

#### GC INTERNATIONAL SCIENCE OLYMPIAD - LEVEL TWO SAMPLE PAPER

#### Question 1

What on Earth helps to keep temperatures stable?

A. air B. wind C. rocks D. oceans

Key: D

#### Question 2

We need this in order to live on Earth.

A. Greenhouse Effect B. Asteriods C. Meteors D. None of these

#### Key: A

#### Question 3

What is the diaphragm's main function?

A. pump blood into the lungs

B. pump carbon dioxide out of the lungs and pull oxygen into the lungs

C. pump oxygen out of the lungs and pull carbon dioxide into the lungs

D. All of these

#### Key: B

## Question 4

What happens to molecules at absolute zero?

A. they do not move B. they move very slowly

C they move quickly D. They move slowly

## Key: A

## Question 5

When germs do find a way into the body, what helps find and kill them?

A. White blood cells B. Blood

C. Red blood cells D. All of these

#### Key: A

#### Question 6

Climate takes hundreds, thousands, even millions of years to change.

True or False?

A True

B. False

#### Key: A

#### Question 7

Some metallic materials are magnetic and some are not. Which of these metallic materials is magnetic?

A. aluminum

B. steel

C. tin

D. copper

#### Key: B

#### **Question 8**

Higher the unbalanced force acting on the object, the \_\_\_\_\_ the acceleration of the object.

A. greater

B. smaller

#### Key: A

## Question 9

Which property of light best explains the way a straw appears to "break" when placed in a glass of water and viewed from the side?

A. Refraction

B. Reflection

C. Absorption

D. Water waves

## Key: A

## Question 10

Which of these is caused because of the natural forces like wind, water and Ice?

A. Erosion

B. Earthquakes

C. Tornados

D. Volcanoes

Which type of rock would most likely be formed at the bottom of a river?

A. Sedimentary

B. Igneous

C. Metamorphic

D. Mineral

#### Key: A

#### Question 12

Which phase of the moon shows more than half the moon lit up?

A. Gibbous

B. Crescent

C. Quarter

D. New

## Key: A

#### Question 13

John had a project at school where he had to create an animal that would survive really well in the tundra. Which of these adaptations would not be beneficial in the tundra?

- A. Brightly colored feathers to help beautify the tundra.
- B. Thick layer of fat to help keep them warm during the cold months.
- C. Slowed metabolism during hibernation in order to conserve energy during months with very little food.
- D. White colored fur to help camouflage with the snow to hide from predators.

## Key: A

## Question 14

What is an effective and healthy way for a person to lose weight?

A. Burn more calories than they take in

B. Eat more calories

C. Eat nothing

D. Only drink liquid

.

Which of the following is false?

A. The Earth's orbit of the Sun causes seasons

B. The Earth's rotation causes day and night

C. The Moon's orbit causes its shape to change

D. None of these

#### Key: C

#### Question 16

If you are in outer space, and you push a bowling ball away from your chest as hard as you can, what will happen to you?

A. Neither you or the bowling ball would move

B. You and the bowling ball will fly away in opposite directions

C. The bowling ball will fly away, and you will stay still

D. The bowling ball will fly away, and you will fly in the same direction.

#### Key: B

#### Question 17

If you hit a golf ball, a cotton ball, and a baseball with an equal amount of force, which will accelerate the most?

A. All of them will be the same

B. The Golf ball

C. The Baseball

D. The Cotton Ball

## Key: D

## Question 18

When you lick a flag pole when it is freezing outside, which best describes what happens to the energy between your tongue and the flagpole?

- A. Thermal energy leaves your tongue and enters the flagpole
- B. Thermal Energy leaves the flagpole and enters your tongue
- C. Coldness enters your tongue from the flagpole
- D. None of these

Which part of the flower contains the pollen?

A. Anther

B. Stigma

C. Leaves

D. Stem

#### Key: A

## Question 20

Lina and Robert are comparing how far their toy cars will roll down slopes made of different materials. Which surface should allow the car to go the furthest?

A. Concrete

B. Grass

C. Gravel

D. Sand

#### Key: A

#### Question 21

If you place a checker on your elbow and try to catch it with that same hand, what force do you need to beat in order to catch it before it hits the ground?

A. Gravity

B. Inertia

C. Friction

D. Mass

## Key: A

## Question 22

I have spilled a glass of water on the floor, what happens to the spilled water?

A. Change its shape but not its size

B. Change its shape and size

C. Not change its shape or size

D. Not change its shape but change its size

## Key: A

## Question 23

Why do we wear gloves in the winter when it gets cold?

- A. To prevent the heat in our hands from escaping
- B. To prevent the cold air from going into our hands
- C. To prevent the heat in the air getting into our hands
- D. To prevent the cold from leaving our hands

## Key: A

1103. 11				
Question 24				
Which of the follow	ring organs is also a muscle?			
A. The Lungs	B. The Brain	C. The Heart	D. The Kidney	
Key: C				
Question 25				
Which landform is b	pest described as a low area o	of land between two large	hills or mountains?	
A. Sand Dune	B. Island	C. Plateau D. Val	ey	
Key: D				
Question 26				
Sound waves travel	down the ear canal before hi	tting which of these?		
A. The pinna	B. The inner ear	C. The ear lobes	D. The eardrum	
Key: D				
Question 27	,			
Freddie has built a t	oy car. He wants to make the	e car move on its own. He	e adds a battery, wires, a switch and	a?
A. Bulb	B. Motor C. Seat	D. Radio		
Key: B				
Question 28				

# Key: B

A. physical change

Photosynthesis is an example of a \_\_\_

B. chemical change

The diagram below shows changes happening to water. What changes did the water undergo?



A. melting and then evaporation

C. condensation and then melting

B. freezing and then evaporation

D. evaporation and then condensation

#### Key: D

#### Question 30

Which of the following is NOT an example of a physical change?

