**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Write which gases are released from following living and nonliving materials in the environment.

|  |  |
| --- | --- |
| **Material** | **Released Material O2 or CO2** |
| Rose | O2 |
| Mango | O2 |
| Orange | O2 |
| Goat | CO2 |
| Cat | CO2 |
| Man | CO2 |
| Car | CO2 |
| Burning & Coal | CO2 |

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-26

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

Release of gases O2 and CO2 from living and none living materials

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
|  | Release gases with material  Identify the source according to relevant gases | Burning and coal understand the concept of both gases emission from living and nonliving material | **4** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Define oxygen axel carbon cycle. Also, draw their labeled cycles.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-06-A-26

**Type of Task:** Long Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Define oxygen and carbon cycle. | Understanding & concept of oxygen and carbon cycle complete | **2** |
| **2** | Sketch a carbon and oxygen cycle. | Sketch understanding | **6** |
| **3** | Labelling of cycle. | Correct labelling of oxygen and carbon cycle. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Following the elements in maintain of oxygen and carbon cycle.

Exclude from diagram forest 02 Co2

P oxygen (O2) Air Carbon dioxide (Co2)

Forest Photosynthesis

Carbon dioxide oxygen O2

Respiration Animals

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-27

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Students become able to know about the release of O2 & Co2. | Indicate the O2 and Co2 in the cycle. | **2** |
| **2** | They have command on balancing of both gases. | Understanding of balance b/w O2 and Co2. | **2** |
| **3** | Forest role in balancing of O2 & Co2. | Rewrite that forest play these role in balance of O2 Co2in life. | **1** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Differentiate between O2 and Co2 cycle.

Write how oxygen cycle inter connected with carbon cycle?

Draw equation that indicated that both processes that crets balance i.e photosynthesis and respiration.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-27

**Type of Task:** Extended Response

**Level of SLO:**  Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (7)** |
| **1** | 2 to 3 points that differentiate the concept of O2 & Co2 Cycle | Comprehension of concept of carbon and oxygen cycles. | **2** |
| **2** | Description how oxygen cycle in inter connected with carbon cycle. | Correct concept of inter connection of both cycles. | **3** |
| **3** | Write equation | Correct and balanced equation | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Figure from internet

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-28

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (6)** |
| **1** | Causes of global warming over population reforestation and fossil fuels | Observed skill from these causes’ students can also identify the pollutant like smog. | **6** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Causes of global warming in context of Pakistan.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-28

**Type of Task:** Extended Question

**Level of SLO:**  Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (05)** |
| **1** | In the basis of previous knowledge that learned with the class student become able to write the effects of global warming in Pakistan. | Observed skin rephrase the information effects of global warming in Pakistan. | **05** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Draw a simple food chain also mention the how much energy in consumed at each level, Also write producers consumers and local decomposers?

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-29

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (6)** |
| **1** | Students able to draw a simple food chain. | Sketch of simple food chain. | **2** |
| **2** | Sketch the how of energy. | Identify the follow of energy | **2** |
| **3** | Should explain producers, consumers, decomposers. | Recognize the concept of producers, consumers, and decomposers. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Define food web and food chain.

The excreted material/waste generated from food chain and food web how I in decomposed.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-29

**Type of Task:** Restricted Response

**Level of SLO:**  Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Define food web and food chain. | On previous knowledge have concept of food chain and food web. | **2** |
| **2** | Name of organism that decompose the waste material from food chain and food web. Also state their role. | Able to write the name of decomposes also write role. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

**Home Task:**

Draw sketch a labelled diagram of food web.

Make a flow chart how food is consumed in food web.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-30

**Type of Task:** Activity based

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (7)** |
| **1** | Student have to set mind map and draw a food web. | Understanding of food web. | **3** |
| **2** | Present a how chart in text of class | Making and Demonstration of food web. Also boosted confidence level of students. | **4** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Write a short note on producers, consumers, and decomposers.

Name the animals and plants that are involved in food web.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-30

**Type of Task:** Extended Question

**Level of SLO:**  Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Concept of producer, consumers, and decomposers. | Understanding of concept of producers, consumers, and decomposers. | **2** |
| **2** | Name of animals and plants in food web. | Rewrite the plants and animals involved in food web. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

There are four living organisms.

1. Honey bee plant.
2. Snake frog.

What type of interaction they have either predator or symbiosis.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-31

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (03)** |
| **1** | Define predator and symbiosis | Understanding of concept of predator and symbiosis. | **1** |
| **2** | Write Name of interaction and explain the nature of Interaction. | Understand the interaction b/w above discussed four living organisms. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Define competition.

A population of goat living in same habitat they compete for what?

Food, water supply, shelter etc.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-31

**Type of Task:** Short Question

**Level of SLO:**  Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Explain the concept of competition. | Also have knowledge about organisms complete for food water supply, shelter etc. | **4** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

How can stop hunting and migration to some the species in their natural environment.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-32

**Type of Task:** Activity

**Level of SLO** Application

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Solve the problem of hunting a migration. | Students suggest ways to stop hunting and migration. | **2** |
| **2** | Suggest Strict laws to stop hunting and migration of species. | Implementation of laws to stop hunting and migration. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

There are chances of new species to survivor with pre-existing species support your answer.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-06-A-32

**Type of Task:** Extended Question

**Level of SLO:** Application

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (02)** |
| **1** | Student become able to know when new species in introduced into environment what happen. | After reading and previous knowledge student can apply his /her thoughts that there is less chances of survival of new species. | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

If ecosystem is disturbed due to fire or flood what happen with the native species.

& Equilibrium of ecosystem disturbed due to death of species.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-33

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Fire and flood disturbed the ecosystem. | Students can assume/conclude that ecosystem is disturbed by fire and flood. | **3** |
| **2** | Death of several species will disturb the balance of ecosystem. | Students are predict due to death of several/many species, equilibrium of ecosystem in disturbed. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Search online that one species is disturbed in an ecosystem, it will affect the balance of ecosystem.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-33

**Type of Task:** Short answer

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (02)** |
| **1** | Student can write the points regarding if one species is disturbed then other will also affected in eco-system. | Understanding of disturbance of an ecosystem | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

**Assign an activity is a group**

Every student writes at least one positive impact of human behavior to protect an environment on flash card.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  01

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-34

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Student must space about each positive behavior of human. | Express knowledge of each point informal of class. | **05** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Enlist three more positive behavior of human by your surrounding environment. E.g.

Land fill

Incineration

Recycling

**Domain: B** Life Science

**Grade:** 08

**Unit:** 01

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-34

**Type of Task:** Short answer

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | Student can easily protect environment and physically observe more ways to save environment. | After observation student become able to know about land fill, incineration and recycling. | **3** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Teacher selects three students from class assign them name as dendrites cell body and axon. Also arrange them an order of their structures.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-11

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (2)** |
| **1** | Student never forget their names as they are correlate with their class follows also state their role. | They can easily draw the structure of dendrite cell body and axon. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Make a list of different parts of neuron. And remember their functions.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-11

**Type of Task:** Long Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (6)** |
| **1** | Students have knowledge to explain dendrites, cell body and axon Function. | Become able to memorize parts of neuron and their functions. | **6** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Identify he different part of human nervous systems and explain it with the help of their functions.

Diagram of Nervous system only.

