



Master Lesson Plan

For

Tick Tick Tick

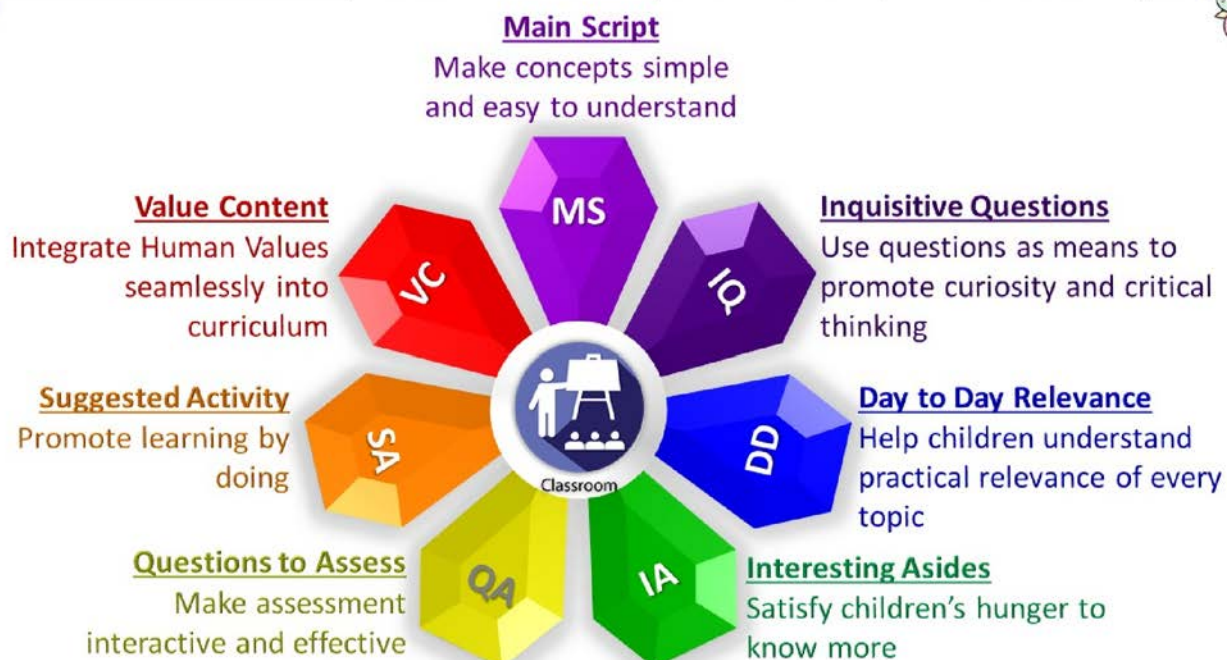
Board	Standard	Subject	Chapter	Language	Reference Link	Creation
CBSE	STD IV	Mathematics	Tick Tick Tick	English	Tick Tick Tick	2020-09

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Master Lesson Plan (MLP) - Covers the entire chapter with the help of these 7 asset types



For more information on how to use the lesson plan effectively, please scroll to the guidelines at the end of this document.

Tick Tick Tick

1. MS_Objectives_Tick Tick Tick

Notes to the teacher: This asset lays down the proposed plan for transacting this chapter. It states the asset objectives of the MLP. This asset is for teacher's reference and need not be taught to the students.

Students will be able to:

- Read the time on a clock to the nearest hour, minute and seconds.
- Express the time in AM and PM.
- Know the method used to know the time in olden days.
- Summarise the importance of time in everyday life.
- Distinguish between 12 hours and 24 hours clock.
- Differentiate between AM and PM.
- Convert 12 hours' time to 24 hours' time and vice versa.
- Convert between the units of time.
- Express daily routine on time line.
- Read a calendar.
- Find the Manufacturing and the expiry date on eatables, medicines etc.
- Do shopping by checking the manufacturing and the expiry date on the food items.
- To appreciate the need for efficient Time Management.

Time to teach	Asset Type	Theme	Sub Theme
5 Minutes	Main Script	Time	Calendar, 24 Hours clock time

2. IQ_About clock

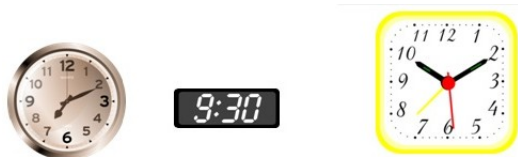
- Teacher shall start the class by asking the students, how do they know the time of the day. **By looking at the clock.**
- Name two basic types of clock.

Answer: Analog clock and Digital clock



- What do you mean by analog clock?

Answer: Analog clock has a face with 1 to 12 marking and hands to move around.



- What is digital clock?



Answer: Digital clock will display time digitally as numbers.

- Check whether your father's watch is an analog or digital watch?

Answer will vary.



- At what time you wake up every day?

Answer will vary.



- How long does it take for you to reach the school?

Answer will vary.



- How long it takes to brush your teeth?



Answer: Approximately 3 min

- When is the lunch break at school?



Answer: Around 1 pm

- How long you slept at night?



Answer: 8 Hours

- At what time your mother wakes up in the morning?

Answer: 5 am or answer will vary

Image Resource:

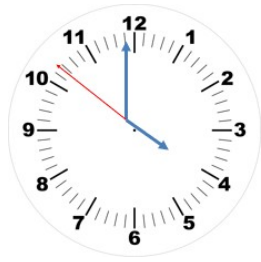
<http://www.clker.com/clipart-yellow-alarm-clock.html>
<http://www.clker.com/clipart-digital-clock-9:30.html>
<http://www.clker.com/clipart-529835.html>
<http://www.clker.com/clipart-695359.html>
<https://openclipart.org/detail/320597/nom-nom>
<https://openclipart.org/detail/233385/girl-and-boy>
<https://pixabay.com/en/smartwatch-gadget-technology-smart-828786/>
<https://pixabay.com/en/adult-hand-man-people-business-3147854/>
<https://openclipart.org/detail/233385/girl-and-boy>
<https://openclipart.org/detail/233385/girl-and-boy>

Time to teach	Asset Type	Theme	Sub Theme
4 Minutes	Inquisitive Questions	Time	12 Hours clock time

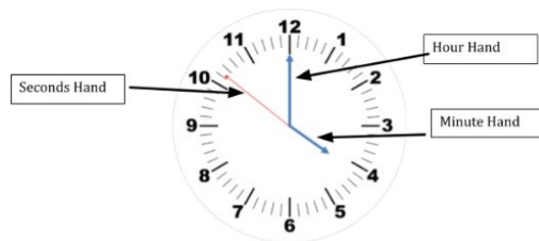
3. MS_Clock Reading

Material required: A big clock

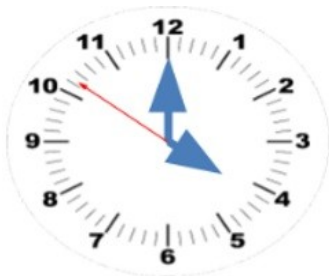
- Teacher may start the class by asking what we use to see the time. Wait for students' response. Show
- them clock and tell them that we use clock to know the time.
- Clock comes in different shapes, sizes and types too.



- We are using analog clock which has two hands and a face.
- It has a face with the numbers 1 to 12. Count the numbers from 1 to 12 by pointing them. Let students too count along with the teacher.
- Show them the long hand, which is the hour hand and the short hand, which is the minute hand and a thin hand which goes faster is seconds' hand.
- Explain to them that hour hand moves from one number to the other in one hour.



- Hour hand completes one rotation in 12 hours.
- In one day there are 24 hours, hence hour hand completes two rotation in a day.
- Minute hand moves faster than the hour hand.
- It takes one hour for the minute hand to complete one rotation, which is 60 minutes.



60 minutes = 1 hour

- Minute hand moves one division in one minute or moves five divisions in five minute.
- Totally there are 60 divisions in a clock.

60 seconds = 1 Minute

- Seconds hand moves faster than the minute hand.
- Hour hand, minute hand and the seconds hand will move in the right that is clockwise direction.



