

FIITJEE SAMPLE PAPER

(FIITJEE Talent Reward Exam-2020)

for students presently in
Class 5 (Paper 1)



Time: 3 Hours (9:30 am – 12:30 pm)

Code 5000

Maximum Marks: 240

Instructions:

Caution: Class, Paper, Code as given above MUST be correctly marked on the answer OMR sheet before attempting the paper. Wrong Class, Paper or Code will give wrong results.

- You are advised to devote 35 Minutes on Section-I, 35 Minutes on Section-II, 50 Minutes on Section-III, 30 Minutes on Section-IV and 30 Minutes on Section-V.
- This Question paper consists of 5 sections. Marking scheme is given in table below:

Section	Subject	Question no.	Marking Scheme for each question	
			correct answer	wrong answer
SECTION – I	APTITUDE	1 to 12	+3	0
		13 to 18	+4	0
SECTION – II	PHYSICS (PART-A)	19 to 22	+2	0
	CHEMISTRY (PART-B)	23 to 26	+2	0
	MATHEMATICS (PART-C)	27 to 31	+2	0
	BIOLOGY (PART-D)	32 to 36	+2	0
SECTION – III	PHYSICS (PART-A)	37 to 48	+1.5	0
	CHEMISTRY (PART-B)	49 to 60	+1.5	0
	MATHEMATICS (PART-C)	61 to 72	+1.5	0
	BIOLOGY (PART-D)	73 to 84	+1.5	0
SECTION – IV	PHYSICS (PART-A)	85 to 87	+3	0
	CHEMISTRY (PART-B)	88 to 90	+3	0
	MATHEMATICS (PART-C)	91 to 93	+3	0
	BIOLOGY (PART-D)	94 to 96	+3	0
SECTION – V	MATHEMATICS (PART-A)	97 to 102	+3	0
	MATHEMATICS (PART-B)	103 to 108	+3	0

- Answers have to be marked on the OMR sheet. The Question Paper contains blank spaces for your rough work. No additional sheets will be provided for rough work.
- Blank papers, clip boards, log tables, slide rule, calculator, cellular phones, pagers and electronic devices, in any form, are not allowed.
- Before attempting paper write your OMR Answer Sheet No., Registration Number, Name and Test Centre in the space provided at the bottom of this sheet.
- See method of marking of bubbles at the back of cover page for question no. 103 to 108.

Note: Please check this Question Paper contains all 108 questions in serial order. If not so, exchange for the correct Question Paper.

OMR Answer Sheet No. : _____
Registration Number : _____
Name of the Candidate : _____
Test Centre : _____

For questions **103 to 108**

Numerical based questions single digit answer 0 to 9

Example 1:

If answer is 6.

Correct method:

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

Example 2:

If answer is 2.

Correct method:

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

SAMPLE PAPER

Recommended Time: 35 Minutes for Section – I

Section – I

APTITUDE TEST

This section contains **18 Multiple Choice Questions** number **1 to 18**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

Directions (Q. 1 to 3): What should come in the place of the question mark (?) in the following questions?

1. $(8226 \div 3) \times \frac{1}{2} = ?$
 (A) 2156 (B) 1371
 (C) 1206 (D) 1202
2. $333 \times 33 \times 3 = ?$
 (A) 32691 (B) 36297
 (C) 32679 (D) 32967
3. $(3^3) = 27$
 (A) 2 (B) 3
 (C) 4 (D) None of these

Directions (Q. 4 to 5): In each of the following questions choose appropriate option from given alternatives such that the relationship defined by ':' is preserved.

4. Carrot : Vegetable :: Apple : ?
 (A) Plant (B) Fruit
 (C) Flower (D) Seed
5. Hot : Cold :: Light : ?
 (A) Dark (B) Small
 (C) Large (D) Tiny
6. Arrange the following words in alphabetical order and choose the word which comes at 3rd place.
Chops, Chord, Champ, Chopper
 (A) Chops (B) Chord
 (C) Champ (D) Chopper

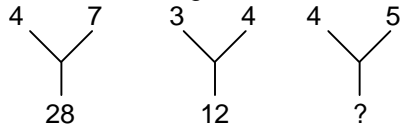
Space for Rough Work

Directions (Q. 7 to 8): In the following questions, you are given some letters which follow a set pattern. There are four answer choices choose the answer choice that can replace the '?' in the series?

