Republic of the Philippines

Department of Education

Region IV-A CALABARZON

ABUNDIO TORRE MEMORIAL ELEMENTARY SCHOOL

DIAGNOSTIC TEST

TABLE OF SPECIFICATIONS IN SCIENCE 4

Learning Competencies	Item Placement	No. of Days	No. of Items	Percentage of Items	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Use information from secondary sources to identify a famous scientist and their invention(s).	1-5	-	5	12.5%	2	2	1	0	0	0
Use information from home or the local community to identify a scientific invention and explain its impact.	6-10	-	5	12.5%	1	2	1	1	0	0
The learners observe the root and shoot system in plants and describe why they are important.	11-15	-	5	12.5%	2	2	1	0	0	0
The learners use a drawing or diagram to classify some Philippine animals and plants, based on their habitat: some live on land (terrestrial), live in water (aquatic) or fly in the air (aerial).	16-20	-	5	12.5%	1	2	2	0	0	0

The learners construct and label simple graphs of different speeds including stationary and uniform speeds, both fast and slow.	21-25	-	5	12.5%	1	2	2	0	0	0
1: The learners identify that energy is something that can cause change including light, sound, and heat energy. The learners observe and identify sources and uses of light, sound, and heat energy at school, at home and in the local community.	26-30	-	5	12.5%	2	3	0	0	0	0
1. describe some of the overall characteristics of the Sun, such as its composition, its size, and the main energy it radiates. 2. describe the changes in the direction and length of shadows from a shadow stick and use the information to infer why the Sun changes position during a day; and 3. make suggestions about the importance of the Sun to living things for a group or class discussion and confirm and record ideas by referring to	31-35	-	5	12.5%	1	3	1	0	0	0

trustworthy secondary sources of information.										
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Total	**1-40**	**–**	**40**	**100%**	**10**	**19**	**9**	**2**	**0**	**0**

DIAGNOSTIC TEST IN SCIENCE 4

NAME:_____ DATE:_____

SCORE:_____

Directions: Read the questions carefully and choose the correct answer.

1. Who is known as the "Father of Electricity" and discovered the laws of electromagnetism?
a) Isaac Newton
b) Albert Einstein
c) Michael Faraday
d) Gregorio Zara
2. What invention is Dr. Fe del Mundo, a famous Filipino scientist, known for?
a) Fluorescent lamp
b) Medical incubator
c) Telephone
d) Microscope
3. Marie Curie is famous for discovering two elements. Which of the following are they?
a) Polonium and Radium
b) Oxygen and Hydrogen
c) Gold and Silver
d) Uranium and Thorium
4. Who invented the polio vaccine, which has helped save millions of lives?
a) Louis Pasteur
b) Jonas Salk
c) Alexander Fleming
d) Anacleto del Rosario
5. Which famous Filipino scientist is known for inventing the moon rover's space suit?
a) Eduardo San Juan
b) Julian Banzon
c) Benjamin Almeda
d) Robert Hooke
6. Which common household appliance, invented by James Harrison, is used to preserve food by keeping it cold?
a) Washing machine
b) Refrigerator
c) Microwave oven
d) Toaster
7. What invention, often used in homes to clean floors, works by creating a suction to remove dust and debris?
a) Dishwasher
b) Vacuum cleaner
c) Air conditioner
d) Electric fan
8. Which invention allows us to communicate with people from far away using sound waves and electrical signals?
a) Radio
b) Television
c) Telephone

d) Internet
9. The invention of which kitchen appliance has made cooking food faster by using electromagnetic waves?
a) Oven
b) Blender
c) Refrigerator
d) Microwave oven
10. What scientific invention, found in almost every household, provides light after dark and is often powered by electricity?
a) Flashlight
b) Light bulb
c) Candle
d) Lantern
11. What is the main function of the root system in plants?
a. To absorb sunlight for photosynthesis
b. To absorb water and nutrients from the soil
c. To produce flowers and fruits
d. To help the plant release oxygen
12. Which of the following is part of the shoot system in plants?
a. Roots
b. Stem
c. Soil
d. Nutrients
13. Why is the shoot system important for plants?
a. It anchors the plant to the ground
b. It absorbs water from the soil
c. It supports the plant and transports nutrients
d. It stores food for the plant
14. What do the leaves in the shoot system primarily do for the plant?
a. They absorb water from the soil
b. They make food through photosynthesis
c. They anchor the plant in the soil
d. They absorb nutrients from the air
15. How do roots help plants survive in dry conditions?
a. They store extra water and nutrients
b. They grow towards the sun
c. They absorb carbon dioxide from the air
d. They release oxygen into the soil
16. Which of the following animals is classified as terrestrial?
a. Fish
b. Eagle
c. Carabao