60 seconds = 1 Minute

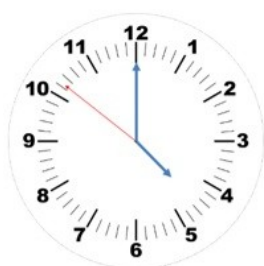
60 minutes = 1 hour

$60 \times 60 = 3600$ seconds = 1 hour

- To read shorthand, whichever number the short hand is pointing to is the hour of the day. If the hour hand is directly pointing to a number, then the minute hand will be at 12. For example, if the hour hand is pointing exactly at 3 and the minutes hand is at 12, the time is 3 O 'Clock. (O 'Clock means on the clock)
- If the short hand is between two numbers that is between 2 and 3 then the hour would be 2, because the short hand reached 2 first and it is yet to reach 3.

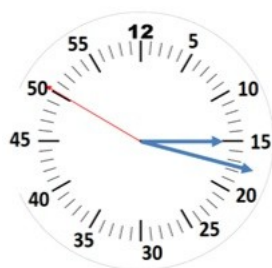


- **For example:** The hour in the below picture is 4 even though the short hand is between 4 and 5.



- To read the minute hand, the numbers on the clock are marked in 5, in the above picture the minutes are counted in multiples of 5. 1 is counted as 5, 2 as 10, 3 as 15 and so on 11 as 55 and 12 as 60 or 0 again. If the minute hand
- is between two numbers, then we have to read the small markings in-between the two numbers. If the minute hand is 3 numbers past 3, then add 3 more to 15.

$$15 + 3 = 18 \text{ min}$$



- Digital clocks will show the time with numbers.

Hours ——— **10** : **45** ——— Minutes

Colon

- Hours and Minutes are separated by colon.
- Number on the left show the hours and the number of the right show the minutes. Show
- some time like 4:20, 5:30, 12:00, 1:45, 3:10 in the analog clock.
- Explain to them that when the hour hand goes to new number, we must make the minutes into 00.
- Call some random students to the front and ask them to write the time on the board which teacher shows on the clock.
- Next teacher writes the time on the board and students will keep that time in the clock.

Image Source:

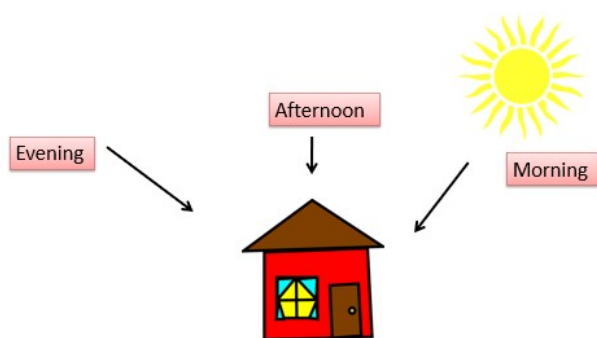
<https://openclipart.org/detail/134335/diy-clock-face>

Time to teach	Asset Type	Theme	Sub Theme
20 Minutes	Main Script	Time	12 Hours clock time

4. IA_Olden days clock

Teacher shall start the class by discussing some facts about the clock.

- In olden days people used to know time by looking at the movement of the sun.



- Egyptians built obelisks, the tall stone, which cast shadow on the ground to tell the time.



- Sundial is used to tell time by using the position of the Sun. It was used by many cultures in olden days.

**Image Resource:**

<http://www.clker.com/clipart-home-sweet-home-1.html>

<https://openclipart.org/detail/248610/blazing-sun-2>

<https://pixabay.com/en/sundial-clock-sun-ancient-sun-dial-587636/>

<https://pixabay.com/en/egypt-luxor-karnak-obelisk-487/>

Time to teach	Asset Type	Theme	Sub Theme
3 Minutes	Interesting Asides	Time	12 Hours clock time

5. DD_Time in everydayuse

Teacher shall discuss with the students the importance of time in everyday activity.

- School starts at the same time every day.



- All the periods and lunch time are at a fixed time at school.



- News in the TV channels are being telecasted at the same time every day.



- Buses, Trains and Airplanes follow a respective time schedule daily.

S.No	Station Name	Arrival Time	Departure Time
1	Hyderabad	Source	9:00 pm
2	Kurnool	12:00 am	12: 10am
3	Prasanthi Nilayam	5:00 am	Destination

- Reading time is an important skill in life.
- It will tell you whether you are running late or have enough time to attend to any task. Students will
- not miss their school bus and be on time to school.
- Students will know when to switch on the TV to watch their favourite shows.



Image Source:

<https://pixabay.com/en/children-tv-child-television-home-403582/>
<http://www.clker.com/clipart-746903.html>
<http://www.clker.com/clipart-466186.html>
<https://pixabay.com/en/happy-children-education-876541/>
<https://pixabay.com/en/food-for-hungry-children-mid-day-meal-885871/>
<https://openclipart.org/detail/290798/school-kids>

Time to teach	Asset Type	Theme	Sub Theme
5 Minutes	Day-to-day Relevance	Time	12 Hours clock time

6. SA_Model of a clock with divisions

Aim: To understand the divisions in a clock.

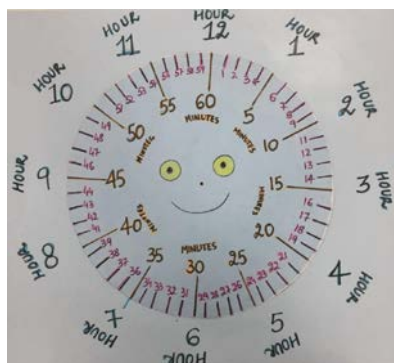
Resources Required: Paper plate or a white chart cut into circular shape, black sketch pen or a marker and scissors for each student.



Setting for the Activity Indoor **Type**

of Activity: Model making

Procedure:



Teacher will guide the students to make a clock face like the one given above with divisions.

1. Take a paper plate or a white chart cut into circular shape. Make an inner circle.
2. Mark 12 equal divisions for the hour.
3. Mark 5 equal distance between the subsequent numbers for the minutes.
4. Write the divisions as given in the diagram.

Instruction to the teacher: It is an individual activity.

Conclusion:

This activity will enable students to learn the divisions on a clock without any confusion.

Image Source:

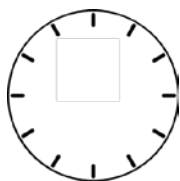
<https://pixabay.com/en/plate-dish-kitchen-white-porcelain-159469/>
<https://pixabay.com/en/scissors-cut-fiskars-cutting-paper-2202215/>
<http://www.clker.com/clipart-marker-picked.html>

Time to teach	Asset Type	Theme	Sub Theme
15 Minutes	Suggested Activity	Time	12 Hours clock time

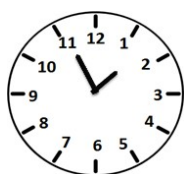
7. QA_Assessment on Clock

Answer the following questions:

1) Mark the numbers, draw the short hand and the long hand to this clock.



Answer:



2) Is it an analog or digital clock?

Answer: Analog

3) What does the short hand show?

Answer: Hours

4) What does the long hand show?

Answer: Minutes

5) How many hours are there in a day?

Answer: 24 Hours

6) How many minutes make one hour?

Answer: 60 Minutes

7) How many seconds are there in a minute?