Omit the nervous diagram.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-12

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | From diagram student become able to write the function and also identify the parts of nervous system. | Understanding of nervous system different parts name their functions | **5** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Define the role of central nervous system with the help of its parts.

(Provide Model of CNS in class)

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-12

**Type of Task:** Short Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | Define the role of central nervous system with the help of its parts. | Trough observation student become able to mention the role of central nervous system with the help of its parts. |  |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

The table below shows the list of your daily activities. Write the name of that part of branch (Forebrain, mid brain, hindbrain)

Which is controlling this activity.

Activity part of brain controlling activity.

Sleeping Forebrain?

Coughing Hindbrain?

Taking breakfast Forebrain?

Balancing of your body Hindbrain?

Taking deep breath Hindbrain?

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-13

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Define forebrain, midbrain and hindbrain functions. | Understanding of function of parts of brains | **05** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Reflex movement of eye muscles are controlled by brain prove it.

Select two students from class. One has ask don’t blink your eyes for 5 minutes.

Other students can blink his eyes as and when required.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-13

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Student blink his eyes before 5 minutes as these are under the control of nervous system. | Students observe that before 5 minute he started blinking of his eyes that prove that brain is the control center | **2** |
| **2** | Other student in blinking his eyes as normal and that is also controlled by our brain. | Movement of eye muscles are controlled by brain. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

State the role of following parts of brain forebrain.

Mid brain

Hind brain

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-13

**Type of Task:** Extended response

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (8)** |
| **1** | Student have concept and explain the parts of brain. | After reading and remembering of functions/rules of diff. parts of brain | **05** |
| **2** | Also become able to know brain is the control is the control station of our body. | He knows how brain become the control station of our body. | **03** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

With the help of different clay colors, make a following parts of brain.

Cerebrum, cerebellum, Midbrain

Also describe their role on flash cards.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-14

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (6)** |
| **1** | Different color of clay identity the different parts of brain. | Easily memorization of different parts of brain. | **3** |
| **2** | Also colored Hash cards shown their role / function. | From model/ hash cards students will observe the role of cerebrum cerebellum and mid brain. | **3** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Draw and label different parts of brain. Also state role of each part of branch?

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-14

**Type of Task:** Long Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | Draw and label the human brain. | Memorization of different of brain. | **3** |
| **2** | Write role of each part of brain. | Become able to describe the role of part of the brain. | **5** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Use of playing dough of different color to the formation of left and right cerebrum.

Make a tag on uncle role of each part in stated.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-15

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Dough us soft material that is easily model cloud different color use available in market. | From color student become able to observe the different parts of brain. | **3** |
| **2** | For tagging use simple paper write a role on it attach it with dough with the help of ice cream sticks. | Also state the rule of left and right hemisphere of cerebrum | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Differentiate between right and left cerebrum of brain?

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-15

**Type of Task:** Short question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (2)** |
| **1** | Concept of cerebrum either it is a part of forebrain mid brain or hindbrain and also write function of right or left cerebrum. | Understanding about cerebrum and its right and left division role. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Teacher should present food to some students in the class.

What happens in your month when you small look/ this of delicious food with an empty stomach

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-16

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | The watering of month upon seeing good food is an example of reflate action. This reaction occurs unconsciously | Understanding sense of organ sensory neuron send message to brain and metro neuron take message back to mouth that secretes saliva. | **4** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Map/ Draw a simple reflex are

e.g.

Sense organ sensory

Neuron interneuron (in CNS)

Motor neuron effector (Muscle or gland)

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-16

**Type of Task:** Short Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (05)** |
| **1** | Student must and write map/draw & all parts of transmission of messages through body and to the brain via a reflex arch. | Student generalized the transmission of messages through body and to the brain via a reflex arch | **05** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Write correct order of transmission of message?

Hand sensory neuron, brain motor Interneuron and hot object.

Student will ask to give correct sequence of transmission of messages from body to brain.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-17

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Complete knowledge of parts of transmission of brain message that in sensory, and motor neuron. | Student must local the correct order of sequence of message transmission. | **3** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Working order of transmission of messages through body is given below. State the role of each part

Stimulus Sensory neuron CNS

Neuron effector response.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-17

**Type of Task:** Activity

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | From the sketch student become able to discuss the role of each body part. | Understanding of transmission of messages and also state its role. | **10** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

In Classroom decorate a wall with use of different color.

Giving a paint and brush to student and ask them decorate what you want.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-18

**Type of Task:** Activity

**Level of SLO** Application

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Due to painting and decoration of wall have positive impact on their brain students feel relax? | These types of activities should be performed once in a week. | **5** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

List different types of activities that keep your brain health from daily life.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-18

**Type of Task:** Short Answer

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Student will write yoga, playing of games, helping their mother at home, making donuts, offering prayer. | All these activities will be observed from their surrounding environment. | **4** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

There are three column ABC. Match column A with B and write correct answer in column C.

|  |  |  |
| --- | --- | --- |
| A | B | C |
| Cerebrum | Movement | Cerebellum |
| Hypothalamic | Critical role | Thalamus |
| Mid brain | Memory | Cerebrum |
| Thalamus | What balance | Hypothalamus |
| Cerebellum | Movement of eyes | midbrain |

Teacher kept column C Blank

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-19

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | From previous knowledge student match the function of each part. | Become able to rearrange the function with part of brain. | **5** |

**Dr. RaFia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Enlist/State the role of following parts of brain.

1. Cerebrum
2. Hypothalamus
3. Midbrain
4. Cerebellum
5. Medulla obligates

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-19

**Type of Task:** Knowledge

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | On me basis of knowledge student become able to write roles of each part of brain. | Construct functions/role of each port of brain by mind mapping. | **10** |

**Dr. RaFia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

There are following sensory organs and effectors. Separate them.

Hand,eyes,nose,mowth,leg,muscles

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-21

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | After reading of topic student become able to differentiate b/w sensory organs and effectors. | Easily understand the sensory oranges and effectors. | **6** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

From the diagram below tell us spiral cord is a part of CNS.

Also write complete name of CNs.

Brain

Spiral

Card

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-21

**Type of Task:** Short answer

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | Define brain and spinal cord. Also define CNS. | Understanding of brain, spiral cord and CNS. | **3** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

If nerve is broken in the leg. What happen with the leg.

Nerves transmit messages from body to brain and from brain to body to body (leg)

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  02

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-24

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Transmission of messages stop. Connection of leg is stopped from brain. Leg have Differently in moving. | Understanding from the statement that transmission of messages of messages is damaged due to have broken. | **3** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Define Nerve, Cranial Nerve and Spiral Nerves

**Domain: B** Life Science

**Grade:** 08

**Unit:** 02

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-24

**Type of Task:** Short Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (6)** |
| **1** | Define nerve, cranial nerve and spiral nerve. | Understanding of nerve, cranial nerve and spiral nerve. | **6** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Below is a list of characters separate them whether it is continuous or discontinuous variation. Also separate adaptive characters skin colors, height, blood group, hair texture smaller ear attached earlobe, free earlobe smaller ears.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-01

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (06)** |
| **1** | Define continuous discontinuous, and adaptation in living organisms. | Students become able to classify the continuous discontinuous and adaptation and living organisms. | **03** |
| **2** | Give two examples from above discussed characters. | Also Separate the above words in a continuous, discontinuous and adaptive characters. | **03** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Have you ever had such a fascinating experience that a stranger person ad recognized whose child you are or whose sibling you all.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-01

**Type of Task:** Short Answer

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (04)** |
| **1** | Every Child should share his/her experience with the teacher. | Student become make correct estimate that this is genetic character. | **04** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Make a list of some of factors responsible for variation and adaptable in individuals?