7. C, E, G, I, ?
 (A) W (B) L
 (C) K (D) F

8. U, O, I, E, ?
 (A) B (B) C
 (C) G (D) A

9. Find the missing number that comes in the place of question mark (?).



- (A) 30 (B) 40
 (C) 20 (D) 50

Directions (Q. 10 to 12): In each of the following questions, which word cannot be formed by using the letter of given word.

10. TRANSFORM
 (A) TRAIN (B) FORT
 (C) ROAM (D) RANSOM
11. CONSTITUTIONAL
 (A) LOCATION (B) TUTION
 (C) TALENT (D) CONSULT
12. COURAGEOUS
 (A) COURAGE (B) SOURCE
 (C) COURSE (D) GENEROUS

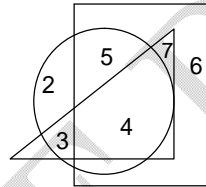
Space for Rough Work

Directions (Q. 13 to 15): Study the following statements marked as (A), (B) and (C) and answer the questions given below:

- (A) A, B, C, D and E are five boys sitting in a circle.
 (B) C is sitting immediately to the left of E.
 (C) A is sitting between D and E.

13. Who is sitting to the immediate left hand side of C?
 (A) E (B) A
 (C) B (D) D
14. Who is sitting exactly between B and A?
 (A) C (B) E
 (C) D (D) None of these
15. E is sitting exactly between?
 (A) B and D (B) D and E
 (C) B and E (D) A and C

Directions (Q. 16 to 18): In the given figure rectangle represents boys in a class, Triangle represents students with weight more than 50 kg wt. and Circle represents students with height more than 5 feet, now answer the following questions



16. No. of boys taller than 5 feet but less than 50 kg is
 (A) 5 (B) 7
 (C) 3 (D) 6
17. Number of boys more than 5 feet height and heavier than 50 kg is
 (A) 7 (B) 6
 (C) 4 (D) 5
18. No. of boys less than 50 kg and shorter than 5 feet is
 (A) 5 (B) 6
 (C) 4 (D) 2

Space for Rough Work

Recommended Time: 35 Minutes for Section – II

Section – II

PHYSICS – (PART – A)

This part contains 4 Multiple Choice Questions number 19 to 22. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.

19. One centimetre is equal to
(A) 1 metre (B) 1/10 metre
(C) 1/100 metre (D) 1/1000 metre
20. The energy possessed by a body due to its motion is called
(A) potential energy (B) kinetic energy
(C) mechanical energy (D) none of the above
21. The energy possessed by a body due to its location is called as
(A) kinetic energy (B) thermal energy
(C) potential energy (D) all of the above
22. Work is
(A) energy from the sun (B) measured in Joule
(C) a type of machine (D) a force that moves an object
-

Space for Rough Work

CHEMISTRY – (PART – B)

*This part contains 4 Multiple Choice Questions number 23 to 26. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

23. Which of the following gases is present in largest amount in air?
(A) Carbon dioxide (B) Nitrogen
(C) Oxygen (D) Argon
24. Which one of the following is an example of non-renewable resources?
(A) Wind (B) Water
(C) Vegetation (D) Coal and minerals
25. The water cycle in nature involves the following processes sequentially :
(A) Evaporation, precipitation, condensation
(B) Precipitation, condensation, evaporation
(C) Evaporation, condensation, precipitation
(D) Condensation, evaporation, precipitation
26. Expansion gaps are left in the railway tracks because these gaps accommodate the expansion of rails during hot weather without damaging the tracks. This process is an application of :
(A) A physical change (B) Expansion of metals on heating
(C) Contraction of metals on cooling (D) All of the above

Space for Rough Work

MATHEMATICS – (PART – C)