Answer: 60 Seconds

8) Complete the worksheet by writing the correct time:



**Answers:**

12:39

9:49

3:03



11:37

1:48

10:48



6:59

5:09

7:22

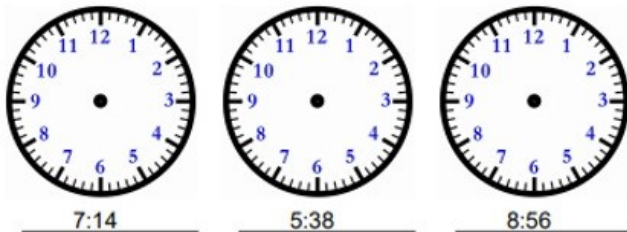
9) Draw the hands for the given time:



3:11

9:29

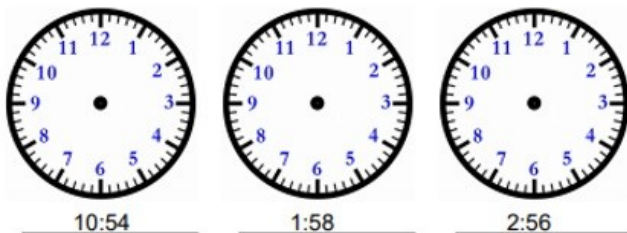
6:20



7:14

5:38

8:56



10:54

1:58

2:56

Answers:

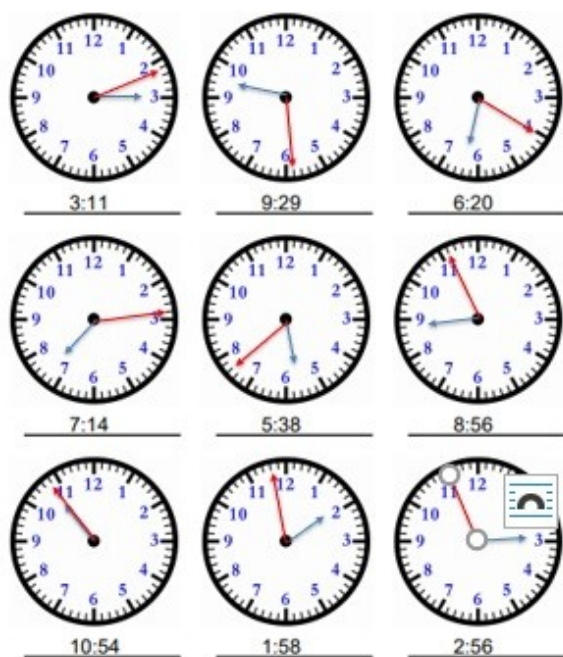


Image Source:

<http://www.clker.com/clipart-clock-face-no-hands-.html>

<http://www.clker.com/clipart-clock-face-hour-and-minute-marks-no-hands.html>

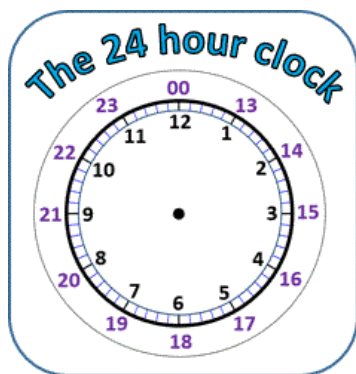
Time to teach	Asset Type	Theme	Sub Theme
10 Minutes	Assessments	Time	12 Hours clock time

8. MS_24 hours_AM_PM_Daily Routine

- Teacher starts the class by asking, “How many hours are there in a day?” Wait for the students to answer. Then, the
- Teacher explains by saying there are 24 hours in a day.
- They are divided into two parts of 12 hours each. Hence,
- the clocks we are using have 12 hour division.



- Teacher ask the question, “How do we differentiate between 4 O’ Clock in the morning and 4 O’ Clock in the evening?” Wait for the students to answer.
- Then, the Teacher explains that **12 midnight to 12 noon** it is called ‘AM’ which the abbreviation is for ‘Ante Meridiem’, it is the Latin word for ‘before noon’
- **12 noon to 12 midnight** is called ‘PM’ which is the abbreviation for ‘Post Meridiem’, it is the Latin word for ‘after noon’
- Therefore, morning 4 O’ Clock is 4 AM and evening 4 O’ Clock is 4 PM. 12 AM
- we call it as 12 midnight and 12 PM we call it as 12 noon.
- In 24 hours clock, the day begins at midnight.
- After 12 noon instead of 1 pm, we say 13 hours, instead of 2 pm, we say 14 hours and so on.



- The table below will show the time in 12 hour clock and 24 hour clock.

12 Hours Clock	24 Hours Clock
12:00 Midnight	00:00 Hours
1:00 AM	01:00 Hours
2:00 AM	02:00 Hours
3:00 AM	03:00 Hours
4:00 AM	04:00 Hours
5:00 AM	05:00 Hours
6:00 AM	06:00 Hours
7:00 AM	07:00 Hours
8:00 AM	08:00 Hours
9:00 AM	09:00 Hours
10:00 AM	10:00 Hours
11:00 AM	11:00 Hours
12:00 Noon	12:00 Hours
1:00 PM	13:00 Hours
2:00 PM	14:00 Hours
3:00 PM	15:00 Hours
4:00 PM	16:00 Hours
5:00 PM	17:00 Hours
6:00 PM	18:00 Hours
7:00 PM	19:00 Hours
8:00 PM	20:00 Hours
9:00 PM	21:00 Hours
10:00 PM	22:00 Hours
11:00 PM	23:00 Hours

- 24:00 Hours or 0:00 Hours in 24 hours clock is midnight 12:00 in 12 hours clock.

For example: Sunday at 24:00 Hours and Monday at 0:00 am means the same.

Expresses daily routine on the timeline

- Teacher ask the students “Why do you need a daily routine?” Wait for student’s response. Daily
- routine help us to get organized.
- For each family the daily routine will be slightly different.



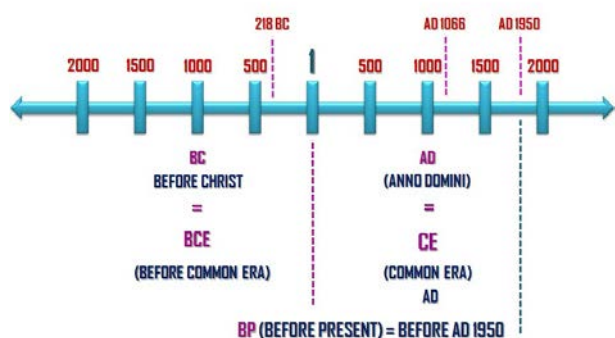
Discuss with everyone, what they do after getting up in the morning. The most common routine will be

- Brushing teeth
- Drinking milk
- Taking bath
- Getting ready to school
- Eating breakfast
- Leaving to school and so on

What is a Timeline? It is series of events that is put in chronological order.

1. When making a timeline, important things to remember are year, month, date and sometimes even time.
2. Timeline could be in horizontal or vertical line.
3. Timeline can start and end at any time.
4. It can be about personal life, events in history, important inventions or anything else.

BC - BCE & AD - CE TERMS



Ask the students to make a timeline as shown in the diagram below and complete it with their daily routine

Kids-Timeline:

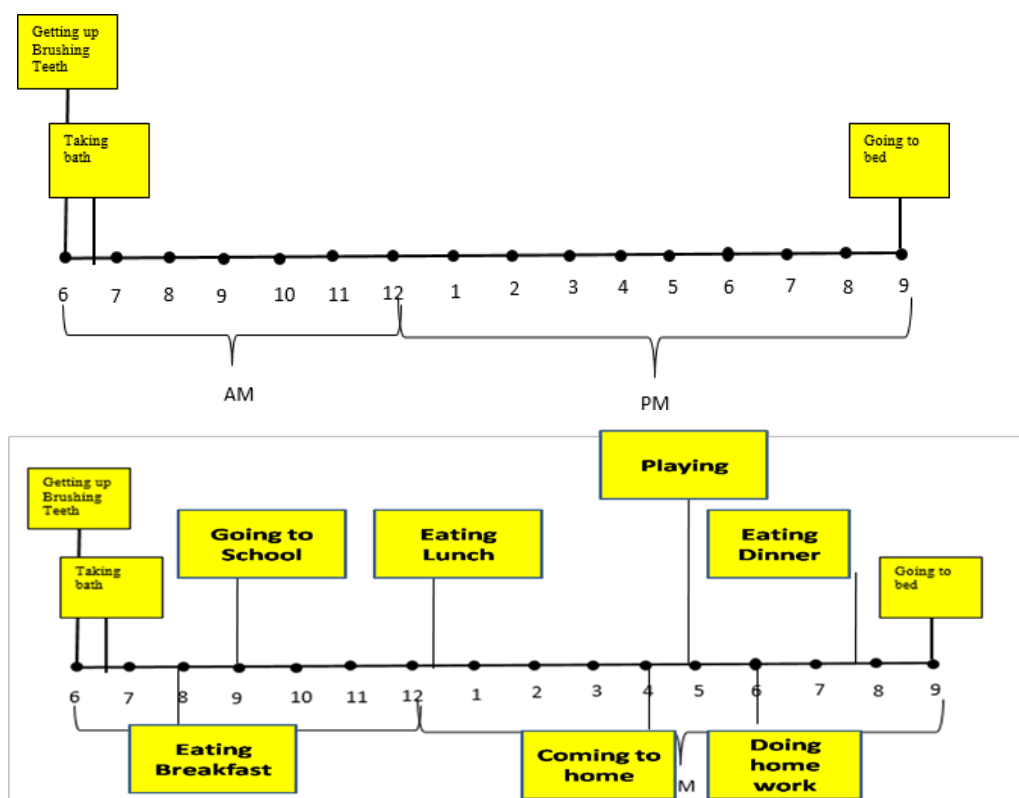


Image Source:

<https://openclipart.org/detail/37939/analog-clock>

<http://www.clker.com/clipart-580218.html>

<https://www.srisathyaivaividyaahini.org/index.php/component/joomgallery/default/bc-ce-timeline-8371.html>

Time to teach	Asset Type	Theme	Sub Theme
20 Minutes	Main Script	Time	24 Hours clock time

9. IQ_24 hours clock

1) Where do we use 24 hours clock?