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-02

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (06)** |
| **1** | On the basis of previous knowledge student become able to write some factors responsible for variation and adaptations | Students give examples from his classmates and also relate these factors to him/her. | **06** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Explain the difference b/w variation and adaptations in individuals in your local context.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-02

**Type of Task:** Long Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (07)** |
| **1** | Concept of variation and adaption. | Correct definition of variation and adaptation. | **03** |
| **2** | Also differentiate b/w variation and adaptation. | Also become able to write two differences. | **02** |
| **3** | Give examples from his /her general knowledge. | At least one example from local community | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Watch online few videos of cheetah hunting on some other animal. Enlist structural adaption which make a cheetah a good predator.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-03

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Remember the concept of adaptation and enlist few factors that make cheetah adaptive for their environment. | Recognize the concept of adaptation and make a list of factors that make cheetah suitable for their environment. | **04** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Characters factors are given below in the table record your observation in the table given below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Characters | Yourself | Father | Mother | Sister | brother |
| Hair (Straight or curly) |  |  |  |  |  |
| Eye color (blew brown black) |  |  |  |  |  |
| Complexion fair /less dark |  |  |  |  |  |
| Height (all medium or short) |  |  |  |  |  |

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-03

**Type of Task:**

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (04)** |
| **1** | Match your common characters between you, your father, mother, sister and brother. | Identify the common characters | **02** |
| **2** | Also state these characters are generic or environmental. | Also recognize whether these factors are environmental or genetic. | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

More adaptive characters mean better survival rate. For example,

Chameleon changes colors.

Izard hibernates in winter. Desert plant store more water.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-04

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (03)** |
| **1** | On the basis of above characters state that different adaptation affects the survival of organisms. | Summarize the concept survival and also relate these examples with adaptive. | **03** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Explain the concept of adaptation in your local context at home.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-04

**Type of Task:** Long Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (06)** |
| **1** | Define the concept of adaptations. | Understanding of concept of adaptation. | **02** |
| **2** | Role of adaptation in survival of organisms. | Correct role of adaptation is survival of an organisms. | **02** |
| **3** | Local examples from home. | Two examples from your home. | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Compassing characteristics relative to eye color.

Observe the eye color of your classmates and friends and record your observation in the table given below.

|  |  |  |  |
| --- | --- | --- | --- |
| Sr.No. | Name of your friend | Eye color (Black, blue, brown/grey | Which of the parents or grandparents (both paternal and material he/ she has received his charter from? |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-05

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (06)** |
| **1** | On the basis of information in the table students explain the concept of heredity and transfer of genetic information from parents or grandparents to their offspring. | Explain the concept of heredity and transfer of genetic information from parents or grandparents to their offspring. | **06** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Below is a diagram of chromosomes label it chromosomes?

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-06

**Type of Task:**

**Level of SLO:** Activity

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (04)** |
| **1** | Label/identify the chromosomes genes and DNA | Identifying labelling of chromosomes DNA genes. | **02** |
| **2** | Also state their role in heredity | Definition of DNA, genes and chromosomes. | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

State the role of chromosomes DNA and genes? Take figure from the internet

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-06

**Type of Task:** short answer

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | Differentiate between genes, chromosomes and DNA | Understanding of concept of genes, chromosomes and DNA in heredity. | **03** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

From model of DNA student should identify me parts of DNA.

In relation to its composition and structure.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-07

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | From Model of DNA student easily identify the structure and composition of DNA. | Become also to write structure and composition of DNA | **04** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Draw sketch structure of DNA. And also write its chemical composition.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-07

**Type of Task:**

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (04)** |
| **01** | Draw a structure of DNA | On the basis of understating student become able to draw a structure of DNA | **02** |
| **02** | Student become able to write chemical composition of DNA. | Also write chemical composition of DNA. | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

By using different color of clay student easily draw a model of DNA teacher suite them.

Teacher provides material clay of different colors that become part of DNA ask student to arrange them.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-08

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Student become able to draw a model of DNA. | By rearranging the clay student become able to design a model of DNA. | **02** |
| **2** | Also describe the functions of various parts of DNS. | Also become able to describe the functions of DNA | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

By observing model of DNA in the lab.

Write the role of DNA, its composition and also its structure.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-08

**Type of Task:** Long Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (6)** |
| **1** | Student become able to write role and composition of DNA. Also draw structure of DNA. | Model should be provided to students they become able to draw structure of DNA, also describe roles and composition of DNA. | **06** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

An injury on a perm’s body needs more and more cells for the repairs of his bod. What type of cell division (mitosis Meiosis) do you

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-09

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Student think about what type of cell division talus place. | Concept/understanding of mitosis and meiosis role. | **02** |
| **2** | Also become to give answer whiner it is somatic or sexual reproduction. | Understanding of repair of cell somatic or sexual reproduction. | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Differentiate between mitosis and meiosis?

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-09

**Type of Task:** short answer

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (02)** |
| **1** | Define mitosis and meiosis. | Understanding of both types of cell division. | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Which of the following figures represent a phase of mitosis and on era phase of meiosis?

Teacher draws the figure of mitosis or meiosis

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  03

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-10

**Type of Task:** Activity

**Level of SLO** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (02)** |
| **1** | Concept of mitosis, meiosis and cell division | From me above figure student become able to understand the type of cell division and also concept of mitosis and meiosis. | **02** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Define mitosis and meiosis. Also explain the various phases’ type of mitosis and meiosis.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 03

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-10

**Type of Task:** long Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (08)** |
| **1** | Define of mitosis and meiosis. | On the basis of previous knowledge student become able to define the mitosis and meiosis. | **2** |
| **2** | Phase of mitosis | Write correct phase of mitosis. | **3** |
| **3** | Phase of meiosis | Write different phase types of meiosis. | **3** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Covid-Vaccine is produced in the lab of biotechnology by growing them living organism (like bacteria).

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  04

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-35

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (2)** |
| **1** | In production of vaccine the living cell of bacterial are used. With the help of biotechnology. | Understand the concept of biotechnology and use of living cells and organism that can improve the quality of life. | **2** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Genetically modified organism (GMO) like animals, plants and various fruits are produced.

Give at least one example from above mentioned organisms.

Name at least one GMO from above mentioned plant, animals and fruits.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 04

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-35

**Type of Task:** Activity

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | Knowledge about GMO also mentioned their names. | Correct names of one plant one animal and one fruit. | **3** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Following material are provided to the student yogurt, cheese, cider, pickets, soy sauce pepperoni.

Ask the student separate them on the basis of from which material is obtained.

