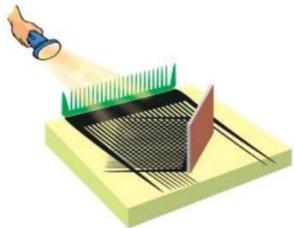


Alternative Academic Calendar for the Month of January 2021-22

Class: 7

Subject: Science

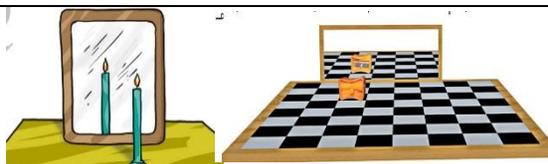
Month: February 2022

Sl no	Month/Week	Main learning abilities	Learning activities	Evaluation
01	First week of February Unit: Light	<p>They understand the concept of simple straight line propagation of light.</p> <p>They will know the reflection of light and the nature of images in horizontal mirrors.</p>	<p>Activity- 1;https://www.youtube.com/watch?v=j8wIPkgI76w With the help of the above link, allow to observe the experiment related to simple straight line propagation of light. Using CDs and candle, by doing simple experiment of propagation of light as per the figure below to motivate them to complete activity sheet 1.</p> <p>Activity-2: https://www.youtube.com/watch?v=j8wIPkgI76w Allowing them to observe the reflection of light and the nature of images in the horizontal mirror with the help of the above link. Show them practically the reflection of light as in the picture and allow it to be observed.</p>  <p>Activity-3; Perform practical activities and allow practical activities to be observed in the horizontal mirror as in the figure and motivate them to complete the practice sheet 2.</p>	<p>Perform activities given in P.No.s 35 and 36 of Practice Book</p> <p>Perform activities given in P.No.s 37 and 38 of Practice Book</p>

Second week
of February
Unit:
Light

They identify spherical
mirrors, differentiate the
real and virtual images
formed in mirrors.

Identify the lenses and
know the nature of images
formed in lenses.



Activity 4: Give children real convex and concave mirrors and help them to identify them.

Activity-5:

<https://www.youtube.com/watch?v=Gyr4IPpNIYw>

Allowing them to do the activity to observe images in mirrors using the above link.

Using a new steel spoon, introduce the concave and convex faces and allow them to view the images formed.

Activity-6: Perform activity 15.7 in the textbook P.No.91 and instruct them to observe the images formed in the spherical mirrors.

Discuss the uses of mirrors in daily life and guide them to do activity sheet 3.

Activity-7:

<https://www.youtube.com/watch?v=3P0bapb9aJk>

Allowing them to do the activity to observe images in lenses using the above link.

Activity-8:

Introducing convex lenses and concave lenses.

Demonstrating the images that occur when the object is placed in different positions. Guide them to complete activity sheet 4.

Perform activities
given in P.No.s 39
and 40 of Practice
Book

Perform activities
given in P.No.s
41 and 42 of
Practice Book

Perform activities
given in P.No. 45
of Practice Book

	<p>Third week of February Unit: Water: A Valuable Resource</p> <p>Unit for the fourth week of February: Water: A Valuable Resource</p>	<p>They will ensure the availability of water on earth.</p> <p>Explain the different stages of the water cycle.</p> <p>They will know the reasons for drop in ground water level and the remedies to increase groundwater level.</p> <p>They will know the water management measures.</p>	<p>Activity-9: https://www.youtube.com/watch?v=-J3rquE8NOQ Facilitate to know the availability of water on earth with the help of above link. Perform activity 16.1 in Text Book P.No. 106 and 107 and guide them to complete activity sheet 5.</p> <p>Activity-10: Discussing the stages of the water cycle with the picture of the water cycle. Informing different forms of water. https://www.youtube.com/watch?v=2cdEISC0VDA Allowing them to view the water cycle demonstration with the help of the above link. To motivate them to complete the activity Sheet 5.</p> <p>Activity-11: https://www.youtube.com/watch?v=B2bwDeLdIMw With the help of above link allow them to view the causes of ground water levels and discuss solutions to increase the ground water level. Discuss the method of harvesting rain water with the children and show them various methods of harvesting rain water through the video link below. https://www.youtube.com/watch?v=B2bwDeLdIMw Guide them to complete the activity Sheet 6.</p>	<p>Perform activities given in P.No. 46 of Practice Book</p> <p>Perform activities given in P.No. 47 of Practice Book</p> <p>Perform activities given in P.No. 48 of Practice Book</p>
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Alternative Academic Calendar February 2021– 22