Answer: We use it in Military, Computers, transports like airline, bus, train etc.



Time	Destination	Flight Number
11:00	KUALA LUMPUR	MM010
11:00	BALI	S0148
11:00	HONG KONG	S0868
11:00	KUCHING	MM002
11:00	KUALA LUMPUR	MM010
11:00	BALI	S0148
11:00	HONG KONG	S0868
11:00	KUCHING	MM002

2) In Transport what is meant by last bus is at 24:00 Hours?

Answer: It means that the last transport is at 24:00, end of the day.



3) What are the advantages of 24 hours clock over 12 hour clock?

Answer:

1. No confusion between AM and PM
2. It is easy to calculate the elapsed time.
3. No confusion between midnight and noon.



4) Do heads of states like Prime Minister and President also have daily routine?

Answer: Yes, they do



5) Do they get time for exercises and to have fun?

Answer: Yes



Image Source:

<https://pixabay.com/en/war-shoot-army-shooting-gun-1283418/>
<https://pixabay.com/en/airport-board-time-departure-1937761/>
<https://openclipart.org/detail/288937/computer-turned-on>
<https://pixabay.com/en/night-view-buses-light-615583/>
<https://openclipart.org/detail/296758/perplexed-male-3>
<http://www.clker.com/clipart-13968.html>
<https://openclipart.org/detail/233657/clock>
<https://openclipart.org/detail/214485/modi>
<http://www.clker.com/clipart-yogaApositions.html>

Time to teach	Asset Type	Theme	Sub Theme
3 Minutes	Inquisitive Questions	Time	24 Hours clock time

10. IA_24 hours analog clock

1) In 24 hour analog clock the hour hand completes one revolution in 24 hours or one day.



2) These clocks are used by pilots, scientists and military people.

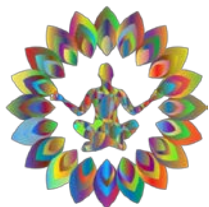


3) In 1953, Glycine watches (Switzerland) came up with Airman 1 which is a 24 hour format watches used by the pilots and travelers.

4) Prime Minister Modi works for 20 hours a day and he hardly sleeps for 3.5 to 4 hours a day.



With his tight schedule he does yoga every day.



- He also finds time to write poems, books etc.



- He eats healthy food.

Image Resource:

https://commons.wikimedia.org/wiki/File:24-hour_watch_by_Zureks.jpg
<https://pixabay.com/en/cockpit-pilot-people-men-airplane-2576889/>
<https://pixabay.com/en/microbiologist-scientist-woman-1332376/>
<https://openclipart.org/detail/274642/prismatic-abstract-blossom-yoga-pose>
<https://pixabay.com/en/writing-write-fountain-pen-ink-1209121>

Time to teach	Asset Type	Theme	Sub Theme
3 Minutes	Interesting Asides	Time	24 Hours clock time

11. DD_Routine

- Routine is important to get organized.

Morning Routine



- It gives confidence and independence, you learn when to brush your teeth, when to leave for school etc. Eating
- breakfast together every day creates bonding in the family.



- Routine will reduce stress.
- It creates important habits like brushing teeth before going to bed, studying day to day lessons every day, eating and spending time together etc.

NIGHTTIME ROUTINE			
Clean up Toys 	Take a Bath 	Eat a Snack 	Brush Teeth 
Read a Book 	Say Your Prayers 	Goodnight 	

- It makes us efficient.
- Routine will not let you procrastinate any work.

Image Source:

<http://www.clker.com/clipart-580218.html>
<http://www.clker.com/clipart-463739.html>
<https://openclipart.org/detail/306204/back-to-school-clear>
<http://www.clker.com/clipart-755658.html>
<http://www.clker.com/clipart-577596.html>

Time to teach	Asset Type	Theme	Sub Theme
3 Minutes	Day-to-day Relevance	Time	24 Hours clock time

12. QA_Identify whether AM or PM

In the following table, write whether it is AM or PM:

No.	Activities	Write AM/PM
1	At what time do we get up in the morning? 	
2	When do we go to sleep? 	
3	Arjun comes back from school at 3 in the afternoon.	

No.	Activities	Write AM/PM
4	Reading bedtime stories. 	
5	Going for an early morning jog. 	
6	Playing with friends after school. 	

No.	Activities	Write AM/PM
7	Having breakfast with father and brother.	
8	Watching television after dinner. 	
9	Brushing teeth after getting up. 	
10	Megha went out to see the stars 	

Answers:

No.	Activities	Write AM/PM
1	At what time do we get up in the morning?	6 AM
2	When do we go to sleep?	9 PM
3	Arjun comes back from school at 3 in the afternoon.	3 PM
4	Reading bedtime stories.	PM
5	Going for an early morning jog.	AM
6	Playing with friends after school.	PM
7	Having breakfast with father and brother.	AM
8	Watching television after dinner.	PM
9	Brushing teeth after getting up.	AM
10	Megha went out to see the stars	PM

Image Source:

<http://www.clker.com/clipart-585174.html>

<http://www.clker.com/clipart-590752.html>

<https://www.publicdomainpictures.net/en/view-image.php?image=261241&picture=kids-reading-read-book-boy-child>

<http://www.clker.com/clipart-512426.html>

<https://openclipart.org/detail/8054/children-playing>

<https://openclipart.org/detail/280813/watching-tv>

<http://www.clker.com/clipart-463739.html>

<https://openclipart.org/detail/252907/crescent-moon-night-stars-remix>

Time to teach	Asset Type	Theme	Sub Theme
5 Minutes	Assessments	Time	24 Hours clock time

13. SA_Timeline

Aim: To prepare a timeline for the daily routine.

Resources Required: Paper, scale, pencil, marker and colour pencils.



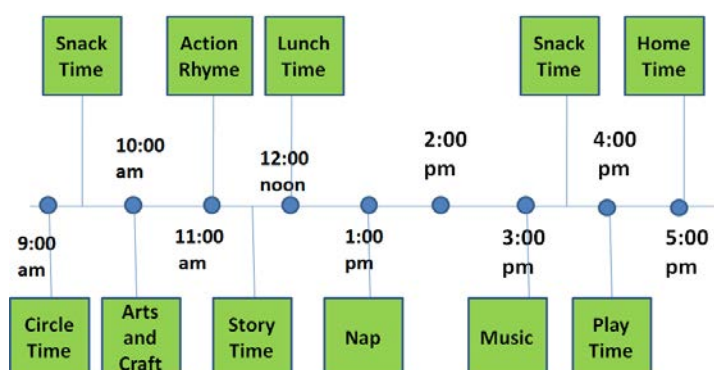
Setting for the Activity: Indoor

Type of Activity: Project **Procedure:**

The table given below is the daily routine of Rohan's brother in his day care. Draw a Timeline in a chart at home.

Time	Routine
9.00 am	Circle time
9.30 am	Snack time
10.00 am	Arts and craft
11.00 am	Action rhyme
11.30 am	Story time
12 noon	Lunch time
1.00 pm	nap
3.00 pm	music
3.30 pm	Snack time
4.00 pm	Playtime
5.00 pm	Hometime

- Draw a line with the equal marking from 9 am to 5 pm.



