



## Quiz Competition on Water Resources

### Question Format

**Format 1: Direct question.**

Example:

Question: Which reservoir is the first reservoir built in Hong Kong?

Answer: Pok Fu Lam Reservoir.

**Format 2: True or false question. Both question and answer have to be rephrased.**

Example:

Question: True or false question. Pok Fu Lam Reservoir is the first reservoir in Hong Kong.

Answer: True.

**Format 3: Multiple-choice question. Answers will be provided for participating teams for selection. (Order of answers does not have to be followed)**

Example:

Question: Multiple-choice. Which reservoir is the first reservoir in Hong Kong? A. Pok Fu Lam Reservoir B. Shek Pik Reservoir C. High Island Reservoir

Answer: A.

 = Answer

1

Which is the first reservoir in Hong Kong?

A

 A Pok Fu Lam Reservoir

 B Shek Pik Reservoir

 C High Island Reservoir

2

Which reservoir in Hong Kong has the largest storage capacity?

A

 A High Island Reservoir

 B Tai Lam Chung Reservoir


 C Plover Cove Reservoir

3

Which reservoir is located at Lantau Island?

A

 A Shek Pik Reservoir

 B High Island Reservoir


 C Plover Cove Reservoir

4

Which is the first reservoir built in the sea in Hong Kong?

A

 A Plover Cove Reservoir

 B High Island Reservoir

 C Shek Pik Reservoir

5

Which reservoir in Hong Kong has the largest surface area?

A

 A Plover Cove Reservoir

 B High Island Reservoir

 C Pok Fu Lam Reservoir

6

Which is the second reservoir built in the sea in Hong Kong?

A

 A High Island Reservoir

 B Plover Cove Reservoir

 C Tai Lam Chung Reservoir

7

Which is the latest reservoir built in Hong Kong?

A

 A High Island Reservoir


 B Plover Cove Reservoir

 C Tai Lam Chung Reservoir

8

Which reservoir in Hong Kong has the smallest capacity?




A

 A Tai Tam Byewash Reservoir  B High Island Reservoir  C Shenzhen Reservoir

9

Which region in Guangdong Province is Dongjiang water extracted from?

A

 A Dongguan  B Heyuan  C Guilin

10

Which place in Dongguan is Dongjiang water extracted?

A

 A Qiaotou  B Shilong  C Changping

11

In which Province can the source of Dongjiang be found?

A

 A Jiangxi Province  B Guangdong Province  C Guangxi Province

12

Dongjiang is a tributary of which river?




A

 A Pearl River  B Yellow River  C Yangtze River

13

Where will Dongjiang water transported from Shenzhen Reservoir first be collected in Hong Kong?

A

 A Muk Wu Water Pumping Station  B Shatin Water Treatment Works  C Plover Cove Reservoir

14

Which government department is responsible for water supply affairs?

A

 A Water Supplies Department  B Department of Health  C Environmental Protection Department

15 In Hong Kong, where will rainwater first be collected before being transported to reservoirs?

A

 A Water gathering grounds  B Service reservoirs  C Water treatment works

16 In 1982, which department was established by the Hong Kong Government to be responsible for water supply as well as the operation and maintenance of seawater supply system?

A

 A Water Supplies Department  B Department of Health  C Environmental Protection Department

17 What is the primary duty of Water Supplies Department?

A

 A Supply fresh water  B Supply seawater  C Both A and B for flushing

18 Which of the following is the main source of drinking water in Hong Kong?

A

 A Dongjiang Water  B Rainwater  C Well water

19 Which category under the standard of "Environmental quality standards for surface water" does Dongjiang water have to meet?

