

Primary School General Knowledge

Requirements of the Basic Academic Attainments

1. Basic rationale

We live in a natural and social environment. Learning to observe, explore and understand natural and social phenomena is conducive to improving our life, broadening our vision of the world, and helping us adapt to social development and coexist with the nature in harmony. The subject of General Knowledge aims to provide students with overall, rather than fragmented, learning experiences, enabling them to understand the people, things and issues related to life progressively from near to far; to help them understand individuals, society and nature, as well as the relationships among them; so that students can master the basic knowledge of natural science, humanities and society as well as diverse learning skills; basically cultivate their humanistic quality and scientific literacy, thus laying a foundation for their whole-person development and lifelong learning. To this end, the requirements of basic academic attainments for primary school General Knowledge shall comply with the following basic rationale:

1) Laying stress on students' balanced and all-round development on the basis of living and development needs

The human quest for knowledge derives from the needs for living and future development. Therefore, the curriculum of General Knowledge should lay stress on guiding students to learn from life experience. Through learning topics close to life, students are enabled to understand the relationship between individuals, society and the natural environment; master the knowledge and skills needed for living and future development; cultivate correct values and attitudes; and promote their balanced and all-round development.

2) Focusing on the relation between human and social environment, passing on historical traditions and social culture

The curriculum focuses on establishing a link between students and the social environment; helping them understand the traditions and status quo of the local society as well as learn about the current social issues in China and the world; fostering their humanistic way of thinking and the humanistic caring spirit. In addition, the curriculum aims to nurture students' awareness on respecting and passing on the history and culture as well as their sense of responsibility for and belonging to Macao and the country by

teaching them Chinese and foreign history and culture that affect the social development of Macao.

3) Advocating harmony between human and the natural environment, promoting students' inquisitive and innovative mind

The curriculum places emphasis on the harmonious relationship between human and the natural environment; it should direct students' attention to the local, regional and global environmental issues, so as to nurture their awareness and habit of protecting the environment and saving resources, as well as help them basically develop a concept of sustainable development. The curriculum, through diverse learning activities, helps to stimulate students' curiosity and inquisitive mind about the natural environment and the world of science, and develop their imagination and creativity.

4) Placing emphasis on diverse and integrated learning experience, cultivating students' lifelong learning ability

The curriculum advocates diverse and integrated learning experience. By combining different learning experiences, students' ability to integrate knowledge can be enhanced. Therefore, the curriculum should provide diverse learning scenarios and guide students to make good use of different learning resources and methods, so as to help them basically master the ability to obtain, organise and analyse information, as well as develop the basic ability and attitude for lifelong learning.

2. Curriculum Goals

1) Enable students to know the basic knowledge of health and hygiene, as well as form a habit of living a healthy life;

2) Help students develop a correct concept of sex and learn to protect themselves and respect others;

3) Enable students to understand the tradition and status quo of the community and foster the spirit of caring for and serving the society;

4) Enable students to understand the historical traditions and social culture of Macao and China, and respect cultural differences;

5) Teach students to care for the social development of Macao, China and the world; develop their ability to think about and criticise social issues;

6) Nurture students' curiosity about and interest in the natural environment and the world of science; develop their inquisitive and innovative mind;

7) Enable students to learn about the natural and scientific knowledge related to life and progressively master the ability to put knowledge into practice and problem-solving skills;

8) Enable students to care for the environmental issues faced by human beings, and help them develop the habit of saving resources and protecting the environment;

9) Enable students to pay attention to the development of science and technology, understand its influence on human life, social economy and the natural environment;

10) Cultivate, preliminarily, students' ability to obtain, organise and analyse information.

3. Requirements of the Basic Academic Attainments in Various Areas

Explanation of coding:

1) The English capital letters refer to the domains of the requirements of basic academic attainments: e.g. A – “Healthy life”, B – “Culture, society and life”, C – “Natural environment and life”, D – “Science and life”;

2) The first number after the English letter refers to the serial number of the learning stages: 1 – Stage 1 (P1 to P3), 2 – Stage 2 (P4 to P6);

3) The second number after the English letter refers to the serial number of the requirements of basic academic attainments in that learning scope.

Learning Scope A: Healthy Life

A-1-1 Be able to tell that birth, aging, sickness and death are the inevitable processes of life;

A-1-2 Be able to tell the main components of human body and their respective functions, and know how to protect themselves and respect others' bodies;

A-1-3 Be able to distinguish the physiological differences between the sexes and respect physical privacy;

A-1-4 Be able to choose a correct diet according to the healthy eating pyramid;

A-1-5 Be able to list the common methods of preserving and handling food, and understand the influence of these methods on food safety and nutritional value;

A-1-6 Be able to tell the influence of environmental hygiene on health, and know how to maintain personal and environmental hygiene;

