Rukmani Birla Modern High School

Session 2026-27

SUMMER ASSIGNMENT

Dear Students,

Summer holidays bring thoughtful days,
Where learning blooms in gentle ways.
Do your assignments, spark your mind,
Read books too—new worlds you'll find.

Explore near and wide with purpose true,
Spend time with family, friends by you.
Help birds and strays with caring hands,
Kindness nurtures across the lands.

Return rejuvenated, relaxed, refreshed, revived, recharged,
Hearts aglow, with wisdom enlarged.
Summer's lessons, soft and slow,
Will help your knowledge to grow.

Complete your class-specific assignments mindfully during this enriching break.
Tasks follow on the next pages.
Submit on the first day back.

Happy Holidays

Rukmani Birla Modern High School

Summer Holiday Assignment

Class VI

Topic: Simple Machine in Bicycle

General Instructions for Holiday Assignment

- Students have to do all the work in a single scrapbook.
- Work must be neat and clean.
- Do not write anything on the backside of the page where drawings are made or pictures are pasted.
- Design a neat, colourful, and creative cover page for your scrapbook based on the title or theme of the Summer Holiday Assignment. The cover page should include the student's name, class, section, roll number, and session. Use drawings, borders, colouring, cut-outs, or decorative materials related to the theme to make it attractive and meaningful.

1. Imagine your bicycle can talk. Write a creative paragraph or short story on "If My Bicycle Could Talk, What Would It Say?"

2. "साइकिल के प्रयोग से होने वाले लाभ" विषय पर 5-6 पंक्तियाँ लिखिए।

3.1 'साइकिल' विषय से संबंधित 10 शब्द संस्कृत में लिखिए तथा उन्हें याद कीजिए।

3.2 श्रीमद्भगवद्गीता के बारहवें अध्याय के पहले पांच श्लोक कंठस्थ कीजिए।

4. Draw and label different parts of a bicycle in French. (Only for French Students)

5. Measure the diameter of your bicycle wheel at home using a measuring tape. Record your observation and also calculate its circumference using the formula: $C = 2\pi r$ (pie= 22/7).

6. If your wheel makes 100 complete rotations, calculate total distance travelled by the bicycle. Write in meters.

7. Draw a neat diagram of the bicycle wheel. Label: centre, radius, diameter, arc, chord, and one sector.

8. The wheel is a circle. A pizza is also a circle. How is a sector of a wheel similar to a pizza slice? Explain in two lines.

9. Suppose you cycle 2 km to school in 10 minutes. Calculate your speed in Km/hr. Hint: Speed= Distance/Time.

10. If you increase your speed to 15 km/hr, how much time will you save on the 2 km trip?

11. Count the number of spokes in your bicycle wheel.

12. If all spokes are placed at equal distance, find the angle between any two adjacent spokes. (Formula: Angle= 360/number of spokes).

13. Find circumference of 2 different cycles. Example: your cycle and your friend's/ sibling's cycle.

14. Do comparison of circumference of your bicycle with a small kid's cycle and find their ratio. Bring

a. Ratio in lowest form and tell whether it is proper or improper fraction.
b. Which cycle will cover more distance in 10 rotations? Why?

15. Identify simple machines in a bicycle: Wheel, axle, lever (brakes), gear system. Write functions of each part.

16. Explain how does a bicycle reduce effort.

17. Interview your parent or grandparent about their childhood cycling experiences. Ask them where they used to go by bicycle, how cycling was different in earlier times, and write one memorable story shared by them. Also mention how bicycles helped people and the environment in the past.

18. Create your unique Bicycle using innovative idea. Submit a drawing and detailed structure of the same.