



**परमाणु ऊर्जा शिक्षण संस्था**  
**Atomic Energy Education Society**  
**कार्यपत्रक / Worksheet (2025-26)**

कक्षा /Class: VIII विषय/Subject: Science माह/Month: July 2025

अंक/Marks: 40

दिया गया पाठ्यक्रम/Portion covered: Chapter: 1, Exploring the Investigative World of science

द्विद्यार्थी का नाम/Name of the student: \_\_\_\_\_

अनुक्रमांक /Roll No. \_\_\_\_\_ कक्षा/अनुभाग Class /Sec.: \_\_\_\_\_ दिनांक/Date: \_\_\_\_\_

**I ) Multiple Choice Questions**

**(1X10=10)**

1. What is meant by 'systematic investigation' in science?  
a) Doing one experiment only Observation Workshops  
b) Observing and changing one factor at a time  
c) Repeating errors d) Memorising theory
2. What made humans develop the first calendars?  
a) Writing tools b) Seasons  
c) Watching Moon phases and sun movements d) Clocks
3. What is the main focus of science learning in Grade 8?  
a) Memorising definitions b) Reading about scientists  
c) Becoming investigators and exploring through experiments  
d) Learning only from textbooks
4. Which of the following helps our body fight infections?  
a) Junk food b) Noise c) Cold drinks d) Vaccines and nutritious food
5. What causes a ball thrown up to come back down?  
a) Air pressure b) Friction c) Force of gravity d) Wind
6. Which effect of electric current helps machines function?  
a) Heating effect b) Cooling effect c) Optical effect d) Magnetic effect
7. Why is observation considered critical in science?  
a) It provides real data to interpret b) It replaces theory  
c) It guarantees success d) It helps avoid reading
8. Which of the following is a pure substance?  
a) Tea b) Air c) Saltwater d) Oxygen
9. What causes the Moon's phases?  
a) Its own light b) The weather on Earth  
c) The positions of the Earth, Moon, and Sun d) Distance from the stars
10. Why is Earth 'just right' for life?  
a) It has liquid water and the right atmosphere b) It is close to the Moon  
c) It is very hot d) It is farthest from the Sun

## II) Assertion-Reason Type Questions

(1X4=4)

For question numbers from 17 to 20, two statements are given, one labelled as Assertion (A) and the other labelled as Reason(R). Select the correct answer to these questions from codes a), b), c), d) as given below.

- (a) Both assertion (A) and reason (R) are true and reason is the correct explanation of the assertion.
  - (b) Both assertion (A) and reason (R) are true but reason is not the correct explanation of the assertion.
  - (c) Assertion (A) is true but the Reason (R) is false.
  - (d) Assertion (A) is false but the Reason (R) is true.
11. Assertion (A): Some microorganisms help us stay healthy.  
Reason (R): All microbes cause infections.
12. Assertion (A): Cyclones are caused due to differences in air pressure.  
Reason (R): Air always flows from a high-pressure area to a low-pressure area.
13. Assertion (A): The Moon reflects light from the Sun.  
Reason (R): The Moon has its own light source.
14. Assertion (A): Everything around us is made of tiny particles.  
Reason (R): Particles of a solid can move freely.

## III Case Based Questions

( 1X 4= 4)

15. Rohan's younger sister fell ill with a throat infection. The doctor explained that the infection was caused by harmful bacteria, a type of microorganism. Rohan was surprised, as he had read that some microbes can also be helpful. The doctor agreed and advised them to follow proper health practices to stay healthy. Rohan's sister followed the doctor's instructions carefully, took the prescribed medicines, and recovered soon.
- a) What are microorganisms?
  - b) How can we fight against these infections?
  - c) Write the benefits of microorganisms.
  - d) How do vaccines help us stay healthy?

## IV Short Answer Type Questions

(2X5=10)

16. Mention two effects of electric current and explain how they are useful in our daily life.
17. How does a puri puff up while frying?
18. Why is it important to balance observation and creative thinking in science?
19. Explain force with an example.
20. How does science help improve our lives according to the passage?

## V Long Answer Questions

(3X4=12)

21. What is meant by the "Investigative World of Science"?
22. What are the different ways in which light behaves?
23. Write the differences between elements, compounds and mixtures.
24. How does Earth's atmosphere and distance from the Sun make it suitable for life? Also explain how human activities are affecting this balance of nature.