A-1-7 Be able to tell the common childhood illnesses and the basic ways to

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- prevent these illnesses, as well as have the awareness of seeking early treatment;
- A-1-8 Have safety awareness in daily life;
- A-2-1 Be able to tell the composition and functions of the main systems of human body;
- A-2-2 Be able to explain the physical and mental changes in boys and girls during adolescence, and accept themselves, as well as respect others' changes as they grow;
- A-2-3 Be able to obtain sexual knowledge through proper channels and be willing to express their views on sex to the elders;
- A-2-4 Be able to describe the process of the birth of life and cherish life;
- A-2-5 Be able to tell the adverse consequences of minors having sexual behaviours;
- A-2-6 Be able to select healthy food and safe daily necessities according to the product labels;
- A-2-7 Be able to tell the nutritional value of different types of food and design a simple healthy menu;
- A-2-8 Be able to collect, organise and analyse information, as well as exchange and discuss topics about healthy life with classmates;
- A-2-9 Be able to tell the harm of common infectious diseases and know how to prevent them;
- A-2-10 Be able to notice the potential crises in the environment and have the ability to seek help and help themselves.

Learning Scope B: Culture, Society and Life

- B-1-1 Understand the meaning of currency;
- B-1-2 Be able to identify the major industries and common occupations in Macao;
- B-1-3 Be able to tell the roles and responsibilities of an individual in different communities;
- B-1-4 Be able to name the common facilities and the services provided in the community;
- B-1-5 Be able to learn by using community resources;
- B-1-6 Be able to list the common means of transportation and know the function of transportation in the society;
- B-1-7 Be able to tell the major festivals in Macao and enjoy participating in the celebration activities;
- B-1-8 Be able to tell that Macao is a city with the blend of eastern and western

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- cultures, and respect different cultures;
- B-1-9 Be able to explain with examples the ancient history and rich culture of China;
- B-1-10 Enjoy reading historical stories and have an interest in history and culture;
- B-1-11 Be able to tell that there are rich and diverse ethnic cultures in the world and respect different customs and traditions;
- B-2-1 Be able to be aware of social issues and be willing to discuss them with others;
- B-2-2 Be able to discuss the influence of the economic and industrial development of Macao on the life of Macao residents;
- B-2-3 Be able to discuss the population issue of Macao by analysing charts or data;
- B-2-4 Be able to illustrate with examples the close link between Macao and the nearby regions in terms of the life of Macao residents and economic development, etc;
- B-2-5 Be able to tell the geographical location, geographical features and territory of China;
- B-2-6 Be able to point out the major social issues in China and the world, and discuss them with others;
- B-2-7 Be able to discuss the influence of media on the attitudes and ways of life of the adolescent;
- B-2-8 Be able to conduct simple social surveys;
- B-2-9 Be able to explain the causes of food crisis and develop the attitude and habit of cherishing food;
- B-2-10 Be able to tell the rights and interests of consumers;
- B-2-11 Be able to tell that Macao was a platform for the exchange of eastern and western cultures in early times, and Macao has great contribution to the exchange and development of eastern and western cultures;
- B-2-12 Be able to collect, organise and analyse information, discuss and exchange views on the topic of the Historic Centre of Macao with classmates;
- B-2-13 Be able to appreciate and protect cultural heritage;
- B-2-14 Be able to name the famous historical figures who once lived in Macao and appreciate their contribution to Macao, China and the world;
- B-2-15 Be able to tell the major cultural events in Macao and enjoy participating in cultural activities;
- B-2-16 Be able to tell the process of the Portuguese settlement in Macao;
- B-2-17 Be able to explore the process and influence of the Portuguese gradual occupation of Macao by reading different historical information;

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- B-2-18 Be able to describe the process and significance of China's resumption of sovereignty over Macao;
- B-2-19 Be able to name the Four Great Inventions of ancient China and their contribution to the development of human civilisation;
- B-2-20 Be able to explore the influence of important historical figures and events in different periods on China;
- B-2-21 Be able to tell the contribution of the four ancient civilisations of the world to the development of human civilisation;
- B-2-22 Be able to name the major religions in the world and respect different religious beliefs.

Learning Scope C: Natural Environment and Life

- C-1-1 Be able to distinguish living and non-living things;
- C-1-2 Be able to identify the morphological characteristics and living habits of common animals;
- C-1-3 Be able to tell the functions of roots, stems and leaves in plants;
- C-1-4 Be able to know that plants need water, air, sunlight and nutrients to grow through planting;
- C-1-5 Be able to know that animals need water, food and air to grow;
- C-1-6 Be able to love animals and plants, and value life;
- C-1-7 Be able to have appropriate reaction according to weather forecast;
- C-1-8 Be able to tell that the length of daytime and nighttime varies with the seasons, and describe the climatic characteristics of the four seasons of Macao;
- C-1-9 Be able to tell how to protect themselves from such common natural disasters as rainstorms and typhoons;
- C-1-10 Be able to notice that the sun rises in the east and sets in the west, and be able to tell the relationship between the sun and life;
- C-1-11 Be able to notice the waxing and waning of the moon, and appreciate the beauty of the starry sky;
- C-1-12 Be able to take the initiative to carefully observe the natural phenomena in daily life;
- C-1-13 Be able to name the common energy sources used in daily life, and have the habit of saving energy;
- C-1-14 Be able to describe the distribution and application of freshwater resources;
- C-1-15 Be able to tell the sources of the drinking water in Macao, and have the habit of saving water;