This part contains 5 Multiple Choice Questions number 27 to 31. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

27. $1\frac{1}{4}$ is same as
- (A) $\frac{4}{5}$ (B) $\frac{5}{4}$
(C) $\frac{3}{4}$ (D) $\frac{1}{4}$
28. Write the sum of 0.35 + 0.42
- (A) 0.72 (B) 0.73
(C) 0.74 (D) 0.77
29. Express each of the following percents as a ratio in the simplest form
(i) 25%, (ii) 50%, (iii) 4%, (iv) 20%
- (A) (i) 1 : 5 (ii) 1 : 2
(iii) 1 : 4 (iv) 1 : 25
(B) (i) 1 : 2 (ii) 1 : 4
(iii) 1 : 25 (iv) 1 : 5
(C) (i) 1 : 4 (ii) 1 : 2
(iii) 1 : 25 (iv) 1 : 5
(D) (i) 1 : 35 (ii) 1 : 3
(iii) 1 : 4 (iv) 1 : 5
30. Cost price of an object is Rs 400 and selling price of that object is Rs 600. What is profit/loss?
- (A) profit = Rs 1000 (B) loss = Rs 200
(C) loss = Rs 1000 (D) Profit = Rs 200
31. Identify an example for twin primes.
- (A) 5, 11 (B) 3, 5
(C) 11, 17 (D) 3, 7

Space for Rough Work

BIOLOGY – (PART – D)

This part contains 5 Multiple Choice Questions number 32 to 36. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

32. The sepals are collectively known as the:
(A) Calyx (B) Corolla
(C) Peduncle (D) Pedicel
33. Deficiency of proteins, carbohydrates and fat's causes:
(A) Marasmus (B) Obesity
(C) Diabetes (D) Anaemia
34. Which disease caused due to deficiency of iodine?
(A) Scurvy (B) Rickets
(C) Goitre (D) Colour blindness
35. Photosynthesis in plant does not require:
(A) Water (B) Carbon dioxide
(C) Oxygen (D) Sunlight
36. Which of the following plant is an insect eating plant?
(A) Pitcher plant (B) Bamboo plant
(C) Watermelon (D) Cotton plant

Space for Rough Work

Recommended Time: 50 Minutes for Section – III

Section – III

PHYSICS – (PART – A)

This part contains **12 Multiple Choice Questions** number **37 to 48**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

37. Which of these is called as Earth's natural satellite?
(A) Sun (B) moon
(C) Mars (D) Jupiter
38. Which of these is closest planet to the sun?
(A) mars (B) venus
(C) earth (D) mercury
39. Distance travelled by light in one year is called
(A) sound year (B) light year
(C) kilometre (D) celestial distance
40. Which of these is not an effect of applied force on a body?
(A) change in shape (B) change in size
(C) change in volume (D) change in energy
41. One kilometre equals
(A) 1 metre (B) 10 metre
(C) 100 metre (D) 1000 metre
42. One minute is equal to
(A) 1 second (B) 6 second
(C) 60 second (D) 600 second
43. How many days are there in a leap year?
(A) 365 (B) 366
(C) 367 (D) 375

Space for Rough Work

44. Gears may be combined in a system to:
(A) transfer motion. (B) change rotating speeds.
(C) multiply forces. (D) All of the above
45. Which of the following is a moving heavenly body with no light of its own?
(A) star (B) moon
(C) earth (D) both (B) and (C)
46. How many seconds are there in a day?
(A) 1000 seconds (B) 8000 seconds
(C) 86400 seconds (D) 64800 seconds
47. Who was the first Indian to travel in space?
(A) Rakesh Sharma (B) Kalpana Chawla
(C) Ravish Malhotra (D) Sunita Williams
48. Patterns formed by different groups of stars are called
(A) galaxy (B) constellation
(C) universe (D) none of these

Space for Rough Work

CHEMISTRY – (PART – B)

This part contains **12 Multiple Choice Questions** number **49 to 60**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