Instructions to Teacher: Individual activity

Conclusion: Thus, the students will be able to draw the Time line for the given data.

Image Source:

<https://openclipart.org/detail/26266/pencil>
<http://www.clker.com/clipart-ruler--5.html>
<http://www.clker.com/clipart-750949.html>
<http://www.clker.com/clipart-marker-picked.html>

Time to teach	Asset Type	Theme	Sub Theme
10 Minutes	Suggested Activity	Time	24 Hours clock time

14. MS_Conversion

Teacher explains the following simple steps to convert 12 hour clock time to 24 hour clock time:

- For 12 midnight, change it to 00:00 hrs.
- For 12 noon, just keep it as 12:00 hrs
- If the hour is in PM, for example 2 PM, simply add 12 to the hour, That

is $2 + 12 = 14:00$ hrs

- If the hour is 9 PM, add 12 to the hour

That is $9 + 12 = 21:00$ hrs

- If the hour is in AM it doesn't change, add 0 to the digit if the hour is less than 10.

For example:

12 hour clock time	24 hour clock time
11:30 AM	11:30
5:40 AM	05:40
12:15 AM	00:15
11:30 PM	23:30
5:40 PM	17:40
12:15 PM	12:15

Steps to convert 24 hour clock to 12 hour clock:

- For 00:00 hrs, change it to 12 midnight
- For 12:00 hrs, change it to 12 noon.
- If the hour is greater than 12, then subtract 12 and write as PM.

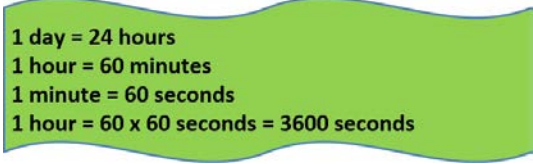
For example:

- $18:00$ hrs = $18 - 12 = 6:00$ PM
- $23:00$ hrs = $23 - 12 = 11:00$ PM
- Till 12:00 write as AM and remove zeros for the numbers less than 10.

24 hour clock time	12 hour clock time
15:50	3:50 PM
07:30	7:30 AM
00:10	12:10 AM
22:10	10:10 PM
05:18	5:18 AM
19:35	7:35 PM
12:40	12:40 PM
23:05	11:05 PM

Converting Hours, Minutes and Seconds

1. Teacher shall explain that like all other conversions, for different circumstances we use different type of unit of time like seconds, minutes, hours, days, weeks, months and years.
2. How many seconds are there in one and a half minute?
3. Recollect the table



1 day = 24 hours
 1 hour = 60 minutes
 1 minute = 60 seconds
 1 hour = 60 x 60 seconds = 3600 seconds

To convert from Hours to Minutes:

Multiply hour by 60 as 1 hour = 60 minutes and then add the minutes if already present.

Example: Convert 3 hours 30 minutes to minutes

hour = 60 minutes

Therefore, 3 hours = $3 \times 60 = 180$ minutes

3 hours 30 minutes = $180 + 30 = 210$ minutes

Example : Convert 9 hours 5 minutes to minutes

hour = 60 minutes

Therefore, 9 hours = $9 \times 60 = 540$ minutes

9 hours 5 minutes = $540 + 5 = 545$ minutes

convert from Minutes to Seconds:

Multiply minutes by 60 as 1 minute = 60 seconds and add seconds if already present.

Example: Convert 5 minutes 20 seconds to Seconds

minute = 60 seconds

Therefore, 5 minutes = $5 \times 60 = 300$ seconds

5 minutes 20 seconds = $300 + 20 = 320$ seconds

To convert from Hour to Seconds: Multiply hour by 3600 as 1 hour = 3600 seconds and add seconds if already present.

Example: Convert 4 hours 30 seconds to seconds.

hour = 3600 Seconds

4 hours 30 seconds = $(4 \times 3600) + 30$

$14,400 + 30 = 14,430$ seconds

Therefore, 4 hours 30 seconds is 14,430 seconds.

To convert from Minutes to Hours: Divide minutes by 60 as 60 minutes = 1 Hour (Converting small unit to big unit we must divide)

Example: Convert 330 minutes to hours

60 minutes = 1 Hour

Therefore, 330 minutes = $330 \div 60 = 5$ hours 30 minutes.

$$\begin{array}{r} 5 \\ 60 \overline{) 330} \\ \underline{- 300} \\ 30 \end{array}$$

Quotient is the **hours** and **remainder** is the **minutes**. To convert from Seconds to Minutes:

Divide Seconds by 60 as 60 seconds = 1 Minute

(Converting small unit to big unit we have to divide)

Example: Convert 560 Seconds to Minutes

60 Seconds = 1 Minute

Therefore, 560 seconds = $560 \div 60 = 9$ minutes 20 Seconds.

$$\begin{array}{r} 9 \\ 60 \overline{) 560} \\ \underline{- 540} \\ 20 \end{array}$$

Quotient is the **hours** and **remainder** is the **minutes**. To convert from Seconds to Hours:

Divide Seconds by 3600 as 3600 seconds = 1 Hour

(Converting small unit to big unit we have to divide)

Example: Convert 7200 Seconds to Hours

3600 Seconds = 1 Hour

Therefore, 7200 seconds = $7200 \div 3600$.

$$\begin{array}{r} 12 \\ \overline{7200} \\ \underline{3600} \\ 3600 \\ \underline{3600} \\ 0 \end{array}$$

$12 \div 6 = 2$ Hours

Time to teach	Asset Type	Theme	Sub Theme
20 Minutes	Main Script	Time	24 Hours clock time

15. IA_Facts about time

Teacher shall discuss facts about time.

- Millisecond, Microsecond and Nanoseconds are small units of time.

1. 1 Millisecond = 0.001 Seconds
2. 1 Microsecond = 10^{-6} Seconds
3. 1 Nanosecond = 10^{-9} Seconds

- Plank time (Approximately equal to 10^{-44} Seconds) is the smallest unit of time.
- Different parts of the world are in different time zones. While you are having dinner at your place someone in other part of the world will be having breakfast



- In the year 1577, Jost Burgi a Swiss clock maker invented the world's first minute hand.

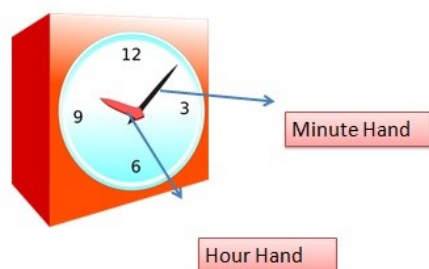


Image Source:

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<http://www.clker.com/clipart-sunrise-1.html>

Time to teach	Asset Type	Theme	Sub Theme
3 Minutes	Interesting Asides	Time	24 Hours clock time

16. DD_24 hours clock

The Teacher shall discuss with the children the usage of 12 and 24 hours clock in real life situations.

- 12 or 24 hours clock is used in microwave ovens and baking ovens.



- For some people, they need to know how many hours they have to work to make enough money if the salary is hourly based.



While travelling to a place we need to know how many kilometres per hour to travel to reach that place on time.



Bus, train and airline follow 24 hour clock. We need to know the conversion so that we don't miss the transport.



- In medical field, 24 hour clock is used for recording purpose to avoid any confusion.



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<https://openclipart.org/detail/46291/farmer%26quot;%26gt;%26lt;img&sa=D&ust=1557247584440000img>
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<https://pixabay.com/en/speed-limit-car-safety-law-ahead-43796/>
<https://pixabay.com/en/railway-chalkboard-timetable-rail-1300826/>

Time to teach	Asset Type	Theme	Sub Theme
5 Minutes	Day-to-day Relevance	Time	24 Hours clock time

17. SA_Quiz and Card game**Activity 1: Power point Quiz**

Aim: To convert 12 to 24 hours clock and vice versa.

Resources Required: Power point

Setting for the Activity: Indoor **Type**

of Activity: Quiz **Procedure:**

- Divide the class into two groups.
- Show the power point quiz
- First question goes to the first group. If
- they answer, they get one point.
- If the group is not able to answer pass it on to the other group. Give half point for the passed on question. Then,
- ask the question to the second group.
- Continue like this till all the questions are done and announce the winner.