A

 A Type II  B Type I  C Type III

20 Where will rainwater first be transported after being collected in water gathering grounds in Hong Kong?

A

 A Reservoirs  B Service reservoirs  C Water treatment works

21 What is the function of water treatment works?

A



A Water purification



B Rainwater collection



C Sewage treatment

22 What is the major cause of water shortage problem in Guangdong region in 2009?

A



A Drought brought by climate change



B Water wastage by local people



C Blockage of major rivers

23 What is the name of the procedure in which vapor in sky encounters cold air and becomes cloud?

A



A Condensation



B Solidification



C Sublimation

24 Upon heating from the Sun, what do seawater and river water turn into?

A



A Water vapor



B Ice



C Rainwater

25 In Natural Water Cycle, vapor rises to the sky and condenses in lower temperature. What will it become?

A



A Cloud



B Rainbow



C Frost

26 In Natural Water Cycle, when clouds reach a certain weight, what natural phenomenon will take place?

A



A Precipitation



B Windy



C Sunny

27 Where is the fresh water treated before it is safe to drink?

A



A Water treatment works



B Water pumping stations



C Service reservoirs

28 In Hong Kong, what is added to the drinking water for disinfection?

A



A Chlorine



B Alum



C Fluoride

29 In Hong Kong, what is added to drinking water for teeth protection?

A



A Fluoride



B Chlorine gas



C Alum

30 What is added to drinking water to neutralize acidity of alum?

A



A Hydrated lime



B Fluoride



C Chlorine

31 In water treatment works, what chemical is added to water to adhere small suspended particles to form big granules?

A



A Alum



B Active Charcoal



C Chlorine

32 Water treated in water treatment works will be stored temporarily in which waterworks?

A



A Service reservoirs



B Reservoirs



C Water treatment works

33 Water is the name of the water used to clean the filters in water treatment works?

A



A Backwash water






B Raw water






C Water from clarifier




34 How can we conserve water when we bath?

- A  A Take a shower instead of bath    B  Use showerhead with high water efficiency    C  Both A and B




35 How can we conserve water when we wash cars?

- A  A Wash the car with a water bucket and towel    B  Use showerhead to wash the car    C  Send the car to garage


36 To conserve water, how can we utilise water used for washing vegetables and fruits?

- A  A Water plants    B  Use it for bathing    C  Pour it away




37 How can we conserve water when using washing machines?

- A  A Run the washing machine with a full load    B  Make sure the clothes are clean before doing laundry    C  Wash clothes separately




38 How can we conserve water when we are brushing teeth or soaping hands?

- A  A Turn off the tap    B  Keep the tap on    C  Minimize the tap flow

39 Which of the following is not a main function of Dongjiang water?

- A  A Supply of fresh water    B  Navigation & Industrial production    C  Toilet flushing




40 Which is the largest water treatment works in Hong Kong?

- A  A Sheung Shui Water Treatment Works    B  B Sha Tin Water Treatment Works    C  C Ngau Tam Mei Water Treatment Works

41 What does water treatment process mainly remove in water?

- A  A Odor    B  B Impurities    C  C Colour

42 How do we call the untreated water?

- A  A Raw water    B  B 1st grade water    C  C Sewage




43 What is the first step of water treatment processes?

- A  A Adding Chlorine    B  B Filtering small particles    C  C Adding Alum

44 Why do we need to conserve water?

- A  A To reduce rain    B  B To protect the environment    C  C As instructed by teachers

45 Which process is a part of the Natural Water Cycle?

- A  A Used water is transported to Sewage Treatment Works    B  B Water drops in clouds get heavier and fall    C  C Stormwater is collected and discharged into the sea

46 How many percentage of water loss in our bodies will lead to feelings of thirst?

- A  A 1-2%    B  B 5-8%    C  C 10-13%



47 How many percentage of water loss in our bodies will lead to unclear memories or difficulties in focusing?

- A  A 2% or above     B 5% or above     C 8% or above

48 How many percentage of water loss may cause death?

- A  A 10%     B 20%     C 40%

49 Which of the following is a unique property of water in solid state?

- A  A Transparent     B Fixed shape     C Tasteless




50 Which of the following is a feasible way of water conservation?

- A  A Taking shower instead of bath     B Stop drinking water     C Bath only once a week

51 During water treatment process, small suspended particles cling together to form sludge, where will it be sent to?

- A  A Landfill site     B Sea     C Farmland

52 Which Water Treatment Works in Hong Kong possess hydroelectricity facilities?

- A  A Tuen Mun Water Treatment Works     B Sha Tin Water Treatment Works     C Ma On Shan Water Treatment Works