Milk, fruit, vegetables, legumes, meat.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  04

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-36

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Student have concept of technology and know about fermented food is obtained from milk, fruits, vegetables, legumes and meat | Students become able to lobately identify the provided things under the category of milk, fruits, vegetables, legumes and meat. | **5** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Fermentation is an old technique that breakdown the carbs like starch by bacteria. Give examples of tormented food from daily life.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 04

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-36

**Type of Task:** Short question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (04)** |
| **1** | Define fermented food and become able to give answer of question also write yogurt, cheese fermented yogurt and bread. | From above information students understand the concept of termination and give examples from daily life. | **4** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

**Review Activity**

Application of Biotechnology teacher provide the physical materials ion the classroom like milk, eggs, insulin, biofuel plants, models of bacteria, injection model of virus, biodegradable plants mode of vaccine.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  04

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-37

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (06)** |
| **1** | Student from above discussed model should aware about the application of biotechnology. | Understanding of how things are prepared by using the application of biotechnology. | **06** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Teacher shows the student different types of medicine, injections, solutions, capsules that are product of biotechnology.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 04

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-37

**Type of Task:** short question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **1** | Student become able to know the products of biotechnology. | Physically observe the things and know their importance in biotechnology. | **03** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

What and rice are our major staple crops. Through GMO we produced higher iron and Zn context varieties.

**Domain: B-** Life Science

**Grade:** 08

**Unit:**  04

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-A-38

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (03)** |
| **1** | Concept of staple food and GMO. | Understand the role of GMO in production of higher Zn & Iron content varieties. | **03** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

The process of increasing more content of Fe and Zn in staple crops in Called \_\_\_\_\_\_\_\_.

Answer = Biofortification.

**Domain: B** Life Science

**Grade:** 08

**Unit:** 04

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-A-38

**Type of Task:** Fill in the blank

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (01)** |
| **1** | Name the forces of bio fortification. | Increasing contents indicate that process is bio fortification. | **01** |

**Dr. Rafia Abid**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**.

**Activity:**

Make a periodic table on a chart paper.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  05

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-01

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **01** | Students name and order all the elements of periodic table with groups and periods on a chart paper. | Learned and remember the information. | **10** |

**Nabeela Ishtaiq**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

How periods do you find in the periodic table?

What is the maximum number of elements in a period?

Define period of a periodic table.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 05

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-01

**Type of Task:** Short Question

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
| **01** | Students provide the information they learned such as definition of period, total number of periods and maximum number element in a period. | Recognition of facts. | **3** |

**Nabeela Ishtaiq**

**Reviewer Comments**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**.

Take 18 students from the class.

Divide them in 8 groups. Make each group as iA, iiA, iiiA, IvA etc.

The number of students in each group represent the number of elements in a group.

Each student hold a card showing the name and atomic number of particular elements

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  05

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-02

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Students arrange them self in accordance with the group they are assigned | Arrangement understanding of the facts. | **5** |

**Nabeela Ishtaiq**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Write the names of the elements of the following groups?

Group iA

Group iiA

Group viiA

Group viiiA

Write the common names of the following groups.

Group iA

Group iiA

Group viiA

Group viiiA

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 05

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-2

**Type of Task:** Shorthand

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (8)** |
| **1** | Students recall the previous knowledge and write the names of elements. | Remembering of previously learned information. | **4** |
| **2** | Students recall the previous information and name the groups | Remembering the previously learned knowledge. | **4** |

**Nabeela Ishtaiq**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**.

Provide the following characteristics. For

|  |  |
| --- | --- |
| Metals. | Non-Metals. |
| Appearance | Appearance |
| Density | Density |
| Strength | Strength |
| Malleable | Malleable |
| Brittle | Brittle |
| Conductor | Conductor |
| Sonorous | Sonorous |
| Duilile | Duilile |

Use the following key words high, shiny, yes, low, dully, no weak strong

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  05

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-03

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | By using the given key words students give the characteristics of metals and non-metals | Knowledge of facts | **4** |

**Nabeela Ishtaiq**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Which properties distinguish a metal from a non-metal?

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 05

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-03

**Type of Task:** long question

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Students explain the properties of metals and non-metals | Describe the properties of metals and non-metals. | **10** |

**Nabeela Ishtaiq**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Match the column

|  |  |
| --- | --- |
| Metals | Uses |
| Steel | Ornaments |
| Gold | Airplanes |
| Aluminum | Bridges |
| Iron | Wires |
| Copper | Cooking pots |

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  05

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-04

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Recalling the properties of metals students match the with their uses. | Understand the properties of metal and their uses. | **5** |

**Nabeela Ishtaiq**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Write down 5 metals and their uses in daily life.

Give 2 common uses of metals.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 05

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-04

**Type of Task:** Short question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Students write down the uses of metals in daily life | Describe the uses of metals in daily lie. | **5** |
| **2** | Give the common uses of metals. | Describe the uses of metals in daily life. | **2** |

**Nabeela Ishtaiq**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Material: Candle, Match stick, Ice Cubes, a boiled egg, boiled egg, boiling water, chopping wooed.

Dissolving sear and water, A resulted spoon, yogurts

Activity: students are asked to identify chemical reaction;

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-05

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
|  | Students will explain knowledge about whether a chemical the chemical reaction occur or it’s a simple physical change | Knowledge about the chemical reaction | **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Define Chemical reaction 2-
2. Give some examples of chemical reactions accruing in daily life

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-5

**Type of Task:** knowledge

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | 1. Students will explain chemical reactions 2. Students will explain some examples of chemical reactions from daily life. | 1. Knowledge about chemical reaction 2. Knowledge about the chemical reactions from daily life | **2**  **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Material: Conical flasks test tables, solutions of NaCl and Ag No3.

Solutions of CaCL2 and Na2 So4

Act city: Half students perform activity with solutions of NaCl and AgNo3.

Other students will perform activity with the solutions of cacl2 and Na2504.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-06

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | Students will explain the weight of reactions before the activity and weight of products after the activity prove the law of conservation of mass. | Comprehension about the law of conservation of mass | **5** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Define law of conversation of mass
2. Prove the law with an experiment using following compounds.
3. AgNo3
4. NaCl

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-6

**Type of Task:** Short Questions

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | 1. Students will explain different the law of conversation of mass. 2. Students will explain different the law of conversation of mass with the help of an experiments | 1. Comprehension about the law of conversation of mass 2. Comprehension about the proof of law of conversation of mass. | **1**  **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Write and balance following word equations by using symbols and formulas.

1. Carbon + oxygen > Carbon dioxide
2. Sodium + water > sodium hydroxide
3. Hydrogen + Oxygen > Water
4. Magnesium + oxygen > Magnesium oxide

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-07

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (6)** |
|  | 1. Student will explain how to write a chemical equation by suing symbols and formulas. 2. Students will explain how to balance above equations in group activity. | Knowledge about to write a chemical equation from word equation  Knowledge about the balancing of above equations | **3**  **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Define chemical equation
2. How a chemical equation is Witten
3. How can you balance a chemical equation if is un-balanced.
4. What is coefficient regarding chemical equation.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-7

**Type of Task:** Short-Questions

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | 1. Students will explain the definition of chemical equation 2. Students will explain the writing the chemical equation 3. Student will explain the balancing of chemical equation 4. Students will explain co-efficient | 1. Knowledge about chemical equation. 2. Knowledge about writing a chemical equation 3. Knowledge about balancing a chemical equation 4. Knowledge about co-efficient | **1**  **2**  **3**  **1** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Individual Activity**

Material: Flash cards on which writing all types of reactions. Students are asked to identify which type of chemical reaction it is.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-08

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | 1. Students will identify the type of reaction by examining flash cards. | 1. Comprehension about the types of reaction | **5** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Describe types of chemical reaction
2. Give examples of each types of chemical reactions.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-8

**Type of Task:** Long+Short-Questions

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
|  | 1. Students will explain the types of chemical reactions 2. Students will give examples of all types of chemical reactions. | 1. Comprehension about the types of chemical reaction 2. Comprehension about the chemical reactions | **5**  **5** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Individual Activity**

Material: Examples of exothermic reactions written on flash cards.