49. The shipping industry has to bear huge financial loss because of rusting of ships. The rusting of ships occur, because :
- (A) The body of ship is always in contact with water
(B) The air around the ship is moist
(C) Presence of salt in sea water speed up the process of rusting
(D) All of the above
50. Water is a good _____ .
- (A) Solute (B) Solvent
(C) Solution (D) Emulsion
51. The ocean of air surrounding the earth, is called :
- (A) Lithosphere (B) Stratosphere
(C) Atmosphere (D) Ionosphere
52. Great loss of life and property is caused by _____ .
- (A) Natural things (B) Blocking of rivers
(C) Natural disasters (D) Diseases
53. Sandstone and limestone are examples of _____ .
- (A) Igneous rock (B) Metamorphic rock
(C) Sedimentary rock (D) None of these
54. Among the following, which is not a natural calamity?
- (A) Earthquake (B) Explosion
(C) Landslide (D) Drought
55. Among the following which is liquid fuel?
- (A) Petrol (B) LPG
(C) Coal (D) CNG

Space for Rough Work

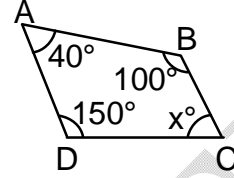
56. The water fit for drinking is called :
(A) River water (B) Rain water
(C) Potable water (D) Ground water
57. Which among the following is a primary rock?
(A) Sedimentary (B) Igneous
(C) Metamorphic (D) None of the above
58. Harmful substance released by power plants occurs as :
(A) Carbondioxide (B) Oxygen
(C) Potassium (D) Magnesium
59. Which of the following fuels causes minimum environmental pollution?
(A) Coal (B) Hydrogen
(C) Diesel (D) Kerosene
60. Each kind of rock is made of :
(A) Same minerals (B) Different minerals
(C) Lava (D) None of these

Space for Rough Work

MATHEMATICS – (PART – C)

This part contains **12 Multiple Choice Questions** number **61 to 72**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

61. In the given figure ABCD is a quadrilateral. Find the value of x .
- (A) 70°
 (B) 60°
 (C) 50°
 (D) 40°



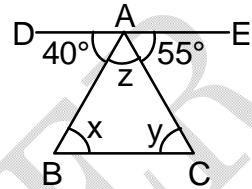
62. When a number is increased by 8, it is divisible by 35. What is the remainder when same number is divided by 5?
- (A) 2
 (B) 4
 (C) 3
 (D) 0
63. If $x + 3 = 8$, then find the value of x
- (A) 5
 (B) 6
 (C) 7
 (D) 8
64. Find the numerator of the equivalent fraction of $\frac{2}{9}$ with denominator 63.
- (A) 14
 (B) 13
 (C) 9
 (D) 64
65. 1g is equal to how much kg
- (A) 0.001kg
 (B) 0.01kg
 (C) 0.0001 kg
 (D) all
66. Express each of the following as a decimal
 (i) 55%, (ii) 15%
- (A) (i) 0.15, (ii) 0.55
 (B) (i) 0.55, (ii) 0.15
 (C) (i) 0.56, (ii) 0.68
 (D) all

Space for Rough Work

67. The cost price of an object is Rs 72. It is sold at a loss of Rs 15. Find its selling price.
 (A) SP = Rs 57 (B) SP = Rs 50
 (C) SP = Rs 56 (D) SP = Rs 55

68. What is the average of first ten odd numbers
 (A) 100 (B) 20
 (C) 10 (D) none of these

69. In the given figure ABC is a triangle and $DE \parallel BC$. Find (x, y and z).
 (A) 40° , 55° and 85°
 (B) 55° , 85° and 40°
 (C) 85° , 50° and 45°
 (D) 55° , 40° and 80°



70. Which is more, the average of 4 even natural numbers from 6 to 13 or average of 4 odd natural numbers from 6 to 13?
 (A) 4 odd natural numbers (B) 4 even natural numbers
 (C) both are same (D) none of these
71. If $\frac{x}{8} = 9$, then find the value of x
 (A) 72 (B) 71
 (C) 69 (D) 68
72. What sum of money will earn an interest of Rs 162 in 3 years at rate of 12% per annum?
 (A) Rs 540 (B) Rs 450
 (C) Rs 400 (D) Rs 500

Space for Rough Work

BIOLOGY – (PART – D)

This part contains 12 Multiple Choice Questions number 73 to 84. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.