53 Where will the newly built desalination plant be found?

- A  A Tsueng Kwan O     B Tin Shui Wai     C Tung Chung



54 Which new technology will be adopted by the new desalination plant?

- A  A Reverse Osmosis      B  Vapor Recompression      C  Distillation

55 In Hong Kong, where can aqueduct for delivery of Dongjiang water be seen?

- A  A Sheung Shui      B  Tsuen Wan      C  Causeway Bay

56 When Dongjiang water has been imported to Hong Kong, where will it undergo quality check?

- A  A Muk Wu Water Pumping Station      B  Government laboratories      C  Sha Tin Water Treatment Works




57 Which of the following does not belong to the major procedures of Hong Kong water supply?

- A  A Desalination      B  Raw water collection      C  Drinking water distribution



58 From what type of bills can domestic water consumption be figured out?

- A  A Water bills      B  Tax payable      C  School fee bills

59 Which government department is responsible for collecting sewage charges from users?

- A  A Water Supplies Department      B  Inland Revenue Department      C  Environment Protection Department

60 How many water efficiency grades are there in "Water Efficiency Labeling Scheme"?

- A  A 4 Grades      B  B 2 Grades      C  C 3 Grades

61 What is the maximum number of water droplets on Water Efficiency Label?

- A  A 4      B  B 2      C  C 3



62 Under "Water Efficiency Labeling Scheme", what is the level of the most water efficient (i.e. the most water conserving) grade?

- A  A Grade 1      B  B Grade 2      C  C Grade 4




63 What can be installed on water taps to conserve water?

- A  A Flow Controller      B  B Plastic Cover      C  C Copper Tube

64 How many types of water using devices and tools are covered in "Water Efficiency Labeling Scheme" of Water Supplies Department?

- A  A 6 types      B  B 10 types      C  C 15 types

65 Which government department is responsible for promoting the "Let's Save 10L Water" campaign?

- A  A Water Supplies Department      B  B Inland Revenue Department      C  C Environment Protection Department

66 What type of water is used by majority of regions in Hong Kong for flushing?

- A  A Seawater      B  B Fresh water      C  C Reclaimed water

67

What is used to replace chlorine for disinfection in the water treatment process in Ngau Tam Mei Water Treatment Works in Yuen Long?

A

 A Ozone

 B Carbon dioxide

 C Nitrogen

68

Which organization's standard has been adopted by Hong Kong for monitoring and checking of drinking water quality?

A

 A World Health Organization

 B United Nations

 C Ministry of Water Resources, PRC


69

What kind of micro-organism is used for checking water quality that can efficiently detect over 1,000 harmful substances in water?

A

 A Light-emitting bacteria

 B Escherichia coli

 C Staphylococcus

70

Which kind of fish is used to detect harmful substances in water efficiently and accurately?

A

 A Zebra fish


 B Crown fish


 C Longnosed Elephant Fish

71

What is the name of the method using light-emitting bacteria and zebrafish for continuous monitoring of water quality?

A

 A Biosensing alert system


 B Rapid toxicity testing system

 C Manual inspection

72

Which Sewage Treatment Works in Hong Kong can produce reclaimed water?

A

 A Shek Wu Hui Sewage Treatment Plant

 B Tai Po Sewage Treatment Plant

 C Stanley Sewage Treatment Plant

73 Which of the following is not an application of reclaimed water?

A



A Drinking



B Watering plants



C Flushing

74 Which of the following method can conserve water?

A



A Shorten showering time



B Drink less water



C Defrost frozen food with running water

75 Which of the following scheme aims at educating consumers about water consumption and water efficiency of the water using devices to facilitate their decision making?

A



A Water Efficiency Labelling Scheme



B Flow Controller Efficiency Labelling Scheme



C Saving Water Labelling Scheme

76 What is the name of the campaign related to water conservation launched by Water Supplies Department in 2014?

A



A Let's Save 10L water



B Let's Save 20L water



C Let's Save 30L water

77 Which sector consumes the largest amount of fresh water in Hong Kong?

A



A Domestic usage



B Industrial usage



C Governmental usage

78 Water from which reservoir is being used by Tuen Mun Water Treatment Works to generate electricity using turbine?

A



A Tai Lam Chung Reservoir



B Shing Mun Reservoir






C Shek Pik Reservoir

79

Hong Kong Government has implemented a whole set of water management strategy, what are the key points?




A

-  A Contain water demand through water conservation
-  B Increase water resources through water conservation
-  C Join hands to save water

80

In 1902, what policy has been implemented by the Hong Kong Government to install water meter and collect water charges?