Activity: Students are asked to identity whether the reaction / example is exothermic or endodermic.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-09

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | 1. Student will identify the endothermic and exothermic reaction | Comprehension about exothermic and endothermic reactions | **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Distinguish between exothermic and endothermic reactions
2. Give some examples of endothermic and exothermic reaction
3. Draw diagrams to show in which system heat is released and in which the heat is absorbed.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-9

**Type of Task:** Short-Questions

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (06)** |
|  | 1. Students will explain exothermic and endothermic reactions 2. Students will explain with example exothermic and endothermic reaction. 3. Students will explain the exothermic reaction and endothermic reaction with the help of diagrams | 1. Comprehension about the exothermic and endothermic reaction 2. Comprehension with the help of examples, 3. Comprehension about the diagrams which show heat absorbed or released. | **2**  **2**  **2** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Activity**

Activity already written on assessment framework.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-10

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
|  |  |  | **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Short question is already given on assessment frame work

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-10

**Type of Task:** Short-Questions

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (03)** |
|  |  |  | **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Material: Plastic bottles, plastic caps, sticks, small wooden wheels, etc., baking soda, cinerary;

Activity

Design a toy car utilize a chemical ratio to power the toy car.

Write a balance equation for the reaction.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-11

**Type of Task:** Activity

**Level of SLO** Application

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | Students will explain how they make a toy car with the given material | Application of chemical reaction of power the toy car. | **5** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Define a chemical reaction
2. Car a chemical reaction drive a toy car.
3. How to construct a toy car and race with the help of chemical reaction

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-11

**Type of Task:** Short-Questions

**Level of SLO:** Application

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (05)** |
|  | 1. Students will explain chemical reaction. 2. Students will explain the reaction which apply on toy car to race or drive | Application about the chemical reaction apply to drive and race the toy car. | **1**  **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Material: Flash cards showing models of different ions (Na+m Ck-, O-2, Mg+2, Al+3

S-2m etc.,

.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-12

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
|  | Student will explain the formation of iconic bond between positive and negative icons. | Comprehension about the formation of ionic bond | **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Define Bond
2. Describe the formation of ionic bond between aluminum and chlorine
3. Draw formation of ionic bond between aluminum and chlorine by using electron dot and electron cross structures.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-12

**Type of Task:** Short-Questions

**Level of SLO:** Comprehensions

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (05)** |
|  | 1. Students will explain ionic bond 2. Students will explain the formation of ionic bond between aluminum and chlorine. 3. Students will explain the electron dot and cross structures of aluminum and chlorine. | 1. Comprehension about ionic bond 2. Comprehension about the formation of ionic bond between aluminum and chlorine 3. Comprehension about the electron dot and cross structure. | **1**  **3**  **2** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Create Jigsaw cutouts that students can use to piece together the atoms to fro covalent bonds.

Start by creating a set of puzzle piece that lift to gather with zigzag or key hole shapes.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-13

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
|  | Students will explain the formation of covalent bonds in  H2, O2 and N2  Molecule swath the help of Jigsaw cutouts. | Comprehension about the formation of single, double and triple covalent bonds. | **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Define covalent bound
2. Describe covalent bond in hydrogen molecule
3. How many types of covalent bonds.
4. Distinguish between single, double, and triple, covalent bond with example of H2 O2 and N2 molecules

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-13

**Type of Task:** Short-Questions

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (05)** |
|  | 1. Students will explain the covalent bond 2. Student will explain the covalent bond with the help of the formation of H2molecules. 3. Students will explain types of bonds and distinguish then with examples of H2 O2 and N2 molecules | Comprehension about the covalent bond.  Comprehension about the formation of covalent bond.  Comprehension about the type of covalent bonds. | **1**  **2**  **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Material: Flash cards , Markers

Activity:

Some ionic compounds and some covalent compounds are written on flash cards and students are asked to identify covalent and ionic compounds.

.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-14

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
|  | Students will identify covalent and ionic compounds written on flash cards | Knowledge about the ionic and covalent compounds | **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Name some ionic compounds

Name some covalent compounds

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-14

**Type of Task:** Short-Questions

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (06)** |
|  | 1. Students will names explain some ionic compounds 2. Student will name and explain some covalent compounds. | 1. Knowledge about ionic compound 2. Knowledge about covalent compounds. | **3**  **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Formative**

**\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Material: Flash cards , Markers

Activity:

Draw positive and negative ions and join them to represent ionic bond

Draw atoms of non-metals using electron dot and cross structure and join them to represent covalent bond.

.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  06

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-15

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

**Level of Item: Comprehension**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (6)** |
|  | Students will explain the formation of ionic bond by using flash cards and dot & cross structures  Students will explain covalent bond by using electron dot and cross structures on flash cards. | Comprehension about the ionic bonds by using electron dot and cross structures.  Compression about the formation of covalent bond by using elector dot and cross structure. | **3**  **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Represent the formation of ionic bond between sodium and chlorine by using electron dot and cross structure.

Represent the formation of diatomic molecules cl2, O2, N2) by using electron dot and cross structure.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 06

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-15

**Type of Task:** Short-Questions

**Level of SLO:** COMPREHNSION

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (06)** |
|  | 1. Students will names explain some ionic bond by using electron dot and cross structures 2. Students will explain the formation of covalent bond by using electron dot and cross structures. | 1. Comprehension about the ionic bound by using dot and cross structure. 2. Comprehension about the covalent bond by using electron dot and cross structures. ‘ | **3**  **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Activity is already given on assessment framework

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  07

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-16

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (3)** |
|  |  |  | **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Question is already given on assessment framework

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 07

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-16

**Type of Task:** Short-Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
|  |  |  | **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Individual Activity**

Material: Water, naoh, Na2, CO2, HCL, Vinegar, Soap, Cacl, Cacl2, Blue and red litmus paper,

Activity: Make Solutions of the above substances students the above sustains students. Students are asked to identify acid alkalis and salts.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  07

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-17

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | Students will explain with the help of blue and red litmus paper whether the substance is acid, alkali or salt. | Knowledge about the identification of acids, alkalis and salts | **5** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Recall acids bases and salts.
2. Describe physical properties of acids, alkalis and salts.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 07

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-17

**Type of Task:** Long-Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (9)** |
|  | Students will explain acids, alkalis and salts. |  | **3** |
|  | Students will explain the physical properties of skids, alkalis and salts. |  | **6** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Individual Activity**

Material: PH paper, lemon juice, soap solution ammonia solution, Hydrochloric acid, water, sodium hydroxide, NaCl, Baking soda.

