THE NATIONAL ANTHEM

Jana-gana-mana adhinayaka jaya he
Bharatha-bhagya-vidhata,
Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchala-Jaladhi-taranga
Tava subha name jage,
Tava subha asisa mage,
Gahe tava jaya gatha.
Jana-gana-mangala-dayaka jaya he
Bharatha-bhagya-vidhata,
Jaya he, jaya he, jaya he,
Jaya jaya jaya jaya he!

PLEDGE

India is my country. All Indians are my brothers and sisters.
I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.
I shall give my parents, teachers and all elders respect, and treat everyone with courtesy.
To my country and my people, I pledge my devotion. In their well-being and prosperity alone lies my happiness.
Dear learners,

Everyone likes to play. There are games that can be played physically. But there are many intellectual games too. This book has a lot of simple computer games and interesting activities. You need concentration to play these games. Along with fun, these games give you information and also help you do the activities given in other textbooks as well. The pictures seen in the games are familiar to you. Observe them while you are playing.

Talk about them to your teacher.

With love,

Dr. J. PRASAD
Director
SCERT
TEXTBOOK COMMITTEE

Information and Communications Technology
Standard 4

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K. ANVAR SADATH
Executive Director
IT@School Project
Thiruvananthapuram

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Suresh S. R., Master Trainer, IT@School Project, Kozhikode

ENGLISH TRANSLATION
Aneesh Lawrence, Master Trainer, Thrissur
Arun Peter, Master Trainer, Thrissur
Subaida P. A., Master Trainer, Thrissur

LANGUAGE EXPERT
Dr. Chitra V. R.
Assistant Professor, Dept. of English, University College, Thiruvananthapuram

CARTOONS
E. Suresh
Cartoonist, Pallikkara, Kozhikode

ACADEMIC CO-ORDINATOR
Dr. Meena S.
Assistant Professor, SCERT, Thiruvananthapuram

CO-ORDINATOR
Hasainar Mankada
Master Trainer, IT@School Project, Malappuram
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Dear Teacher

The methodology adopted for the lower primary classes to achieve the basic qualities and skills of ICT and other subjects is mainly through games, without giving the feeling of learning something.

We use GCompris, an edutainment software much more in Standard 4 than we did in the earlier classes. Children need to develop abilities like reasoning, logical thinking and problem solving skills from the very early childhood. Many interesting and issue based games in GCompris will help the learners achieve these goals.

Students have to do activities in the Mathematics lesson, **Time wheel** to mark the time in the clock. Much more activities are to be given to reinforce the concepts of clock and time and its relevance in man’s life. For this, 4 types of games are included in the lesson **Time and Clock**.

A new section titled **Fractions** is introduced in the Mathematics lesson **Half and Quarter**. After getting the idea of one-half, the learners should get acquainted with one-third and one-fourth fractions. There are many games in the fraction group of pySioGame software besides textual activities to reinforce the idea of fractions.

Students can play games to learn how to balance a scale in the Mathematics lesson of standard 4 concerned with weights and
length. It will help the learners gain basic knowledge about mass, weights and measurements.

The basic functions of multiplication and the related activities in pySioGame, will help the learners to develop the skill of doing mathematical calculations mentally.

The lesson in Environmental Science titled **Up Above The Sky** deals with celestial spheres and the game chronos in GCompris will help the learners know more about them. The lesson **My neighbouring districts** help the learners to become familiarised with the districts in Kerala. The software used is Tux Paint. The learners have to be informed about the names of the districts after colouring.

The reasoning ability and the problem solving skills of the learners could be developed with the help of these games.
ARTICLE 51 A

Fundamental Duties - It shall be the duty of every citizen of India:

(a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

(b) to cherish and follow the noble ideals which inspired our national struggle for freedom;

(c) to uphold and protect the sovereignty, unity and integrity of India;

(d) to defend the country and render national service when called upon to do so;

(e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practice derogatory to the dignity of women;

(f) to value and preserve the rich heritage of our composite culture;

(g) to protect and improve the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures;

(h) to develop the scientific temper, humanism and the spirit of enquiry and reform;

(i) to safeguard public property and to abjure violence;

(j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

(k) who is a parent or guardian to provide opportunities for education to his child or, as the case may be, ward between age of six and fourteen years.
When a new computer was brought in, Ami and Sumi went to see it. They expected a big box but the teacher took out a long box first. There was a picture of keyboard on it. She gave another box to Sumi telling her that it was the monitor. There were 6 boxes altogether.

