GS AB 4 ANSWERS KEYS

1.1 Science and Its Major Fields

Exercise A:

Biology	Chemistry	Physics
Cells	Blood	Eyes
Tissues	Sweat	Ears
Organ	Saliva	Skeletal system
Organ system	Urine	Muscular system

Exercise B: Practical

1.2 Characteristics of Living Things

Exercise A:

	New born		Adult
1.	Need food to grow and survive.	1.	Need food to survive.
2.	Grow and change into adult.	2.	Adult grow into old.
3.	Newborn cannot reproduce.	3.	Adult can reproduce.
4.	New born breaths.	4.	Adult can breaths too.
5.	New born need support to move.	5.	Adult can move by them self.
6.	New born are sensitive they can feel environmental changes.	6.	Adult are sensitive too they also can feel environmental changes.
7.	New born release their waste through perspiration.	7.	Adult also release their waste through perspiration.

Exercise B:

- 1. Both are living thing.
- 2. Both need food, water and air to survive.
- 3. Both can reproduce.
- 4. Both grow and change.
- 5. Both will die one day.

Exercise C: Practical

3.1 Our Body Sciences

Exercise A: Practical

Exercise B: Practical

3.2 The Musculoskeletal System

Exercise A: Practical

3.3 Balanced Diet

Exercise A:

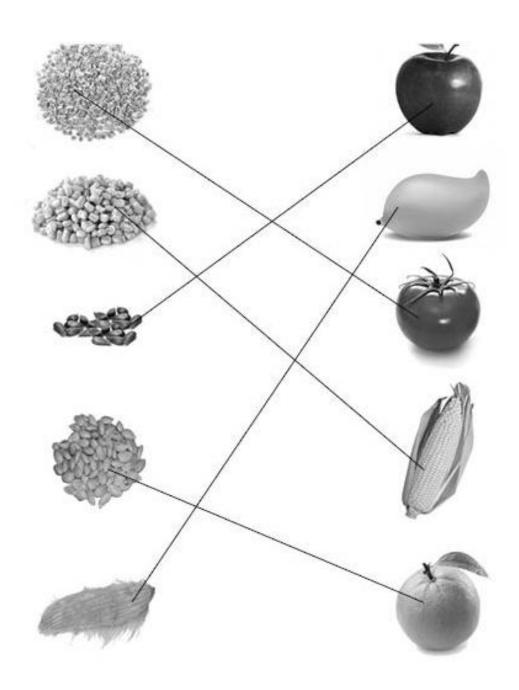
Dairy product	Yogurt, cheese and milk.	Provides calcium, makes our muscles strong and repair body tissues.
Grains	Wheat, corn, bread and cereals.	Provides carbohydrate, contain fiber, helps in digestion food.
Vegetables	Carrot, onion, potato.	Provides calcium and minerals, makes body and teeth stronger.
Fruits	Orange, pomegranate, apple.	Provides calcium, potassium and minerals, helps body to fight against infections.
Proteins	Chicken, egg, fish.	Provides protein, makes muscles strong and repair body tissues.
Carbohydrates	Pasta, spaghetti, rice.	Provides carbohydrates, provides immediate source of energy to body.

Exercise B:

- 1. Balanced diet provides right amount of proteins, carbohydrates, minerals, vitamins and fiber to the body.
- 2. It keeps our body strong and healthy.
- 3. Too much intake of one type of food harm to our body.
- 4. Children, heavy workers require more food.
- 5. Persons who do a lot of mental work should take less carbohydrate but more proteins.

Exercise C: By yourself

Exercise D:



3.4 Teeth

Exercise A: Practical

Exercise B: Practical

Exercise C: Practical

- 1. Baby teeth fallen as their roots begin to dissolve. When an adult tooth moves up in the jaw, eventually babies start to lose their baby teeth.
- 2. Those people who lost their incisor teeth they cannot eat properly because incisor teeth have wide and sharp cutting edges that used for snipping or cutting food.
- 3. Bacteria enters in a tooth and damage it internally and leaves a hallow space called cavity. It is formed due to left sugary food in our tooth.

4.

- Brush your teeth with fluoride tooth paste after eating or drinking.
- Avoid frequent snacking and sugary foods.
- Take milk daily to make your teeth stronger.

4.1 Classifying Animals

Exercise A: Practical

Exercise B: Practical

4.2 Habitat and Adaptation

Exercise A:

Animals	Adaptation	How it helps the animal
Polar bear	Thick fur	Keeps polar bear warm in cold water
Wood packer	Sharp beaks	They have sharp beaks to make openings in trees to store their food
Giraffe	Long neck	Easier to reach the food other animals cant in the trees
Sand grouse	Maintain body temperature	Helps to survive in hottest temperature

Exercise B: Practical

Predator for	Animals	Prey for
bee	Lizard	hen
shark	Dolphin	crab
dog	Cat	mice
loin	Fox	frog
tiger	Deer	birds

Exercise C: Practical

1. Giraffe: Long neck for eating tree tops.

2. Dolphin: Gills for breathe in water.

3. Deer: Strong muscles for running escape from predators.

4. Rabbit: Long ears for strong hearing to listen nearby predator voice.

5. Scorpio: Hard skeleton to avoid extreme temperature.

5.1 Investigating Leaves

Exercise A: Practical

Exercise B: By students.

Exercise C: By students.

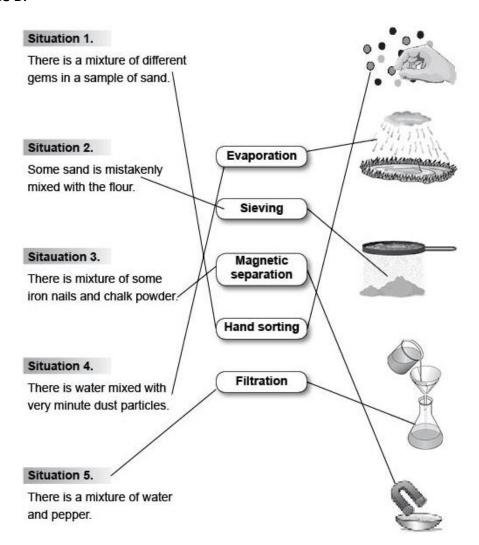
5.2 Pollination and Fertilization

Exercise A: Practical

6.1 Separating Mixtures

Exercise A: Practical

Exercise B:



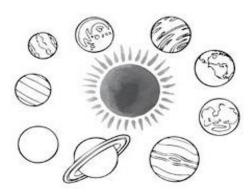
Exercise C: Practical

6.2 Investigating Atmosphere

Exercise A: Practical

Exercise B: Practical

Exercise C:



planets

in solar system



astronaut

on moon



volcano

usually in pacific ocean



rocket

on space

7.1 Friction and Resistance

Exercise A: Practical

Exercise B:



This car will meet the destination first because it is moving on smooth surface. Smooth surface have less friction and car moves with high speed on it rather than the rough surface.

Exercise C:

Merits of friction:

- 1. It allows us to walk.
- 2. Prevents us from slipping.
- 3. Helps in holding or gripping things.
- 4. Helps in supporting a ladder inclined to a wall.
- 5. Helps in producing fire.

Demerits of friction:

- 1. Slow down the speed of vehicles.
- 2. Produce unnecessary heat.
- 3. Car engine becomes hotter because of friction.
- 4. Produces undesirable noises.
- 5. Due to friction, engines of automobiles consume more fuel.

7.2 Investigating Machines

Exercise A: By students.

Exercise B: Practical.

Exercise C: Practical.

7.3 Electricity and The Circuits

Exercise A: Practical.

Exercise B: Practical.