Activity 2: Matching card game

Aim: To convert 12 to 24 hours clock and vice versa.

Resources Required: Printout of the cards given or write it in a small piece of paper, watch.

Setting for the Activity: Indoor

Type of Activity: Matching game

Procedure:

1. This is an activity in pairs.
2. Each pair will get one set of printed cards and blank cards, or write it in small square papers and have blank papers too.
3. Each student will spread out all their cards on the table.
4. Then they will write the correct time using 24 hour format on the blank card and keep it on the matching card.
5. The pair of students who takes less time to complete the task is the winner.

12:00 midnight	3:45 in the afternoon	6:00 in the morning
4:45 in the afternoon	11:45 in the night	3:00 in the morning
5:00 in the afternoon	0:15 in the morning	10:30 in the evening
1:00 in the morning	12:00 Noon	12:15 in the afternoon
2:00 in the afternoon	8:00 in the evening	7:00 in the morning

Answer:

12:00 midnight = 00:00 Hours	3:45 in the afternoon =15:45 Hours	6:00 in the morning = 06:00 Hours
4:45 in the afternoon = 16:45 Hours	11:45 in the night= 23:45 Hours	3:00 in the morning =03:00 Hours
5:00 in the afternoon = 17:00 Hours	0:15 in the morning = 00:15 Hours	10:30 in the evening = 22:30 Hours
1:00 in the morning =01:00 Hours	12:00 Noon = 12:00 Hours	12:15 in the afternoon =12:15 Hours
2:00 in the afternoon = 14:00 Hours	8:00 in the evening = 20:00 Hours	7:00 in the morning =07:00 Hours

Activity 3: Bingo game

Aim: To convert time from hour, minute and seconds and vice versa.

Resources Required: Printout the Bingo cards (or Teacher shall write it on the board and all the students can draw a table and copy it down.)

Setting for the Activity: Indoor

Type of Activity: Game **Procedure:**

1. This is an individual activity
2. Teacher will read out the question from the card and students have to find the answer and circle it.
3. Whoever finish the whole card first with correct answer is the winner.

Convert hrs to min 6 h	Convert min to sec 57 min	Convert sec to min 870 sec	Convert min to hr 435 min
Convert min to sec 80 min	Convert hr to sec 3 h	Convert hrs to min 4 hrs 20 min	Convert sec to min 678 sec
Convert min to hr 918 min	Convert sec to min 507 sec	Convert sec to hr 7200 sec	Convert min to Sec 12 min

Convert hrs to min 6 h = 360 min	Convert min to sec 57 min = 3420 sec	Convert sec to min 870 sec = 14 min 30 sec	Convert min to hr 435 min = 7 hr 15 min
Convert min to sec 80 min = 4800 sec	Convert hr to sec 3 h = 10,800 sec	Convert hrs to min 4 hrs 20 min = 260 min	Convert sec to min 678 sec = 11 min 18 sec
Convert min to hr 918 min = 15 hr 18 min	Convert sec to min 507 sec = 8 min 27 sec	Convert sec to hr 7200 sec = 2 hr	Convert min to Sec 12 min = 720 sec

Instructions to Teacher: Teacher shall either conduct a quiz by making two groups or play the second activity or the third activity.

Conclusion: Thus, the students will know how to convert the 12 hour time to 24 hour time and vice versa, also able to convert between unit of time.

Time to teach	Asset Type	Theme	Sub Theme
10 Minutes	Suggested Activity	Time	24 Hours clock time

18. QA_Conversion of units of time

Answer the following Questions related to time:

1) Jagan finished the cycling race in 240 seconds. How many minutes is that?



Answer:

1 Minute = 60 Seconds

Number of Minutes taken by Jagadish = $240 \div 60 = 4$ Minutes

2) Raji finished her work in 340 minutes. Is it more than 5 hours or less than 5 hours?



Answer:

1 Hour = 60 Minutes

Number of hours taken by Raji for her work = $340 \div 60 = 5$ Hours 40 Minutes So, It is more than 5 hours.

3) Adit, Manoj, Pranav and Raksith ran 800 meters race. Their finishing time is recorded in the chart below. Rank them according to the time taken to complete.



Names	Time taken to complete the race	Rank according to less time taken to complete
Adit	3 min	
Manoj	240 sec	
Pranav	150 sec	
Raksith	2 min 30 sec	

Answer:

Names	Time taken to complete the race	Rank according to less time taken to complete
Adit	3 min	II (180 Sec)
Manoj	240 sec	III (240 Sec)
Pranav	150 sec	I (150 Sec)
Raksith	2 min 30 sec	I (150 sec)

4) Express 4 hours 15 minutes in minutes?

Answer:

1 Hour = 60 Minutes

So, 4 Hours 15 Minutes = $4 \times 60 + 15 = 255$ Minutes

5) Nikita is writing an exam at school. She has 2 hours 30 min to complete the exam. She has been writing for 100 min. How many minutes are left for her to complete the exam?

**Answer:**

1 Hour = 60 Minutes

Time allotted for exam = 2 Hours 30 Minutes = $2 \times 60 + 30 = 150$ Minutes Time

already utilized by Nikita = 100 Minutes

Number of Minutes left for her to complete the exam = $150 - 100 = 50$ Minutes

50 Minutes are left for Nikita to complete the exam.

6) A short film is 20 min long. How many seconds is the short film?

**Answer:**

1 Minute = 60 Seconds

Duration of the short film = $20 \times 60 = 1200$ Sec The

short film is 1200 Seconds.

Image Source:

<https://openclipart.org/detail/253283/man-racing-on-bike-silhouette>
<http://www.clker.com/clipart-cinema.html>
<http://www.clker.com/clipart-600804.html>
<https://openclipart.org/detail/298501/woman-with-laundry-basket>

<https://openclipart.org/detail/296559/starting-line>

Time to teach	Asset Type	Theme	Sub Theme
10 Minutes	Assessments	Time	24 Hours clock time

19. MS_Calendar_Mfd_Exp Date

1. Teacher shall start the class by asking a student, “Your birthday falls on which day?”
2. When do we celebrate Diwali and it is on which day of the week?
3. When do you have your exams?
4. What do you need to see all these days?
5. Yes, a **calendar** is used to see the **months, weeks and days in a year.**
6. Show the calendar of 2019 or any year.

2019

January	February	March
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
April	May	June
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
July	July	September
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
October	November	December
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

1. Ask students which month is it now? **Answer will vary**
2. How many months are there in a year? **There are twelve months in a year, January, February, March, April May, June, July, August, September, October, November and December. Show all these months in the calendar.**
3. How many days are there in a month? **Some months have 30 days and some have 31 days, February alone will have 28 or 29 days. Show it in the calendar. Teacher shall show the number of days in each month.**
4. How many days make one week and how many weeks make one month? **There are seven days in a week. Teacher shall show that in the calendar. Sunday, Monday, Tuesday, Wednesday, Thursday, Friday and Saturday. Four weeks and 2 or 3 days make one month.**
5. Which year is this? **2019**
6. Which month comes next? **Varies. Depends on current month.**
7. How many days are there in November? **30 days, show it in the calendar**
8. Show them the Month of June. Teacher shall try to find the answer along with the children.
9. How many days are there in June? **30 Days**
10. Can you count the number of Saturdays in June? **5 Saturdays**
11. June 1 falls on which day? **Saturday**
12. If today is 9 June, what day of the week it will be? Do you have school on this day, why? **9 June is Sunday. No, Sunday is holiday.**
13. What is the date on third Tuesday of this month? **18 June**
14. Which days occur 5 times in this month? **Saturday and Sunday**
15. Wednesdays falls on which days. **5, 12, 19 and 26 June**

Manufacturing and expiry date:

Materials Required: Some packed food and medicines with manufacturing and expiry dates printed on it.

- 1) What is manufacturing date? Where can you find it? **It is the date printed on the product, which is the date on which it is produced.**

You can find manufacturing date in all consumable goods, medicines, electronic items, vehicles etc

- 2) What is expiry date?

It is the date after which a product can't be used, for consumable it is not safe to be eaten.