Activity: Students are asked to measure the PH of above materials.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  07

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-18

**Type of Task:** Activity

**Level of SLO** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | Students will explain the PH of the above material and also explain the PH range of other indicators. | Knowledge about the PH of different materials. | **5** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Define PH scale
2. Draw a PH scale
3. What is the PH range of acidic solutions
4. What is the PH range of basic solutions
5. What is the PH range of natural solution

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 07

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-18

**Type of Task:** Short-Question

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (7)** |
|  | Students will explain PH scale | Knowledge about PH scale | **1** |
|  | Students will draw a PH scale showing its range | Knowledge about drawing a PH scale with its ranted | **3** |
|  | Students will explain the PH rang of acidic basic and natural solutions | Knowledge about the PH range of acidic basic and natural solutions | **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Individual Activity**

Material: PH Paper, hydro-chloric acid, sodium Hydroxide Na2 Co3, apple Juice, orange Juice, Acetic acid, blood, water, milk, NaCl

Activity: Students will measure the PH of the above materials on the basic of PH of the above materials students will identify weather the material is acidic, basic or natural

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  07

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-19

**Type of Task:** Activity

**Level of SLO** comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | Students will explain the measurement of PH of the above material and categorize those material as acidic, basic or natural | Comprehension about the identification of above material as acidic, basic or natural on the basic of PH scale | **5** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Define PH
2. How you categories substances as acidic, basic or natural on the basic of PH of substances.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 07

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-19

**Type of Task:** Short-Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | Students will explain PH and PH Scale. | Comprehension about the nature of substances as acids, bases and salts (neutral) on the basic of PH | **5** |
|  | Students will measure the PH of some substance and categorize them as acids, basic and salts  (Natural) |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Individual Activity**

Material: Hydrochloric acid solution, Sod Hydroxide solution, Phenolphthalein, burette, conical flash, etc.

Activity,

Students will performed this activity of neutralization inaction under the guidance of teacher.

HCL+NAOH > NACL + H20

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  07

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-20

**Type of Task:** Activity

**Level of SLO** comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | Students will explain the neutralization reaction HCl+ NaOH > NACL + H20l | Comprehension about the neutralization reaction | **5** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Task:**

1. Define naturalization reaction
2. Describe the process of neutralization reaction
3. How is naturalization used in digestion
4. How neutralization process prevent tooth decay.
5. Give some more examples of neutralization from daily life

**Subject:** G.SC

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 07

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-20

**Type of Task:** Short-Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
|  | Students will explain neutralization reaction | Comprehension about the neutralization reaction | **1** |
|  | Students will explain the neutralization process |
|  | Students will explain the neutralization reaction used in digestion | Comprehension about the process of neutralization | **1** |
|  | Students will explain some more examples of naturalization from daily life | Comprehension about the neutralization reaction take place in stomach | **2** |
| **4** |  | Comprehension about daily life examples of Neutralization | **3** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Individual Activity**

Material: Flash cards on which written uses of acids, bases and salts

Activity: Students have to identity the uses of acids or bases or salts.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  07

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-21

**Type of Task:** Activity

**Level of SLO** comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
|  | Students will explain the uses of acids, bases and salts | Comprehension about the uses of acids, bases and salts | **4** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

1. Recall acids, bases and salts
2. Write the uses of acids
3. Write the uses of bases
4. Write the uses of salts
5. Give examples of acids, bases and salts from our daily life

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 07

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-21

**Type of Task:** Short-Question

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (7)** |
|  | Students will recall acids, bases and salts  Students will explain the uses of acids.  Students will explain the uses of bases  Students will explain the uses of salts. | 1. Comprehension about acids, bases and salts. 2. Comprehension about the uses of acids. 3. Comprehension about the bases 4. Comprehension about the uses of salts. | **1** |
| **2** |
| **2** |
|  |  | **2** |

**Nasreen Fatima**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Group Activity**

Task 1: Teacher will turn off the light and make a room dark. Then take a glass and direct it toward wall and turn on the touch on one side of glass.

Observe what happens?

As light is transmitted completely so it glass is a material.

Task 2: Repeat the above given producer but instead of glass we will use tissue paper.

What happen why you pass light though tissue paper? So--- tissue is ---- material.

Task 3: Repeat process with cardboard sheet what happens…. Card board is…. Material.

Task 4: Take a torch and a mirror Shine the flashlight on the mirror and see what happens. Dees it shines batch at you or not Ans. This process is

Task 5: Take a glass of water and white paper. Place a glass of water near a sunny window next place a sheet of white paper on the other side of a glass. What did you notice this is called of light?

Observation sheet.

|  |  |  |
| --- | --- | --- |
| TASK | WHAT happened | Property of light |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

**Subject: G.SC**

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-22

**Type of Task:** Activity

**Level of SLO** knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Name, basic properties of light | Knowledge about basic properties of light | **05** |
| **2** | Describe and Recognize the basic properties of light | Knowledge about basic properties of light. | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

List basic properties of light?

Define the absorption of light?

State the dispersions of light

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-22

**Type of Task:** Short Q/A

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe basic properties of light | Knowledge about basic properties of light | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Materials Required

Plane mirror (half silvered) so that object on the opposite side is visible binder clip to hold mirror, sheet of paper, pen, 2 candles

**Procedure**

On a sheet of paper draw a line and rest a mirror upright on the line Then take 1 candle and lit it then placed it on the paper and draw a circle around it look into the mirror and see an image of the candle As the mirror is half silvered the object on the other sides of mirror can be seen from this side of mirror. Take 2nd candle and position on the other side/opposite side at the location where it seems to be exactly aligned with the image of the candle in front. Now at this point look in the mirror at the image of candle notice that 2nd candle is aligned with that image position no matter from what angle we view the image from. Now remove the mirror rom paper and trace around the 2nd candle with pen now measure the distance from candle 1 to line of mirror. And then from candle 2 to line of mirror

Is this distance equal or not?

What does this experiment show?

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-23

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Show how an image is formed by the plane mirror | Comprehend formation of image | **5** |
| **2** | Describe how an image is formed by place mirror. | Understand the formation of image by place mirror. | **5** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

How the image is formed?

Why the image seems to originate from behind the mirror?

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-23

**Type of Task:** Short Q/A

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe how an image is formed by plane mirror. | Understanding the formation of image by plane mirror. | **05** |
| **2** | Explain why image seems to originate from behind the mirror. | Comprehended the origination of image | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

**Materials required:**

White sheet paper, comb, black paper, torch mirror, pencil, ruler, protractor,

**Procedure**

Cover a table with a white sheet of paper take a comb and cover all its openings except the middle on with black paper place the comb perpendicular to the white sheet of paper now light up as torch. Through it light through the opening of the comb from inside adjust the torch in such a way that you can see light on the white sheet of paper. Now place mirror in the path of this light Draw a line on mirror and much the incident 7 reflected ray with pencil. Now draw the normal also with the help of protector measure the angle of incidence and angle of reflection Now Answer the following questions

Does rays of incidence reflection & Normal lie on same plane?

Is Angle of incidence is equal to angle of reflection?

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-24

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | State laws of reflection | Knowledge about laws of reflection | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Define Reflection of Light?

State the laws of Reflection?

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-24

**Type of Task:** Short Q/A

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Define Reflection of light. | Knowledge about Reflection of light. | **05** |
| **2** | State laws of Reflection. | Knowledge about Reflection of light | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Materials Required

Shaving mirror, head mirror, pictures of ophthalmoscope, Telescope headlights, Telescope, he alights, pictures of solar furnace, flash light, sunglasses, picture of reflection.