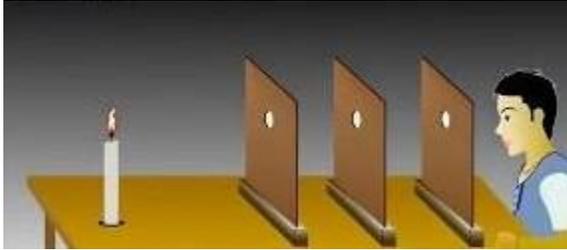
Activity Sheet – 1

Class 7

Light

Subject: Science

1. Child! Perform activity using cardboards/CD, candle as given in the picture and answer the following questions.



2. Arrange the cardboard straight and observe the candle through the windows and write your observation.

3. Move the card board slightly aside, view the candle and write your observation.

4. What is your decision on the dispersion of light from the above two observations?

Alternative Academic Calendar February 2021– 22

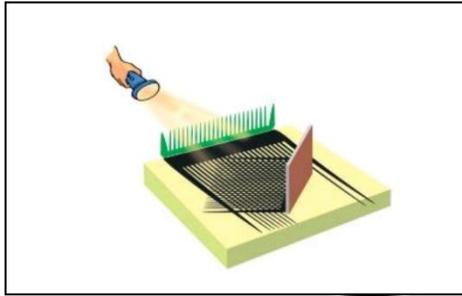
Activity Sheet – 2

Class 7

Light

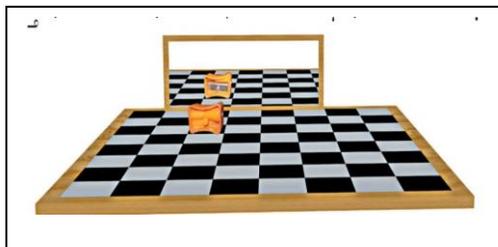
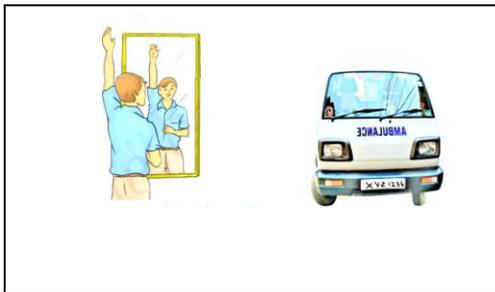
Subject: Science

1. Use combs, torch, mirrors, etc., to perform the activity shown in the picture, draw a diagram of the reflection of light and define the reflection of light.



Reflection of light means

2. View the following pictures and write down the nature of the images in the plane mirror.



Alternative Academic Calendar February 2021– 22

Activity Sheet –3

Class 7

Light

Subject: Science

1. Draw a ray diagram of the convex and concave mirror.

2. Observe the following pictures and write the uses of the concave mirror.



1. _____

2. _____

3. _____

3. Observe the following pictures and write the uses of convex mirror.



Alternative Academic Calendar February 2021– 22

Activity Sheet – 4

Class 7

Light

Subject: Science

1. Fill the blank spaces with appropriate answers.

- (i) Convex lens produces _____ and _____ image.
- (ii) The concave lens always produces a image _____ , _____ and smaller than the size of the object.
- (iii) The enhancement lens is an example of _____ lens.
- (iv) _____ lens is the focus lens.
- (v) _____ lens is a decentralizing lens.

2. Answer the following questions.

a) Explain the two differences between the convex lens and the concave lens.

b) Which type of lens always produces a virtual image?

Alternative Academic Calendar February 2021– 22

Activity Sheet – 5

Class 7

Water- A Valuable Resource

Subject: Science

1. Perform Activity 16.1 in Text Book P.No. 106 and 107 and answer the following questions.

a) Sea , ocean water are not fit for human use. Why?

b) Even if there is $\frac{3}{4}$ the amount of water on earth, the amount of water available for use is very low. Explain why?.

e) Draw a picture of the water cycle and list its various stages.

Alternative Academic Calendar February 2021– 22

Activity Sheet – 6

Class 7

Water- A Valuable Resource

Subject: Science

1. List the reasons for the drop in groundwater levels.
2. Explain how groundwater can be replenished.
3. What is rain water harvesting?
4. Name the irrigation methods that can be undertaken in agriculture to make limited use of water.
5. Prepare a collage of leaflets on water conservation.