- Teacher explains that whenever we buy eatables or medicines in the shop we must check the manufacturing and the expiry date.
- The abbreviation for Manufacturing date is Mfg. date or some use is as P date that is date of produce and for the expiry date is Exp. Date.
- For some product the manufacturing date will be given and instead of the expiry date it will be printed as XXX days from the date of manufacturing. If the expiry date is 180 days from the date of manufacturing. In the above case, to find the date of expiry conversion of days to month is to be done. As we recall, to convert from small unit to big unit we have to divide.
- 30 days = 1 month

Therefore $180 \text{ days} = 180 \div 30 = 6 \text{ months}$ from the date of manufacturing

- Manufacturing date and the expiry date are in the format, dd/mm/yyyy
- Show the food and medicine packs to the students to find out the manufacturing and the expiry date.

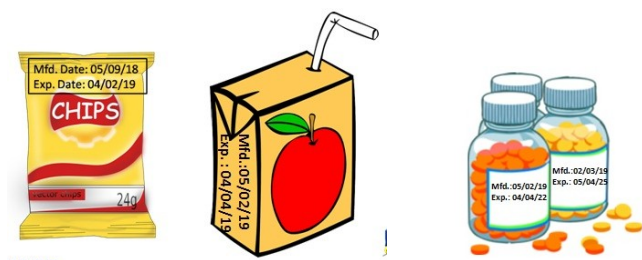


Image Source:

<https://www.publicdomainpictures.net/en/view-image.php?image=257633&picture=2019-calendar-template>
<https://www.publicdomainpictures.net/en/view-image.php?image=70749&picture=hand-cream-clip-art>
<http://www.clker.com/clipart-blank-medicine-bottles.html>
<https://pixabay.com/en/chips-food-yummy-tasty-junk-food-160417/> <https://pixabay.com/en/juice-box-apple-straw-tetra-pack-306748/>

Time to teach	Asset Type	Theme	Sub Theme
20 Minutes	Main Script	Time	24 Hours clock time

20. IQ_Calendar and expiry date

Answer the following questions:

1) Which is the shortest month?

Answer: February



2) What is a Leap year?

Answer: A year which has 366 days, it occurs once in 4 years.

3) Which is the longest day of the year?

Answer: June 21

4) Which is the shortest day of the year?

Answer: December 22

5) Which two consecutive months have 31 days?

Answer: July and August

AUGUST 2012						
SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

6) What happens if we eat the perishable, expired food?



Answer: We get stomach upset.

7) How to store perishable food for a couple of days?

Answer: By Keeping it in the refrigerator



8) Can the frozen food be kept for longer time?

Answer: Yes

9) Why shouldn't we eat the expired medicine?

Answer: It will lose its power



Image Source:

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<http://www.clker.com/clipart-red-circle-cross-transparent-background.html> <http://www.clker.com/clipart-february-calendar.html>
<https://pixabay.com/en/clouds-sky-blue-white-summer-day-1117588/>
<http://www.clker.com/clipart-july-calendar.html>
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<https://pixabay.com/en/refrigerator-icebox-food-cold-1809344/&sa=D&ust=1555875327322000>

Time to teach	Asset Type	Theme	Sub Theme
5 Minutes	Inquisitive Questions	Time	24 Hours clock time

21. IA_Types of Calendar

Teacher shall discuss the facts about calendar.

1) The word calendar comes from the Latin word “Kalendae” meaning first day of the month.

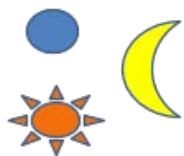


2) The calendar which we are using now is called Gregorian calendar, which is used widely around the world.

3) There are around 40 types of calendars used around the world, some of them are

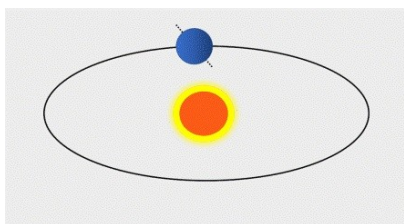
- The Chinese calendar
- The Hebrew Calendar
- The Islamic Calendar
- The Japanese Calendar
- The Persian Calendar

4) Based on movement of Earth, Sun and Moon, there are three types of calendar, Solar, Lunar and Lunisolar.

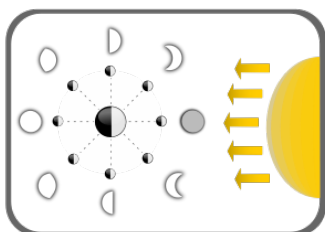


Earth, Sun and moon

- Solar Calendar is based on movement of Earth around Sun.



- Lunar calendar based on the phases of the moon.



- Lunisolar based on movement of both Sun and Moon.

Example: Chinese Lunar Calendar



Image Source:

<https://openclipart.org/detail/212689/chinese-lunar-calendar-3> <https://openclipart.org/detail/80533/diagram-of-moon-faces>
<https://www.srisathyaivaividya.org/index.php/component/joomgallery/default/revolution-8190.html>
<https://openclipart.org/detail/298380/february-calendar>

Time to teach	Asset Type	Theme	Sub Theme
3 Minutes	Interesting Asides	Time	24 Hours clock time

22. DD_Use of a Calendar

Teacher shall discuss the need and use of a calendar.

- 1) Can you think of life without calendar. Ask students “why do we need calendar?”
- 2) We use calendar to keep track of present day, month and year.



- 3) Planning holidays



- 4) Keep track of daily activities.
- 5) To stay organized and to be productive.



- 6) Knowing festival and public holidays
- 7) Remembering birthday, anniversaries and death days.

2018 December						
SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4	5 School Holi	6	7	8
9	10	11	12	13	14	15
16	17 Jeeva's Birthday	18	19	20	21 Sports Day	22
23	24	25 Christmas	26	27	28	29
30	31					

- 8) Completing work before deadline.
- 9) Opening the food product affects the best before or expiry date. Product once opened loses its freshness.



10) When consumable goods are expired it should not be eaten.

11) Medicines will lose its effectiveness if it is expired.



12) Never buy any product without checking the manufacturing and the expiry date.



13) Food gets spoiled easily with more time and high temperature. Hence it should be stored properly.



14) Follow the instructions given in the packet.



Image Source:

<https://pixabay.com/en/calendar-2019-agenda-schedule-plan-3312280/>
<https://openclipart.org/detail/236731/happy-holidays-man> <https://www.maxpixel.net/Pen-Clip-Ruler-Paper-Work-Table-Calendar-White-2559888> <https://pixabay.com/en/pringles-chips-snack-junk-food-331944/> <https://pixabay.com/en/close-up-drugs-medical-medicine-1853400/>
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<https://openclipart.org/detail/273218/fridge-open>
<http://www.clker.com/clipart-454203.html>

Time to teach	Asset Type	Theme	Sub Theme
5 Minutes	Day-to-day Relevance	Time	24 Hours clock time

23. SA_Shopping

Aim: To visit a grocery shop and to find out the manufacturing and expiry date of the items given in the list.

Resources Required (for each student): One print- out of the list of the items

Setting for the Activity Outdoor

Type of Activity: Field Trip

Visit a grocery shop and find the manufacturing date, the expiry date and the duration within which it has to be used for the following items.

Food Item	Manufacturing Date	Expiry Date	Duration
Sugar			
Milk			
Frozen peas			
Cake			
Bread			
Dolo 650 (Tablet)			

Instructions to Teacher: It is an individual activity.

Conclusion: Students will know to find the manufacturing and the expiry date.

Time to teach	Asset Type	Theme	Sub Theme
10 Minutes	Suggested Activity	Time	24 Hours clock time

24. QA_Worksheet on calendar reading

Answer the questions by reading the calendar:

2018 December						
SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4	5 School Picnic	6	7	8
9	10	11	12	13	14	15
16	17 Jyoti's Birthday	18	19	20	21 Sports Day	22
23	24	25 Christmas	26	27	28	29
30	31					

1) What is the date of the picnic?



Answer: 5 December

2) How many days are there in one week?

Answer: 7 Days

3) How many Sundays are in this month?

Answer: 5 Sundays

4) What day of the week is December 10?

Answer: Monday

5) When is Jyoti's birthday?



Answer: 17 December

6) What activity is on December 21?



Answer: Sports Day

7) When is Christmas?