**Procedure** Classify following objects in different types of curved mirrors

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-25

**Type of Task:** Application

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Describe different optical instruments which use curved mirrors. | Understanding the use of curved mirrors in daily life. | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Discuss the uses of curved mirrors in optical instruments used in our real life?

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-25

**Type of Task:** Activity

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Describe different optical instruments which use curved mirrors. | Understand the use of Curved mirrors in daily life. | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Material Required

Flash light 3 red color jelly, 3 green color jelly (Candyland) etc. laser light (red, Green white sheet)

**Procedure**

Place jelly on white sheet of paper and turn off the light of the room Align the jellies side by side Now at some distance place green jellies also on sheet on paper. Now take a laser red and shine on the red jelly.

See what happened?

Take shine red laser on green jelly and see what happens?

Take green laser and repeat the procedure. Observe & note

Take flash light and repeat the procedure. Observe & Note

Now fill the observation sheet following words reflect absorb do not absorb

|  |  |  |  |
| --- | --- | --- | --- |
| Color of Jelly | Red Laser | Green laser | Flash light |
| Red Jellies |  |  |  |
| Green |  |  |  |

Why flashlight changes color according to jellies shine light on them?

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-26

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Describe that an object has a color of light that it reflects or absorb | Understand that color in light absorbs or reflect is the color of the object | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Sana is wearing glasses with red color filter.

She uses red filter to look at the lamp that gives white light, but the lamp appears red Explain how?

She look at red light lamp with red color glasses. What color with the lamp appear to her?

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-26

**Type of Task:** Activity

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe that an object has a color of light that it reflect or absorb | Understand that color in light absorbs or reflects is the color of the object. | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Fill the glass with water and put a pencil in glass.

What did you see and why?

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-27

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Define the Refraction of light | Knowledge about Refraction of light | **09** |
| **2** | Explain the phenomenon of refraction. | Understanding the phenomenon of refraction. | **06** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Explain that light is refracted at the boundary b/w air and any transparent material?

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-27

**Type of Task:** Short Q/A

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Explain the phenomenon of Refraction of light. | Understand the refraction of light | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Distinguish between the phenomena of refraction & Reflection from the following examples and explain your choice.

Twining of stars

Periscope.

Kaleidoscope

Pool of water appears to be less deep than what it actually is rainbow formation in the sky

Camera lenses, glasses

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-

**Type of Task:**

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Distinguish b/w reflection and refraction with daily life examples. | Understanding Reflection & Refraction in everyday life activities | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Explain the difference between Reflection & Refraction of light.

Give At least 3 examples of Reflection and Reflection each from daily life

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-28

**Type of Task:** Short Q/A

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Distinguish between Refraction and Reflection of light with daily life examples. | Understand Reflection & Refraction in everyday life activities. | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Cd white Surface a white sheet, flashlight or sunlight

**Procedure**

Place CD in bright light or shine flashlight on shining side of Cd to see that light is made up of many colors

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-29

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (05)** |
| **1** | Recognize that light is made up of many color. | Comprehend that light is made up of many colors | **5** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Write names of color which you see in white light in right order?

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-29

**Type of Task:** Activity

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Recognize that light is made up of many color | Understanding that light is made up of many color. | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

What will be the characteristic of images Fill the table below

|  |  |  |
| --- | --- | --- |
| Characteristic | Possible values | Plane mirrors |
| Magnification |  |  |
| Position |  |  |
|  | Upright invested |  |
|  | Read virtual |  |
|  |  |  |

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-30

**Type of Task:** worksheet

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe the characteristics of inmate formed by plane mirrors | Understand the characteristics of image formed by plane mirror | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Discuss the characteristics of image formed by plane mirror.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-30

**Type of Task:** Short Q/A

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe the characteristics of image formed by plane mirror | Understand the characteristics of image farmed by plane mirror | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

**Material**: Flashlight, red, blue, green, white A 4 papers plastic bag (Transparent) permanent marker of red, blue, green. Color, red, blue green, cellophane

Paper (easily available in market for gift wrapping Rubber band

**Procedure:**

Make color filter take plastic bags cut then in 4x4 and color each piece with permanent marker of different colors. Let red color on sides and use colored side in front on light means inward.

Dou hen the room turn on the light and aim it on white paper observe and record it in observation table. Repeat step 2 with red blue green piece of paper place the red filter in front of flashlight using rubber brand to secure the cellophane paper filter shine the filtered beam on white, red, blue and green paper record and see the colors.

Repeat step 4 using blue and then green filter after each test record the result

Result

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Filter paper | White | Red | Green | Blue |
| White |  |  |  |  |
| Red |  |  |  |  |
| Green |  |  |  |  |
| Blue |  |  |  |  |

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-31

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Explain that appear color of objects are related to reflected or observed light | Understanding that the appearance of colors is related to reflected 09 absorbed light | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

If we use green filter to look at the green light what color of the light with appear to you

If we use blue filter to look at blue that gives white light the color appear will be white on blue?   
Explain how.

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-31

**Type of Task:** short Q/A

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe that apparent color of object are related to reflected or absorbed light | Understanding that the appearance o color is related to reflected on absorbed light | **10** |

**Ramsha**

**Reviewer Comments:**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Draw say diagram and tell the nature of object. If we use concave mirror with following condition.

|  |  |  |  |
| --- | --- | --- | --- |
| Object position | Image position | Ray diagram | Nature of image |
| At infinity | At focus |  |  |
| AT C | At C |  |  |
| Between be pole P and  Focus F | Behind mirror |  |  |

**Convex Mirror**

|  |  |  |  |
| --- | --- | --- | --- |
| Object position | Image position | Ray diagram | Nature of image |
| Between infinity & pole | Behind the mirror between the focus & pole |  |  |
| At infinity |  |  |  |
|  |  |  |  |

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-32

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Define spherical mirror | Knowledge about spherical mirrors. | **5** |
| **2** | Describe characteristics of image formed by spherical mirrors | Understand the characteristic of spherical mirrors | **5** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Define and list spherical mirror?

Draw Ray diagram and state the nature of object in following conditions

Concave mirrors

|  |  |  |  |
| --- | --- | --- | --- |
| Object position | Image position | Ray Diagram | Nature of image |
| At C | At c |  |  |
| Between infinite & C | Between F and C |  |  |

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-32

**Type of Task:** Short Q/A

**Level of SLO:** Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Define Spherical mirror | Knowledge about spherical mirrors | **05** |
| **2** | Describe image formed by spherical mirrors | Understanding the characteristics of spherical mirrors | **05** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject: G.SC**

**Group Activity**

Material Required

Magnifying glass, pictures of microscope, glass le peephole picture camera, flashlight rear view mirror, picture of telescope sunglasses, picture of sheet light reflectors, vanity kaleidoscope, periscope, mirror

**Procedure**

**Teacher** will show each object and ask students weather they are convex or concave mirror. Or plane mirrors.

**Domain: B-** Physical Science

**Grade:** 08

**Unit:**  09

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-B-33

**Type of Task:** Activity

**Level of SLO** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe use of different instruments in which spherical & plane mirrors are used | Understand the use of special plane mirrors in daily life. | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Give examples At least 5 each of different untorments in which spherical mirrors are used?