73. Birds can fly due to light body weight. This is due to:
(A) Hard bones (B) Soft bones
(C) Hollow bones (D) Cylindrical bones
74. Mark the incorrect statement:
(A) The grasshopper has powerful hind legs to hop away quickly
(B) The lizard sheds a wriggling tail to distract the enemy
(C) Crocodile, lizard and turtles use their legs to crawl on the ground
(D) A snake and a worm use their legs to crawl on the ground
75. Which system does make framework of the body?
(A) Muscular system (B) Skeletal system
(C) Lung (D) None of these
76. A tough covering of seed is called:
(A) Cotyledons (B) Seed coat
(C) Epidermis (D) None of these
77. The _____ is a bony structure and protects our brain.
(A) Bones (B) Skull
(C) Cartilage (D) Bone marrow
78. Which give us quick energy?
(A) Protein (B) Carbohydrate
(C) Fats (D) Minerals
79. Kwashiorkar occurs because of deficiency of:
(A) Fats (B) Carbohydrates
(C) Proteins (D) All of these

Space for Rough Work

80. _____ helps our body to get rid of undigested food.
(A) Water (B) Fats
(C) Roughage (D) Sugar
81. The tea plant needs _____ climate to grow.
(A) Hot and moist (B) Hot and dry
(C) Both (A) and (B) (D) Cool
82. Which disease caused by deficiency of 'Iron'?
(A) Rickets (B) Anaemia
(C) Goitre (D) Scurvy
83. Spinal cord is a part of _____ system.
(A) Circulatory system (B) Nervous system
(C) Digestive system (D) Urinary system
84. Which of the following vitamin known as clot master?
(A) Vitamin A (B) Vitamin B
(C) Vitamin D (D) Vitamin K

Space for Rough Work

Recommended Time: 30 Minutes for Section – IV

Section – IV

PHYSICS – (PART – A)

*This part contains 3 Multiple Choice Questions number 85 to 87. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.*

85. Which of these is not an example of an inclined plane?
(A) ladder (B) stairs
(C) wall (D) driveway
86. Which is a characteristic of simple machines?
(A) They run on electricity. (B) They take a long time to make.
(C) They have few or no moving parts. (D) They are not very large.
87. Force can be called as
(A) a push (B) a pull
(C) both push and pull (D) neither push nor pull
-

Space for Rough Work

CHEMISTRY – (PART – B)

This part contains 3 Multiple Choice Questions number 88 to 90. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

88. The process by which a liquid changes to its solid form
(A) Evaporation (B) Solidification
(C) Condensation (D) None of these
89. Which of the following rocks contains calcium?
(A) Granite (B) Obsidian
(C) Limestone (D) Shale
90. Which of these may cause fire?
(A) Burning matches (B) Electrical faults
(C) Gas leaks (D) All of these
-

Space for Rough Work

SAMPLE PAPER

MATHEMATICS – (PART – C)

This part contains **3 Multiple Choice Questions** number **91 to 93**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

91. What will be the sum of $\frac{7}{12}$ and $\frac{3}{12}$
- (A) $\frac{10}{13}$ (B) $\frac{4}{9}$
(C) $\frac{8}{12}$ (D) $\frac{5}{6}$
92. 0.04 is equal to
- (A) $\frac{1}{4}$ (B) $\frac{1}{7}$
(C) $\frac{1}{25}$ (D) all
93. The sum of two angles of a triangle is equal to its 3rd angle. Find the 3rd angle.
- (A) 90° (B) 30°
(C) 60° (D) 45°

Space for Rough Work

BIOLOGY – (PART – D)

This part contains **3 Multiple Choice Questions** number **94 to 96**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