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- C-1-16 Be able to tell that the earth's resources are limited, and form the habit of recycling and reusing resources;
- C-2-1 Be able to compare the similarities and differences between the structures of common animals, and distinguish different types of animals such as reptiles, birds, fish and mammals;
- C-2-2 Be able to name the types and methods of plant reproduction, and describe the characteristics of wind-pollinated plants, water-pollinated plants and animal-pollinated plants;
- C-2-3 Be able to tell the reproduction methods and characteristics of viviparous animals and oviparous animals;
- C-2-4 Be able to illustrate with examples the structural features of plants that enable them to adapt to the natural environment;
- C-2-5 Be able to illustrate with examples the morphological features and life styles of animals that enable them to adapt to the natural environment;
- C-2-6 Be able to explain the relationship between photosynthesis and the growth of plants;
- C-2-7 Be able to explore the influence of environmental changes on living things;
- C-2-8 Be able to tell the three states of water and that the state of water varies with temperature;
- C-2-9 Be able to explain the causes of natural phenomena such as rain, snow, cloud and fog;
- C-2-10 Be able to describe the weather by using such meteorological elements as temperature, wind direction, precipitation and humidity;
- C-2-11 Be able to compare the difference of climatic characteristics between Macao and other places by reading meteorological charts and data;
- C-2-12 Be able to tell the composition of the solar system and the characteristics of its major members;
- C-2-13 Be able to tell that natural phenomena such as the phases of the moon, solar eclipse and lunar eclipse are caused by the relative positions of the sun, the moon and the earth;
- C-2-14 Be able to tell the geographical location, composition and the basic characteristics of the terrain of Macao;
- C-2-15 Be able to name different landforms of the earth;
- C-2-16 Be able to illustrate with examples the harm brought by extreme natural disasters such as volcanic eruptions, earthquakes, tornados and tsunamis;
- C-2-17 Be able to discuss the non-renewable feature of fossil fuels and the harm brought to the environment by using fossil fuels;

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- C-2-18 Be able to name the major new energy sources, and explain how the development and application of these new energy sources can promote sustainable development;
- C-2-19 Be able to explore the causes of global warming and its effects on life;
- C-2-20 Be able to explore the causes and effects of such environmental pollutions as the pollution of air, water, noise and solid waste;
- C-2-21 Be able to collect and organise information about natural phenomena and environment issues, and discuss and exchange opinions with classmates.

Learning Scope D: Science and Life

- D-1-1 Be aware of the existence of air and be able to tell the properties of air;
- D-1-2 Be able to name the common light sources in daily life;
- D-1-3 Be able to know the law of rectilinear propagation of light, and investigate the formation of shadow through experiments;
- D-1-4 Be able to know that mirror images are formed by the reflection of light, and enumerate the application of mirror in life;
- D-1-5 Be able to know that a rainbow is formed by the refraction of light, and appreciate the beauty of rainbows;
- D-1-6 Be able to notice that objects vibrate when they make sounds, and investigate sound propagation through experiments;
- D-1-7 Be able to tell the ways of producing heat and describe the influence of heat on life;
- D-1-8 Be able to know that objects will expand when heated and contract when cooled through observation;
- D-1-9 Be able to know the temperature measurement unit, and know how to use a thermometer;
- D-1-10 Be able to tell that thermal conductivity varies with materials through life experience;
- D-1-11 Be able to tell that a magnet has a north pole and a south pole, and discover, through experiments, the law of magnetic attraction and repulsion;
- D-1-12 Be able to tell the applications of magnets in life;
- D-1-13 Be able to tell the safety precautions in use of electricity;
- D-1-14 Be able to illustrate with examples the application of science and technology in life;
- D-1-15 Be able to stimulate the spirit of scientific inquiry through reading short stories about scientific inventions;

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- D-2-1 Be able to make a simple electric circuit with basic components;
- D-2-2 Be able to distinguish electrical conductors and insulators through experiments;
- D-2-3 Be able to tell that energy such as electricity, light and heat can be converted to each other, and give common examples;
- D-2-4 Be able to tell the power generation methods in Macao, and develop the habit of saving power;
- D-2-5 Be able to notice that forces are ubiquitous, and give common examples;
- D-2-6 Be able to tell that forces can change the motion or shape of an object through experiments;
- D-2-7 Be able to explain simple mechanical principles, and tell their applications in life;
- D-2-8 Be able to design or make simple mechanical models;
- D-2-9 Be able to enumerate the achievements of famous scientists, tell and appreciate their contribution to social development;
- D-2-10 Be able to tell the course of human exploration of the universe, and show concern for the development of aerospace science and technology of China;
- D-2-11 Be able to show care for the development and application of new science and technology, and tell the influence of science and technology development on life.