Concave Convex Plane

Mirror Mirror Mirror

**Domain: B** Physical Science

**Grade:** 08

**Unit:** 09

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-08-B-33

**Type of Task:** short Q/A

**Level of SLO:** Comprehension

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe use of different instruments in which spherical mirrors are used. | Understand the use o spherical mirrors in daily life | **10** |

**Ramsha**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Group Activity**

**Worksheets**

Define the terms

1. Star
2. Galaxy
3. Milky way
4. Black Hole

**Domain: B-** Earth sciences

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-08-C01

**Type of Task:** worksheet

**Level of SLO:**  Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (4)** |
| **1** | Recapitulate the terminologies like Star, Galaxy, Milky way and Black holes. | Knowledge about space science | (4) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

Extensive Question

Write a comprehensive note on astronomy with major focus on terminologies i.e.

1. Star
2. Galaxy
3. Milky way
4. Black Hole

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-06-C-01

**Type of Task:** Extensive Question

**Level of SLO:**  Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Review the terms like Star, Galaxy, Milky way and Black holes. | Knowledge about objects in space science | (10) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Group Activity**

**Materials**: Photos of type of galaxies like spiral, elliptical and irregular),

Methods:

1. Divide students in group of 5 and pass photo to each group.

2. Tell student to examine photo and ask them to write what they feel is same or different from three galaxy types.

3. Students will record their observations.

4. Teachers will discuss their findings and grade them.

**Subject:** G.SC

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-06-C-02

**Type of Task:** Group Activity

**Level of SLO:**  Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Classify type of galaxies. | Knowledge about galaxy and their type. | (2) |
| **2** | Compare type of galaxies | Understanding about how various galaxies are different from each other. | (3) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

**Extended Questions:**

What do you know about galaxies?

Differentiate between type of galaxies like spiral, elliptical and irregular in tabulated form.

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-06-C-02

**Type of Task:** Extended Question

**Level of SLO:**  Knowledge

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Explain what galaxies are. | Knowledge about galaxy. | (4) |
| **2** | Interpret how we can classify various type of galaxies | Understanding about various types of galaxies. | (6) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Group Activity**

**Worksheet Activity:**

Short answer questions.

1. How death of star occurs
2. Which reaction is involved during dying of stars
3. How red giant is formed
4. How Black dwarf is formed from white dwarf.
5. Define Pull far.
6. How Black hole is formed.

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-06-C-03

**Type of Task:** Work Sheet

**Level of SLO:**  Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Discuss formation of star. | Knowledge about formation of stars. | (2) |
| **2** | Explain stages in star’s life. | Understanding about stages in life of star. | (2) |
| **3** | Describe formation of white dwarfs, neutron star and black hole. | Knowledge about death of star and formation of white dwarfs, neutron and black hole from it. | (2) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

**Role play Group Activity:**

1. Make three groups of students.
2. Group-1 will perform role play of formation of white dwarf by using labels in their hands and performing the hands with delivery of dialogues i.e. “I was red giant and now I have become white dwarf by \_\_\_\_\_\_\_\_\_\_”
3. Group-2 will perform formation of neutron star on similar pattern
4. Similarly, Group-3 will perform formation of black hole.
5. Teacher will grade according to student’s understanding about dying and formation of stars.

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-06-C-03

**Type of Task:** Role Play Group

**Level of SLO:**  Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe formation of red giant, white and black dwarfs, neutrons and black holes. | Understanding about relation of dying stars to formation of new stars. | (10) |
| **2** | Describe formation of red giant, white and black dwarfs, neutrons and black holes. | Understanding about relation of dying stars to formation of new stars. | (10) |
| **3** | Describe formation of red giant, white and black dwarfs, neutrons and black holes. | Understanding about relation of dying stars to formation of new stars. | (10) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Group Activity**

**Worksheet:**

Write short answers to the following questions.

1. What do you about sun and its origin
2. What components made out sun?
3. What energy is involved in nuclear reaction in sun?
4. What do you know about red giant stage?

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-06-C-04

**Type of Task:** Worksheet

**Level of SLO:** Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Discuss Birth and eventual death of sun. | Knowledge about birth and death of sun. | (4) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

**Activity: Student as Instructor**

Students will make their own lesson plans and reflect their concept about birth and eventual death of sun. Students present their lesson plan. (Note: Depending on number of students, activity can be done individually or in groups)

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-06-C-04

**Type of Task:** Activity

**Level of SLO:**  Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Explain stages of sun’s life cycle. | Knowledge about birth and death of sun. | (10) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-06-C-05

**Type of Task:** Activity work Sheet

**Level of SLO:**  Comprehensive

**Group Activity**

**Activity:**

Fill in the blanks (0.5 marks each blank, total marks = 6):-

1. Telescope is used by \_\_\_\_\_\_\_\_\_\_\_\_\_ to see far away objects enlarged.
2. Telescope use\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_ to gather and focus light.
3. The image is blurry because mirror or lenses of telescope had \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on it.
4. Optical telescope is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ telescope.
5. Hubble space telescope is used to observe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Capability and life time of Hubble telescope is increased by aging constant \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of parts.

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Explain function of telescope. | Knowledge about function and uses of telescope by astronomer. | (3) |
| **2** | Explain Hubble space telescope. | Understanding largest telescope used by astronomers to observe distant planets and galaxies. | (3) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

**Extensive Question:**

Describe telescope, its components and uses by astronomers.

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-06-C-05

**Type of Task:** Extended Question

**Level of SLO:**  Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Discuss components and uses of telescope by astronomers. | Knowledge about components and uses of telescope. | (10) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Formative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Group Activity**

**Short answers to following questions.**

1. What is space probe?
2. What are space probes used for?
3. Why space probe are designed?
4. What is unabbreviated form of SUPARCO?
5. What are artificial satellites used for?

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Formative

**SLO: (M-…-B-)** S-06-C-06

**Type of Task:** Short Answer

**Level of SLO:**  Comprehensive

**Task:**

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| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (5)** |
| **1** | Describe space probe and its uses. | Understanding uses of space probes. | (3) |
| **2** | Summarize working of SUPARCO in generating space technology. | Knowledge about SUPARCO, and its responsibility for nation’s public space program. | (1) |
| **3** | Define artificial satellites. | Knowledge about artificial satellites. | (1) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**

**Summative**

**\*\*\*\*\*\*\***

**Subject:** G.SC

**Task:**

**Extensive Questions:**

1. What is space probe? Write advantages of designing space probes?
2. “Asteroid and comets threat out planet” justify the statement by giving arguments about how technology can help locate these hazards in advance.

**Domain: B-** Earth Science

**Grade:** - 08

**Unit:** 12

**Type of Assessment:** Summative

**SLO: (M-…-B-)** S-06-C-06

**Type of Task:** Extensive Question

**Level of SLO:**  Comprehensive

**Task:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr. No.** | **Expected Response** | **Skill Observed** | **Score (10)** |
| **1** | Describe the advancement in space technology. | Knowledge about space technology specifically space probe with its uses. | (4) |
| **2** | Analyze benefits generated by technology of space exploration. | Knowledge about advancement in space science technology gives social benefits. | (6) |

**Bushra Gul Yousaf Zai**

**Reviewer Comments:**

**Dr. Tooba Saleem**