94. Raman got injured during playing on his leg. Which of the following fruit will heal his wound?
(A) Banana (B) Apple
(C) Orange (D) All of these
95. Digestive system consists of:
(A) Mouth (B) Oesophagus
(C) Intestine (D) All of these
96. The muscles found in the front of your thighs are known as:
(A) Iris (B) Melanin
(C) Cerebrum (D) Quadriceps
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Space for Rough Work

SAMPLE PAPER

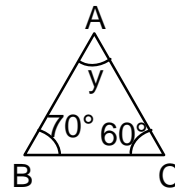
Recommended Time: 30 Minutes for Section – V

Section – V

MATHEMATICS – (PART – A)

This part contains **6 Multiple Choice Questions** number **97 to 102**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

97. In an examination, Suresh got 200 questions, if he had attempted 80% of questions then calculate how many questions he did not attempt?
 (A) 160 (B) 20
 (C) 80 (D) 40
98. Cost price of an object is Rs 1280 and selling price of that object is Rs 1260. What is profit/loss?
 (A) profit = Rs 20 (B) loss = Rs 20
 (C) profit = Rs 40 (D) loss = Rs 40
99. Find $4\frac{2}{5} - 2\frac{1}{5}$
 (A) $1\frac{1}{4}$ (B) $3\frac{1}{5}$
 (C) $2\frac{1}{5}$ (D) $3\frac{1}{4}$
100. 11.35 is read as
 (A) eleven point three five (B) eleven point fifty three
 (C) eleven point five three (D) none
101. Find the following as 130% of 20 kg
 (A) 26 (B) 25
 (C) 24 (D) all
102. In the given figure $\angle B = 70^\circ$ and $\angle C = 60^\circ$. Find $\angle A$
 (A) 50°
 (B) 80°
 (C) 70°
 (D) 60°



Space for Rough Work

MATHEMATICS – (PART – B)

This part contains 6 Numerical Based Questions number 103 to 108. Each question has Single Digit Answer 0 to 9.

103. A tank can hold 50 litres. At present it is only 30% full. Litres of water that shall be put in the tank so that it is 50% full is $5y$. The value of y is
104. What percent of 500 is 30?
105. If the angles of a triangle are $10x$, $15x$ and $20x$, find the value of x .
106. Find the average of 1, 3, 6, 8, 12.
107. 2 kg of rice is bought for Rs 100 per kg. If 1 kg is sold at Rs 118 per kg and the rest is sold at Rs 100 per kg, what is the net profit percent?
108. What is the sum of $1\frac{3}{9}$, $2\frac{3}{9}$ and $3\frac{3}{9}$?

Space for Rough Work

FIITJEE SAMPLE PAPER – 2020

(FIITJEE Talent Reward Exam-2020)

for students presently in
Class 5 (Paper 1)
ANSWERS

1.	B	2.	D	3.	B	4.	B
5.	A	6.	A	7.	C	8.	D
9.	C	10.	A	11.	C	12.	D
13.	C	14.	C	15.	D	16.	A
17.	C	18.	B	19.	C	20.	B
21.	C	22.	B	23.	B	24.	D
25.	C	26.	D	27.	B	28.	D
29.	C	30.	D	31.	B	32.	A
33.	A	34.	C	35.	C	36.	A
37.	B	38.	D	39.	B	40.	C
41.	D	42.	C	43.	B	44.	D
45.	D	46.	C	47.	A	48.	B
49.	D	50.	B	51.	C	52.	C
53.	C	54.	B	55.	A	56.	C
57.	B	58.	A	59.	B	60.	B
61.	A	62.	A	63.	A	64.	A
65.	A	66.	B	67.	A	68.	C
69.	A	70.	A	71.	A	72.	B
73.	C	74.	D	75.	B	76.	B
77.	B	78.	B	79.	C	80.	C
81.	A	82.	B	83.	B	84.	D
85.	C	86.	C	87.	C	88.	B
89.	C	90.	D	91.	D	92.	C
93.	A	94.	C	95.	D	96.	D
97.	D	98.	B	99.	C	100.	A
101.	A	102.	A	103.	2	104.	6
105.	4	106.	6	107.	9	108.	7