A

-  A User pays
-  B Polluter pays
-  C Privatization of water supply

81

In 1860, what kind of waterworks was constructed by government at Bonham Road?

A

-  A Water tanks
-  B Filters
-  C Service reservoirs

82

How many water deficient cities are there in China currently?

A

-  A 400
-  B 100
-  C 1000

83

How many water wells were dug by the government in 1851 to provide drinking water to urban areas?

A

-  A 5
-  B 50
-  C 100

84

How many reservoirs are there in Hong Kong?

A

-  A 17
-  B 19
-  C 21

85

How many water treatment works are there in Hong Kong?



A

-  A 20
-  B 17
-  C 19

86

Hong Kong practised water rationing in 1963. During the toughest time, how many hours was water supplied every four days?



A

 A 4 hours B 8 hours C 12 hours

87

There was a severe drought in Hong Kong in 1963. During the toughest time, how many days were there between each water supply?


A

 A 4 days B 2 days C 3 days

88

If all the reservoirs in Hong Kong are fully filled, how many months can the total capacity of water support the demand of fresh water in Hong Kong?

A

 A 6 months B 1 month C 3 months

89

How often is domestic water charge calculated?

A

 A Every 4 months B Every 3 months C Every 6 months

90

How often shall buildings under "Quality Water Supply Schemes for Buildings - Fresh Water (Management Systems)" cleanse their fresh water tanks?



A

 A Every 3 months B Every month C Every 6 months

91

How many fresh water service reservoirs are there in Hong Kong?

A

 A 178 B 200 C 340

92

Where do fresh water service reservoirs usually locate?

A

 A Higher ground B Lower ground C Random

93

Where is drinking water supplied from before reaching household?

A

 A Management office


 B Fire Hydrant


 C Roof water tank


94

What is the main reason for suspension and demolition of Lok On Pai Desalination Plant in 1991?

A

 A High cost of desalination technology


 B Aging of infrastructures


 C Increase in number of reservoirs

95

Which of the following is not a main pollution source of Dongjiang water?

A

 A Increase in population along Dongjiang


 B Dust and ashes brought by wildfire


 C Industrial development


96

Which of the following can reduce bursts and leakages of water mains?

A

 A Leakage checking and implementing water pressure management


 B Water Mains Replacement and Repairing Scheme

 C Both A and B


97

Which of the following is not a means adopted by the mainland to protect the quality of Dongjiang water?

A




 A Construction of sewage treatment plants

 B Relocation of water intake




 C Both A and B



98 Which of the following involves virtual water consumed during the manufacturing of beef?

- A  A Water used to grow fodder    B  Water used to clean pens    C  Both A and B

99 Under the Total Water Management strategy of the government, which of the following is a means to increase water sources?

- A  A Develop desalination technology    B  Actively consider the use of reclaimed water    C  Both A and B

100 Reclaimed water is a water resource generated by further processing treated effluent from sewage treatment works. Which of the following is one of the source of Reclaimed Water?

- A  A Rainwater    B  Flushing water    C  Dongjiang water

101 What is the proportion of water in a child's body?

- A  A About 45%    B  About 55%    C  About 65%

102 What is the proportion of water in an adult male's body?

- A  A About 60%    B  About 70%    C  About 80%

103 What is the proportion of water in an adult female's body?

- A  A About 55%    B  About 66%    C  About 77%

104 Which part of a human body contains the highest percentage of water?

- A  A Bones    B  Lungs    C  Muscles


105

Which of the following beverage may increase the water discharging rate in our body?

A

 A Beer

 B Coffee


 C Both A and B


106

How many percentage of Global Water Consumption is domestic consumption?

A

 A 10%

 B 30%


 C 50%

107

What have the Hong Kong Government built to solve the problem of drought?

A

 A Retaining walls


 B Stormwater drainage system


 C Reservoirs


108

Which of the following is one of the new water sources under the sustainable water supply scheme?

A

 A Reclaimed water & desalination

 B Reusing of flushing water & fresh water conversion


 C Fresh water reclamation & desalination

109

What have the Hong Kong Government built to solve the flooding problem brought by heavy rain?

A

 A Retaining walls

 B Stormwater drainage system

 C Reservoirs

110

What is the name of the process in which water transforms from solid to liquid state?

