meaningful way. When you see a photo of the background radiation or primordial afterglow of the fireball, you are seeing the universe "light up". The new gaseous atoms allowed the photons to freely move through the universe like never before.

### 3. 14 BYA GALAXIES & STARS

Enormous clouds of hydrogen and helium coalesce into galaxies in which stars appear as the atoms can no longer hold onto their bonds and begin to shine their brilliance throughout the expanding universe. Large stars are supernovas which birth forth newer elements in their exploding death dance adding diversity and variety to the story. Supernovas are the mothers of the universe, creating in their wombs the seeds of all life.

### 4. 4.5 BYA SUN & SOLAR SYSTEM

In our home galaxy, the Milky Way, a star making way crashed upon a cloud left over from a supernova and birthed 10,000 new third generation stars, one of them was our day star, the sun. After millions of years a family of nine planets (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto) and many moons came to grace our galaxy.

### 5. 4 BYA OCEANS & LIFE

Now we begin the story of our home, the third planet from the sun. Early on, earth was a boiling hot ball of molten rock. But eventually cooled off and later was able to create wet, juicy water! After millions of years of rains, the oceans were created and magically they were soon filled with single celled life, known as bacteria

or prokaryotes. Earth is alive!

6. 3.9 BYA PHOTOSYNTHESIS

The first life forms fed on the rich chemical soup but soon the food ran out and they figured how to eat their wastes but still food supplies were in danger. All did not perish, for some of these tiny creatures learned how to capture light for nourishment. Earth eats the sun. Photosynthesis was invented.

7. 2 BYA OXYGEN & NUCLEIC CELL

During photosynthesis oxygen is released which has a big appetite so food was running out again. Our single

celled ancestors rose to the occasion again and learned how to breathe, how to use the oxygen. They invented

respiration. This is when the ozone layer formed. The oxygen loving bacteria enter into a deeper more complex structural form. The nucleic cell is invented which will lead to the invention of chromosomes.

8. 1 BYA SEX & HETEROTROPHY

Previously, a cell reproduced asexually, making 2 individuals from one. Now, 2 cells came together and made

one entirely new being. Sexual reproduction was created and the depth of diversity and communion opened up

infinite possibilities. A new form of eating was invented, that of eating other creatures that were still alive! The birth of sexual and predator-prey relationships.

9. 700 MYA MULTICELLULAR LIFE

Many celled creatures flourish, evolving rapidly in incredible variety. Extreme temperatures and glaciation periods challenge these new life forms to persist. Life is still only in the sea! Just imagine the explosion of shape, color, and texture.

10. 600 MYA PLANTS & ANIMALS

First animals and plants appear as flatworms, jellyfish, seaweed. The invention of eyes, the Earth sees.

11. 550 MYA CRUSTACEANS

Animals grow hard shells on the outside becoming the first invertebrates. Trilobites, snail, clams and later lobster, shrimp and crab beautify the oceans.

12. 510 MYA FIRST FISH WITH BACKBONES

The first fish-like creatures with a backbone emerge, protecting the earth's earliest nervous system and the development of her sensory organs.

13. 425 MYA PLANTS GO ASHORE & SOIL

Do you remember how brave the plants were? They were the first to venture away from their parent sea. Developing a membrane within which they could carry their own bit of water. Moss, ferns, lichen creep inland to live on the rocky earth and eventually create soil.

14. 395 MYA INSECTS

The first animals to explore earth were the insects. They formed an interdependent community with the plants. Some eventually learned how to fly.

15. 370 MYA AMPHIBIANS & CONIFERS

Larger animals came ashore but still needed to lay their eggs in the water. Large trees marched forward using

a hard cone to contain their seed.

16. 313 MYA REPTILES

These animals figured out how to grow a shell around their eggs so they could be laid on earth. They weren't so dependent on water, growing skin that was tough and scaly.

17. 235 MYA DINOSAURS

For 170 million years, these creatures explore the extremes of size, speed and strength. Staying with their young, they developed parental care.

18. 216 MYA MAMMALS & ATLANTIC OCEAN

Live birth and nursing lead to emotional bonding among these very small, at first, mammals. Continents continue to shift, crack and drift apart which help form the Atlantic Ocean.

19. 150 MYA BIRDS

The first birds took flight and earth broke into song.

20. 120 MYA FLOWERS

Earth awakens to color, fragrance, and beauty like never before. The flowers brought concentrated food sources and bodies easy for insects, birds and mammals to feast on. In turn they would help to spread the flowers all over the land.

21. 20 MYA GRASSES & MOUNTAINS

As the flowers spread across the world the grasses followed, further enabling more variety and abundance of food for the ever increasing mammals. Alps, Grand Canyon, Sierra Nevada and Himalayas made their majestic stance upon earth.

22. 5 MYA FIRST HOMINIDS

Chimpanzees leave the forest and forage upon the rich food source the Savannah has to offer. They stand upright and walk on two legs. They will eventually grasp, hunt, talk and evolve into humans.

23. 3.3 MYA CURRENT ICE AGES

Current ice ages of earth began, further shaping mountains, valleys, rivers, lakes and streams which formed our present bio-regions.

24. 2.6 MYA FIRST HUMANS

The earliest humanoid types develop, with brains and nervous systems, complex enough for the earth to awaken into conscious self awareness.

25. 100,000 YA CONSTELLATIONS & RITUAL BURIALS

The constellations now seen took their place in the sky. The early human ritualizes the passing of life.

26. 40,000 YA LANGUAGE

Modern Homo Sapiens emerge in Australia and Africa. They develop the ability to use language. The earth awakens to story, poetry and song.

27. 11,000 YA AGRICULTURE

Humans learned how to cultivate plants and to domesticate animals and settled throughout Asia and the

Americas.

28. 3,000 YA CLASSICAL RELIGIONS

A spiritual flowering of the classical religions began. Hinduism, Confucianism, Judaism, Buddhism, Christianity, Islam. Earth based indigenous religions, which had been around for thousand of years, were often condemned after the newer religions were more organized.

29. 72 YA EXPANDING UNIVERSE (1929)

Humans observed the expansion of the universe. We became aware that we live in a developing universe.

30. 32 YA MOON LANDING (1969)

Earth was seen as whole from the moon. Earth witnesses her own vast depth of beauty.

31. YOU WERE BORN

Born of star stuff and earth flesh, you were born to share your unique gifts with all.

32. TODAY...

Today we know our common origin story. Today we explore the significance of this and the role of the human in this ongoing story of the universe. Today we celebrate the sacredness of the whole earth community.

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