A. crumpled paper B. pencil sharpening

C. shrunken clothing D. sour milk

#### Key: D

## Question 31

Mr. Sinyard is jumping up in the air. What happens at the highest point of his jump?

A. Gravity becomes weaker.

B. The force of his jump pulls him back down.

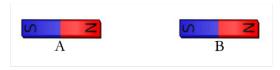
C. Gravity starts to pull him back down.

D. The force of his jump becomes greater than gravity.

## Key: C

Two magnets are shown in the picture.

What happens to magnet "B" if it is free to move?



- A. The force of gravity will pull it to the left.
- C. The force of gravity will push it to the right.
- B. The magnetic force will pull it to the left.
- D. The magnetic force will push it to the right.

#### Key: B

#### Question 33

A group of students were asked to improve the design of a car.

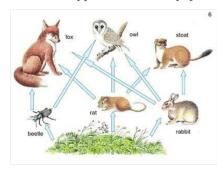
What is the first thing they should do?

- A. Adjust the wheels of the car and determine if it works better.
- B. Design a solution to make the wheels work better.
- C. Identify the problem that needs to be improved.
- D. Ask what materials they could use to fix the problem.

## Key: C

## Question 34

What will happen to the rabbit population if the owl population becomes bigger?



- A. The rabbit population will become smaller
- B. The rabbit population will become bigger
- C. The rabbit population will stay the same
- D. None of these

# Question 35 Which of the following mineral is used in making chalk? A. Fluorine B. Mica C. Gypsum D. Feldspar Key: C Question 36 Soil erosion can be prevented by following which of these? A. Terrace farming B. Afforestation C. Building bunds D. All the above Key: D Question 37 Process of developing immunity to fight against diseases after inoculation of the germs is called? A. sterilisation B. vaccination C. Pasteurization D. All of these Key: B Question 38 Which of the following is / are component(s) of balanced diet? A. Carbohydrate B. Protein C. Fat D. All of these Key: D Question 39 Anaemia can be corrected by \_\_\_\_\_? A. Taking calcium supplements B. Taking iron supplements

## Key: B

C. Taking vitamin E capsule

D. Taking vitamin B capsule

Question 40										
Which is used to broad	cast sound and pict	ures?								
A. newspaper B. 1	radio C.	television	D. fax							
Key: C										
Question 41										
Which kind of particle	pattern is present in	ı Ice?								
A. Flexible	B. Rigid	C. Loose	I	O. none						
Key: B										
Question 42										
Which one of the follow	wing birds has long	legs and thin toes	s that prevent t	hem from sink	ing in mud?					
A. Stork bird	B. Woodpecker	bird	C. Tailor bird		D. Kite bird					
Key: A										
Question 43										
Which type of beak is h	nelpful for birds to t	take out insects th	nat lives under	the bark of the	trees?					
A. Flat B. H	C.	Chisel shaped	D. Stray	v like						
Key: C										
Question 44										
A bulbul builds its nest	in?									
A. hedges and bushes		B. barks of t	he trees							
C. holes in the trunks of	of trees	D. under the	ground							
Key: A										

The electric cables appear to hang loosely from the poles in summer. Identify the reason.

A. Freezing of electric cables.

B. Evaporation of electric cables.

C. Expansion of electric cables.

D. Contraction of electric cables.

#### Key: C

#### Question 46

Which one among the following is not an amphibian?

A. Frog

B. Salamander

C. Tortoise

D. Whale

#### Key: D

#### Question 47

Why do plants have flowers?

A. They look nice

B. They catch the rain

C. They brighten up the garden

D. They make seeds to make more plants

## Key: D

## Question 48

Plants depend on insects. Which of these is the reason?

A. grow new leaves

B. strengthen roots

C. make more food

D. produce offspring

# Key: D

What is an example of a fish interacting with a non-living thing?

- A. The fish eating a smaller fish.
- B. The fish swimming in between a plant's leaves.
- C. The fish hiding under a rock.
- D. The fish laying it's eggs on plant leaves.

#### Key: C

#### Question 50

Which of the following cannot spread diseases?

A. housefly

B. cockroach

C. rat

D. grasshopper

#### Key: D

#### Question 51

Alex is building a car to race down a ramp. The car weighs 100 grams. Which could Alex do to increase the speed of the car?

A. increase the mass of the car

B. decrease the mass of the car

C. increase the friction on the ramp

D. change the color of the car

## Key: B

## Question 52

How does a bat find its food?

A. Through the smell of the food.

B. Through its eyes.

C. With the help of sound waves.

D. All the above

## Key: C

## Question 53

Which is an abiotic component of the environment?

A. Plants

B. Water

C. Animals

D. Humans

#### Key: B

## Question 54

Which fuel among the following causes less pollution?

A. Petrol

B. Diesel

C. Natural Gas

D. Kerosene

#### Key: C

## Question 55

Which holds the layer of air around the earth?

A. Friction

B. Electricity

C. Gravity

D. Ultraviolet rays

## Key: C

## Question 56

Which of the following gases is/are released by grass-eating animals as their waste product?

A. Ozone

B. Methane

C. Chlorofluorocarbon

D. All the above

## Key: B

## Question 57

Which among these is not a decomposer?

A. mushroom

B. leaves

C. worm

D. None of these

## Key: B

Identify the bird shown in the picture.



A. Eagle

B. Ostrich

C. Stork

D. Hawk

## Key: D

## Question 59

Which planet is known as the Morning Star or the Evening Star?

A. Venus

B. Mercury

C. Uranus

D. Saturn

## Key: A

## Question 60

Identify the animal shown in the picture.



A. Mole

B. Sloth

C. Ferret

D. Boar

# Key: C