A

 A Melting

 B Evaporation

 C Sublimation

111

What is the name of the process in which water transforms from liquid to gas state?

A

 A Melting


 B Boiling

 C Evaporation

112 Which of the the following form of water is in solid state?

A

 A Hail

 B Dew

 C Cloud

113 Which of the the following form of water is in liquid state?

A

 A Cloud

 B Frost

 C Snow

114 Which of the the following form of water is in gas state?

A


 A Water vapor

 B Ice

 C Fog

115 Which of the following is not a water saving device under the Water Efficiency Labelling Scheme?

A

 A Dish washing machine


 B Flow controller


 C Urinal

116 What is the largest diameter of water mains for transporting Dongjiang water to Hong Kong?

A


 A 2.4 metres


 B 3 metres

 C 5 metres

117 The dam height of Plover Cove Reservoir was increased in 1973. How many times of the total water capacity of Hong Kong reservoirs increased because of this project?

A

 A 3 times

 B 1 time

 C 2 times

118 How many times is the water capacity of High Island Reservoir greater than that of Plover Cove Reservoir?

A

 A 1.2 times

 B 2 times

 C 2.5 times


119

What percentage does the total water capacity of High Island Reservoir and Plover Cover Reservoir make up of the total water capacity of all impounding reservoirs in Hong Kong?

A

 A 87%


 B 78%


 C 68%

120

Among all the sources of drinking water in Hong Kong, what percentage does rainwater make up?

A

 A 20% - 30%


 B 60% - 70%

 C 80% - 90%


121

Among all the sources of drinking water in Hong Kong, what percentage does Dongjiang water make up?

A

 A 70% - 80%

 B 20% - 30%

 C 60% - 70%

122

What percentage does fresh water take up in all water sources on Earth?

A

 A About 2.5%

 B About 60%


 C About 97.5%

123

How many percentage of fresh water on Earth is frozen in iceburg located at North Pole and South Pole?

A

 A 70%


 B 30%


 C 50%

124

What percentage does seawater take up in all water sources on Earth?

A

 A 97.5%

 B 2.5%

 C 60%

125

How many percentage of Hong Kong's population is covered by the seawater supply network for flushing?

A

 A About 85%

 B About 60%

 C About 90%

126 How many percentage of electricity can the hydroelectric system of the Tuen Mun Water Treatment Works supply to itself?

- A  A 10%      B  B 25%      C  C 50%




127 How many percentage of the total fresh water treated daily is handled by the Shatin Water Treatment Works ?

- A  A 25%      B  B 10%      C  C 20%

128 According to the United Nations, what is the minimum amount of fresh water a person requires for drinking and daily use?

- A  A 50 Litres      B  B 90 Litres      C  C 130 Litres


129 How much domestic fresh water is consumed in Hong Kong per person per day? (based on 2019/20 data)

- A  A 135 Litres      B  B 90 Litres      C  C 220 Litres



130 Compared to the minimum amount of fresh water consumption suggested by the United Nations, how much more do Hong Kong people consume on average?

- A  A 80 Litres      B  B 20 Litres      C  C 130 Litres


131 On average, how much water (fresh water and seawater) is used by one person for flushing in Hong Kong? (based on 2019/20 data)

- A  A 90 Litres      B  B 130 Litres      C  C 220 Litres




132 How much "virtual water" is needed to produce 1-kg beef?

- A  A 15455 Litres      B  B 5455 Litres      C  C 455 Litres




133 How many cubic metres of water are free of charge for each domestic user in each season in Hong Kong?

- A  A 12 cubic metres    B  B 18 cubic metres    C  C 24 cubic metres




134 How many cups of water shall a person drink daily?

- A  A 6-8 cups    B  B 2-4 cups    C  C At least 20 cups




135 What is the total water capacity of all reservoirs in Hong Kong?

- A  A 586 million cubic metres    B  B 486 million cubic metres    C  C 386 million cubic metres

136 How much water can be processed by all 20 Water Treatment Works in Hong Kong per day?

- A  A 4.7 million cubic metres    B  B 3.02 million cubic metres    C  C 7.02 million cubic metres




137 What is the total capacity of all fresh water service reservoirs in Hong Kong?

- A  A 4.4 million cubic metres    B  B 2.6 million cubic metres    C  C 3 million cubic metres

138 How many people are in lack of safe drinking water at home?

- A  A Around 2.1 billion    B  B Around 100 million    C  C Around 10 thousand

139 What is the agreement reached in 2006 by Hong Kong and Mainland Government in order to import Dongjiang water according to actual need?