Answer: 25 December

8) On 4 May 2018 Ravi goes to a shop to buy Tomato Ketchup. He checked the bottle to see the manufacturing and the expiry date. Manufacturing date was 24/08/17 and the expiry date is 24/02/19.



a) In which Month was the ketchup packed?

Answer: August

b) Can Ravi eat the ketchup on 30/3/19? Why?

Answer: No, it has crossed expiry date.

c) How long it can be used?

Answer: 18 Months

d) Can you keep it for long after opening?

Answer: No

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<http://www.clker.com/clipart-774421.html>
<http://www.clker.com/clipart-play-sports-2.html>
<https://openclipart.org/detail/303844/tomato-ketchup>

Time to teach	Asset Type	Theme	Sub Theme
8 Minutes	Assessments	Time	24 Hours clock time

25. VC_Time Management

Time Management

We have just learnt about the role of Time and its importance in our lives.

In our day to day life, Time has a lot of importance and relevance. Like money, time is also limited. We can perhaps earn back the money we spent. But, we cannot get back the time we have spent. Therefore, we should manage our time effectively by planning our work schedules properly to get optimum benefit of the time we have.



Story Time

A teacher in a school was teaching his class about the importance of Time and it's efficient management. On his desk were a bag of sand, a basket of pebbles and a bag of different sized rocks and a glass of water.

The teacher asked a student to fill up all the three items, i.e. rocks, pebbles and sand into a glass jar. The student very obediently filled up all the three into the bucket starting with sand, pebbles and rocks. But, they all did not fit into the bucket. Some rocks were left outside.

And the teacher refills the jar with

- rocks first,
- pebbles next

- then sand and
- finally the water,

shaking the jar now and then so that they all can fit into the jar.

The teacher told the students – “this is an example of poor time management. Just like a bucket has a definite limited volume, we have limited time of 24 hours per day at our disposal.

1. The big rocks are your regular studies and homework which you should put in first in your day of 24 hours
2. The pebbles are your play time which you should fit in next
3. The sand is your relaxation time that comes after the first two
4. The water is miscellaneous activities like packing your school bag for next day, making your uniform and shoes ready for next day etc that should be fitted in finally.

Children! We should prioritize our day's tasks based on their importance.

Otherwise, you may waste so much time spending on your least important tasks that you may not be left with time for your more important tasks and for absolute necessities.

Video link: Uncle lion's Tales

https://www.youtube.com/watch?v%3DdEurilNCiv8%26list%3DPLBRCC43j_ndZ87BPQ0cJ2MHCYhRi9h-Vw%26index%3D20&sa=D&ust=1565196690518000

Image Source:

<https://pixabay.com/illustrations/time-time-management-family-3933685/&sa=D&ust=1565196690519000>

Time to teach	Value Type	Value Sub Type	Value Attribute
10 Minutes	Right Action		Stories

26. MS_Summary_Tick Tick Tick

Summary of Tick Tick Tick:

- **Analog and Digital** are the two types of clock.
- The long hand, which is the hour hand and the short hand, which is the minute hand and a thin hand which goes faster is seconds hand.
- There are 24 hours in one day.
- In olden days people used to know time by looking at the movement of the sun.
- 12 midnight to 12 noon is called 'AM' which is the abbreviation for 'Ante Meridiem'. 12 noon to 12 midnight is called 'PM' which is the abbreviation for 'Post Meridiem'. In 24 hours clock, the day begins at midnight.
- **Daily** routine helps us to get organized.
- **Timeline** is a series of events that is put in chronological order.
- We use 24 hours clock in Military services, Computers, Transports like airline, bus, train etc.
- When we convert from big unit to small unit we multiply using the below table. When we convert from a small unit to big unit we divide using the below table.

1 Hour = 60 Minutes

1 Minute = 60 Seconds

1 Hour = 60 x 60 Seconds = 3,600 Seconds

- A **calendar** is used to see the months, weeks and days in a year.
- **Manufacturing date** is when the product was produced.
- **Expiry date** is before which the product has to be used.
- We should prioritize our day's tasks based on their importance.

Time to teach	Asset Type	Theme	Sub Theme
5 Minutes	Main Script	Time	Calendar, 24 Hours clock time

Master Lesson Plan

Seven Asset Methodology for MLP

What is the purpose of this Master lesson Plan?	This Master Lesson Plan (MLP) prepared by Sri Sathya Sai Vidya Vahini (SSSVV), covers the entire chapter for the given board. The MLP for the chapter given in the textbook is broken down into smaller modules known as assets. Any chapter can be taught using the 7 asset types in SSSVV methodology. Several different assets together complete the entire chapter. Depending on the requirement, each asset is supported by teaching aids such as animated presentation, audio, video, and learning aids such as worksheets. The MLP is for the teacher's preparation and the teaching aids are for use in the classroom.
How to use it?	You can prepare for your class with this MLP by following 3 simple steps: 1. Read your textbook; 2. Go through the information given in the assets (document & multimedia); 3. Prepare your teaching notes. Great! Now you are ready to transact the chapter.
Duration	Kindly note the duration given for each asset. Due care has been taken in planning the assets, to ensure the chapter is completed within the time specified by the Board. Note: Preparation time is not included in the asset duration. The teaching time depends on the duration of the teaching aids and is not impacted by the length of the MLP.
What is a 'Main Script' (MS) Asset?	The Main Script asset is there for explaining the main concepts of the chapter clearly. The information given in the textbook is simplified, organised and structured to give more clarity. Additionally, you may find a video or mnemonics or a graphic organiser to deepen the understanding of the concept.
How to teach using the MS asset?	Please use the blackboard, slides and interaction to develop the concept.
What is an 'Inquisitive Questions' (IQ) asset?	The Inquisitive Questions asset uses questions to promote higher order thinking like the n^{th} why, what-if, new perspectives, cause-effect, and others, creating curiosity.
How to teach using the IQ asset?	You may use the questions to connect with the students, encourage exploration to engage them in the learning process. You may allow multiple responses and instead of rejecting any of the responses, ask why, before revealing the suggested answer or hints.
What is a 'Day to day Relevance' (DD) Asset?	The Day to Day Relevance asset helps students understand the practical relevance of every topic, making them eager participants in the classroom. If students connect the concepts to their environment, they would learn meaningfully without dislike or simply memorizing for exams.

How to teach using the DD asset?	You may use the asset by asking questions about their experience and use it to establish why they are learning the topic. If necessary you may substitute with a recent or local example.
What is an 'Interesting Aside' (IA) asset?	The Interesting Aside asset uses attention grabbing titbits or anecdotes to bring joy and satisfy the child's hunger to know more. This is a quick/short asset intended to bring attention back to the main concept being taught.
How to teach using the IA asset?	You may use this asset to give a piece of interesting information relevant to the topic, without prolonged explanation/discussion. You may suggest appropriate books for further reading.
What is a 'Suggested Activity' (SA) Asset?	The Suggested Activity asset provides a detailed step by step procedure for the teacher to conduct a hands-on activity. This promotes Activity Based Learning.
How to teach using the SA asset?	You may use this asset to energise your students to learn by doing simple, fun-filled activities based on the topic. The asset includes - preparation, activity, and follow-up. You may engage the students in the preparation and follow-up stages to develop collaboration and responsibility. You could try it once, yourself, before the actual delivery to be more comfortable with it. Note: The duration mentioned in the asset is usually for the activity part only.
What is a 'Value Content' (VC) Asset?	The Value Content asset integrates Universal Human Values (such as empathy, inclusivity, respect for nature that translates into responsible behaviour) seamlessly into the curriculum, as the "End of education is character".
How to teach using the VC asset?	You may use this asset to engage with the students to bring out their innate values and connect with the intrinsic values in the topic/concept. The asset includes pointers on the specific pedagogical technique followed.
What is a 'Questions to Assess' (QA) asset?	The Questions to Assess asset uses an interactive approach to check learning of different types of learners, and provides feedback to the teacher for appropriate action. The questions cater to all the levels of Bloom's Taxonomy. Questions from 'Apply' level and above enable students to reflect on their learning.
How to teach using the QA asset?	You may go through the slides to understand its flow and know when to click for the answer (slides include suggested answers). While presenting in the class, you may display the question and encourage multiple responses, before revealing the answer. In some cases, this asset may include extra questions/worksheet that can be given as homework.

