Investigation

Technology

for the Earth

(Global Environmental Detector)

(Global environmental detector)

Investigate the Earth

@Investigate interior of the earth

**B.The Science to** 

(D) Investigate the ground

A.GED

@GED

large wild mammals 2.Way of Survival 2 Way of survival

3. Mammals in Savanna Mammals in savanna

1.Introduction to the History

2. Science and Technology

Development and popularization

Introduction to the history

of science and technology

in the Edo Period

Mining in the Edo period

Astronomy and surveying

6 Transition from herbalism to

6 Medicine in the Edo period

of Modernization

Introduction of machine tools

Standardization of criteria and systems

Qultivating human resources for modernization

@Spread of modern science and technology

Introduction of electrical power systems

**7**Skills of the masters

3.The Beginning

of arithmetic

natural history

of Science and Technology

Progress in Science and Technology

4. Our Evolutionary Kindred Our evolutionary kindred

5.On the Brink of Extinction On the brink of extinction

6.Birds of Diverse Appearances

6 Birds of diverse appearances

4. Results of Modernization

BInventions and creations by Japanese people

Birth of the car manufacturing industry

New technology: picture transmission

6.Past, Present, and Future

of Science and Technology

Jananese Science and Technology

5. Further Developments in

Mechanical calculators

Space development in Japan

@Ocean Research in Japan

2 Past, present, and future of

science and technology

Computers

[Rooftop] Sky Deck Herb Garden Sky Deck Herb Garden

Testing and

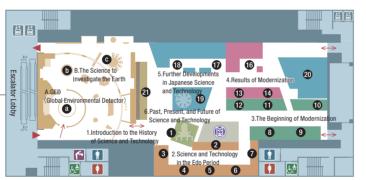
(Lab)

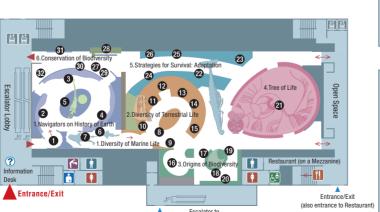
Training Room

1

**∮ 5**€

1.Peak of Evolution : Large Wild Mammals 2. Way of Survival 3 6.Birds of Diverse 6 Appearance







•

Accessible toilets/
Baby changing stations

Accessible toilets

Ostomate toilets

Drinking fountain

Elevator \*Accesible

Discovery pocket

Nursing room

2. Geological Samples from the Planet Earth B<sub>2</sub>F 5. Plants and Animals invade the Land 6.The Age of Mammals 25 28 26 27 32 trapods to life in water. E.



Floor MAP **Global Gallery** 



# -Exploring the Mysteries of Dinosaur Evolution-

Dinosaur Evolution Evolution of saurischian dinosaurs

**Evolution of Life** 

Evolution of ornithischian dinosaurs

3The last day of the Mesozoic

## **Evolution of Life**

-From the Earth's Origin through Human Existence-

1.Exploring the Mysteries of The Special Exhibition Hall

### 1.A Stroll Through 4.6 **Billion Years of History**

billion years of history

### 2. Geological Samples from the Planet Earth

Rocks and minerals

Fossils

A stroll through 4.6

3. Biotic Response to Global **Environmental Change** 

ARecords of global environmental change

6 Mass extinctions

Geosphere-biosphere interactions Microfossils

### 4. Explosive evolution of life in the sea

8 Precambrian microorganisms Vendian life

Strange animals in Burgess Shale and Chengjang Faunas

Paleozoic invertebrates

Trilobites in the paleozoic sea BEvolution and success of fishes

### 5. Plants and Animals invade the Land

@First steps on the land Greening the land

6.The Age of Mammals

## @Origin of the mammals

Mesozoic mammals

@Early mammals lived in forests @Early mammals lived in

grasslands and arid lands Mammals of island continents

@Graviportal mammals

@Carnivorous mammals 7. Secondary adaptation of tetrapods to life in water.

### Secondary adaptation of tetrapods to life in water

@The forerunners of anuatic mammals

@Convergence to life in water

A pioneer in new food resources.

②A gigantic marine reptile @Diving birds

### 8. Flying tetrapods @Flying tetrapods

9. Human Evolution

@Primate evolution

The evolution of the Australopithecines and contemporary species @The evolution of early Homo

@Reconstructing ancient humans

@The evolution and worldwide expansion of modern humans

The expansion of modern humans: out of Africa again

The expansion of modern humans:

into Furasia The expansion of modern humans:

into Oceania @The expansion of modern humans: into northern Eurasia

@The expansion of modern humans: Into the Americas





# **Exploring the Structure of Nature**

## **O.Japanese Scientists**

Japanese Nobel Prize laureates in

• Japanese builders of science with items from our collection

# 1.Exploring the Laws of Natur

KEKB accelerator & Belle experiment

Measuring temperature

the universe and its origin

# 3. Exploring the World of Matter

## @Periodic table:

a variety of matter

@Exploring the ultimate

@Galaxies and clusters of galaxies

Superclusters of galaxies and the large-scale structure

# (B) Hierarchical structure of matter

the diversity of elements

Shape of molecules:

®Exploring the nanoworld

formation of matter Macroscopic properties and

friendly chemistry

# Great Japanese Figures in Science and Technology

This exhibit can be easily accessed by stairs located in front of the Information Desk on the 1st floor or by escalator from the 2nd floor

### **Navigators** on **History of Earth** 1.Navigators on History of Earth • All comprise atoms 2 History of the universe 3 History of life

4 History of humankind

Time line stage

# **Biodiversity**

1. Diversity of Marine Life 6 Photosynthetic ecosystem

### Ochemical synthetic ecosystem 2. Diversity of Terrestrial Life

Mangrove forests

**₩**etlands

#### Alpine regions Deserts

3.Origins of Biodiversity What is life?

Species of life

@Factors of diversification : evolution

Factors of diversification : speciation @Examples of diversification

### 5.Strategies for Survival: Adaptation Size factors

8 Various landscapes on earth The linkage of life

Tropical rainforests

**®**Temperate forests

Mow much do we really know? @Pursuit of biodiversity Red list

biodiversity

4.Tree of Life

@Challenges of extreme

Seeking for nutrients

@Symbiosis and parasitism

6.Conservation of Biodiversity

Succession of life

temperature and humidity

Tree of life

@Inter-specific network around Japanese crested Ibis

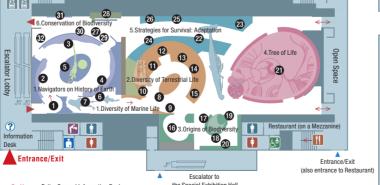
@Recovery of endangered species @Networks on conservation of

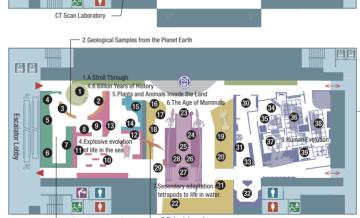
Japan Gallery Exit General Information Desk Audio Guide Desk Museum Shop Lounge and Cafeteria

THEATER 36O

the Special Exhibition Hall

Escalator to





 3.Biotic Response to Global 8.Flying tetrapods



physics, chemistry, and physiology or medicine

Exploring the world of elementary particles

Measurements Measuring electricity and magnetism

4 Thermal radiation and energy Speed of light

Gravity

### 2.Exploring the Universe Telescopes: our eves to

investigate the universe 8 Let's take a look at celestial bodies

9 Hierarchical structure of the universe The solar system

Fixed stars, nebulae and star clusters

of the universe The expansion of

### microscopic properties Punctional materials

Striving for environmentally