- A  A Flexible arrangement    B  B Increasing import arrangement    C  C Fixed arrangement

140 When did the government start providing seawater for flushing purpose?

A

 A 1950s

 B 1930s


 C 1960s

141 "People downstairs, turn off the water taps!" When did this saying become popular in the 20th century?

A


 A 1960s


 B 1930s


 C 1980s

142 Where did citizens of Hong Kong obtain fresh water 150 years ago?

A

 A Well water & stream water

 B Seawater & stream water


 C Seawater and well water

143 Wong Nai Chung Reservoir is no longer in use. When was it built?

A

 A 1899

 B 1863

 C 1902

144 When was the first filter built in Hong Kong?

A

 A 1890

 B 1860

 C 1910

145 When did urban waterworks start to supply water to Peak area by pumping?

A

 A 1891

 B 1898


 C 1900

146 When did Hong Kong start to implement "User pays" policy to install water meters and collect water charges from users?

A

 A 1902

 B 1863

 C 1894

147 When was Pok Fu Lam Reservoir built?

A


 A 1863

 B 1898


 C 1963

148 When was Kowloon Reservoir built?

A

 A 1910


 B 1925

 C 1931

149 When was Shek Lei Pui Reservoir built?

A

 A 1925

 B 1915


 C 1935

150 When did Kowloon start transporting water to Hong Kong Island via cross-harbour pipelines?

A

 A 1930


 B 1863


 C 1906

151 When was Kowloon Byewash Reservoir built?

A

 A 1931


 B 1906


 C 1925

152 When was Shing Mun Valley Reservoir (Jubilee Reservoir) built?

A

 A 1936


 B 1957

 C 1963

153 When was Tai Lam Chung Reservoir built?

A

 A 1957

 B 1947


 C 1967

154 When was Shek Pik Reservoir built?

A

 A 1963

 B 1978

 C 1957




155 When did Shatin Water Treatment Works officially start its service?

A


 A 1964

 B 1960


 C 1967

156 When was the already demolished Lok On Pai Desalting Plant constructed?

A


 A 1975

 B 1991


 C 2000

157 When was the Plover Cove Reservoir built?

A


 A 1968

 B 1957


 C 1978

158 When was the High Island Reservoir built?

A

 A 1978

 B 1982


 C 1968

159 When was Water Supplies Department established?

A

 A 1982

 B 1842


 C 1960

160 When did the last water rationing take place in Hong Kong?

A

 A 1981

 B 1963


 C 1967

161 When was Lok On Pai Desalting Plant demolished?

A

 A 1991

 B 1975


 C 1982

162 When did Water Supplies Department start "Replacement and Rehabilitation Programme of Water Mains"?

A

 A 2000

 B 1997

 C 2003

163 Under “Dongshen Water Supply Improvement Works”, when did the dedicated aqueduct for transporting Dongjiang water start its service?

- A  A 2003      B  B 1963      C  C 1982

164 When did the first two cave-built service reservoirs start their service?

- A  A 2009      B  B 2003      C  C 2012

165 When did Hong Kong list its 41 waterworks as Declared Monuments?

- A  A 2009      B  B 1997      C  C 1982


166 When will the construction of the first stage of Desalination Plant in Tsueng Kwan O be completed?

- A  A 2023      B  B 2030      C  C 2046

167 When did a severe drought occur in Hong Kong?

- A  A 1963      B  B 1968      C  C 1973

168 How many people in the world are in lack of safe sanitation facilities?


- A  A 4.5 billion      B  B 1.5 billion      C  C 0.5 billion


169 When did Hong Kong start to import Dongjiang water?


- A  A 1950s      B  B 1960s      C  C 1970s

170 In 2019/20, what is the total fresh water consumption in Hong Kong?

A


 A Around 1 billion cubic metres

 B Around 1.2 billion cubic metres

 C Around 1.4 billion cubic metres

171 1 cubic metre equals to how many litres?

A

 A 1000 Litres

 B 100 Litres

 C 10 Litres