d. Dolphin
17. What habitat do corals primarily belong to?
a. Terrestrial
b. Aerial
c. Aquatic
d. Desert
18. Which of the following plants is commonly found in water?
a. Bamboo
b. Mangrove
c. Pine tree
d. Sunflower
19. Which animal is known for flying in the air?
a. Frog
b. Tarsier
c. Parrot
d. Snail
20. What type of habitat do the Philippine Eagle and the Flying Fox belong to?
a. Terrestrial
b. Aquatic
c. Aerial
d. None of the above
21. Which type of graph would show a stationary object?
A) A straight, horizontal line
B) A straight, upward sloping line
C) A straight, downward sloping line
D) A zigzag line
22. In a graph showing speed, what does a straight, upward sloping line indicate?
A) The object is stationary.
B) The object is moving at a uniform (constant) speed.
C) The object is moving faster as time increases.
D) The object is moving slower as time increases.
23. What would a graph of an object moving at a slow, uniform speed look like?
A) A steep, upward line.
B) A shallow, upward line.
C) A zigzag line.
D) A horizontal line at the bottom.
24. Which graph represents an object moving faster as time passes?
A) A steep, upward sloping line.
B) A straight horizontal line.
C) A vertical line.
D) A downward sloping line.

25. If you want to create a graph that shows an object speeding up, which type of line would you draw?
A) A horizontal line.
B) A straight line that gets steeper.
C) A straight line that stays the same slope.
D) A straight line that gets flatter.
26. Which of the following is an example of light energy?
A) The sound from a bell ringing.
B) The warmth from a heater.
C) The light from a lamp.
D) The movement of a fan.
27. What is a source of sound energy in a school?
A) The sunlight coming through the windows.
B) The ringing of a school bell.
C) The heat from the classroom heater.
D) The light from a projector.
28. Which of the following is an example of heat energy?
A) The light from the sun.
B) The warmth from a stove.
C) The sound of a radio.
D) The light from a flashlight.
29. At home, which of the following would most likely be a source of light energy?
A) A fire in the fireplace.
B) A microwave oven.
C) A television screen.
D) A hairdryer.
30. Where might you find heat energy being used in a local community?
A) In a classroom lightbulb.
B) In a car engine.
C) In a radio speaker.
D) In a streetlight.
31. What is the main energy that the Sun radiates to Earth?
A) Heat and light
B) Sound and light
C) Electricity and heat
D) Heat and gas
32. Which of the following is true about the Sun's composition?
A) It is made up of solid rocks
B) It is composed mostly of hydrogen and helium
C) It is made of mostly gases and water
D) It is a ball of ice and gases
33. How does the length of a shadow change throughout the day?

A) It stays the same all day
B) It gets shorter as the Sun moves higher in the sky
C) It gets longer as the Sun moves higher in the sky
D) It changes based on the wind speed
34. What happens to a shadow when the Sun is at its highest point in the sky?
A) The shadow becomes longer
B) The shadow disappears
C) The shadow becomes shorter
D) The shadow turns blue
35. Why is the Sun important to living things on Earth?
A) It provides heat and light necessary for life
B) It helps animals sleep at night
C) It causes rain to fall every day
D) It is not important for living things
36. What is the size of the Sun compared to Earth?
A) The Sun is much smaller than Earth
B) The Sun is the same size as Earth
C) The Sun is much larger than Earth
D) The Sun is half the size of Earth
37. Which of the following best describes the energy that the Sun provides to Earth?
A) It only gives light to Earth
B) It radiates heat and light, making life possible on Earth
C) It only helps plants grow
D) It radiates cold and darkness
38. Why do shadows change direction throughout the day?
A) Because the Earth rotates on its axis and the Sun's position changes
B) Because clouds block the Sun's light
C) Because of the movement of the moon
D) Because the Earth changes shape
39. When is the shadow of an object the shortest?
A) Early morning
B) Midday when the Sun is directly overhead
C) Late afternoon
D) When the weather is cloudy
40. How does the Sun support life on Earth?
A) By providing food directly to plants and animals
B) By allowing plants to perform photosynthesis, which provides energy for food chains
C) By making the Earth cold and dark
D) By making the atmosphere thick and heavy

ANSWER KEYS:

1. C
2. B
3. A
4. B

5. A
6. B
7. B
8. C
9. D
10. B
11. B
12. B
13. C
14. B
15. A
16. C
17. C
18. B
19. C
20. C
21. A
22. B
23. B
24. A
25. B
26. C
27. B
28. B
29. C
30. B
31. A
32. B
33. B
34. C
35. A
36. C
37. B
38. A
39. B
40. B