Why are there so many devices?

Which of them could be used for hearing music and watching movies?

There are some other devices also. Look at the next page. Can you name them? What are their uses?
Different types of computers

“But the computer in the headmaster’s room does not have so many components!” Ami exclaimed.
“That’s a laptop”, teacher said “All those things are there in the laptop also.”

Have you ever seen a computer as shown below? This small computer is known as tablet.
We use computers to do many things in our life. We depend on a computer because it can do everything accurately and fastly. We listen to music, watch films, play video games or even control satellites using computers.

You have also computers at school. What activities do you perform in a computer? Which one do you like most? No doubt, it must be the games.

Computer games are not meant for fun alone. They are also used for learning. Shall we see what all games are there in the computer? Play games in GCompris in your computer with the help of your teacher.
Understand the words

Don’t you see words falling down? Type them before they reach the ground.

GCompris ⇒ Discover the Computer ⇒ Keyboard-manipulation boards ⇒ Falling Words

Don’t forget to read the words while you type them.
The items given above are arranged in a logical sequence. Observe them. You have to complete the list based on this.
4

THE TOWER OF HANOI

Do you see the discs? Rebuild the tower in the same order by dragging the discs to the picture on the right.

Drag and drop here first

Don't forget to obey the instructions...!

Activity

GCompris ⇒ Puzzles ⇒ The tower of Hanoi

You can move only one disc at a time. You cannot place a bigger disc on a smaller one. Do similar activities in this group.
TIME AND CLOCK

Shall we play a game to write the correct time in the clock?

Click the hour and minute hands and drag them in a circle to fix a time you like.

Check the changes in time

You can select more activities from here

Oops! The time in the clock is wrong. The bell must have rung.

All India Radio
Thiruvananthapuram
Now the time is 10 O’Clock

Drag the clock hands to set the time

08 : 46
fourteen to nine

How clock works?
Turn the clock hands and see what happens.
To the teacher

Activity

Applications

Games

pySinGame

Time

How clock works?

Do you play these clock games?

Game to type the time by looking at the clock.

Game to arrange the clock according to the given time.

Game to click and remove same numbers shown in the clock and figures.
Pathrose is weighing the items bought for preparing the noon meal by the headmaster of Arun’s school. But some weights are missing. Help Pathrose balance the scale using the available weights.

We can equalise the two sides by using these weights.

Did you see the indications?

Activity

GCompris ➔ Mathematics ➔ Go to calculation activities ➔ Balance the scales properly

Drag and drop weights on both the sides of the scale. Some times you cannot see the measurement of the weights. Do you see the markings in the middle of the scale?
7

MATCHING CARDS

There are twins hidden among the cards. Find them out.

![Matching Cards Image]

Find out the cards having the same operations and results

To the teacher

Activity

GCompris ⇒ Mathematics ⇒ Go to calculation activities ⇒ Go Mathematics memory activities ⇒ Multiplication memory Game

When you click two cards having similar operations and results, the cards will disappear. Try all the other activities yourself.
LET’S MAKE WORDS

The letters are shuffled.
Make as many words as you can...

You have to make the maximum possible words within the given time. If the words are correct, you can see them in *Answers* box.

It’s a word game. When you make the longest word, you can go to the next level.
“July 16, 1969. 7 o’clock in the morning. Three people - Neil Amstrong, Edwin Aldrin and Michael Collins got into a space jet attached to a rocket in Cape Kennedy Rocket launching station in America. The rocket went up the sky. Surprising the onlookers, the rocket darted to the moon.”

Did your teacher tell you about the landing of man on the moon? You can arrange the steps of the journey using Chronos. It’s a game in GCompris.

When the story completes, click on OK.

Drag and drop images in a sequential order.

GCompris ➔ Go to discovery activities ➔ Miscellaneous activities ➔ Chronos
Amina and Philomena learned an English song yesterday. They sang the song a number of times and wrote it in their notebook. When they reached the lab, Amina had a doubt.

Where will they type?
How can they type?

We can use a word processor in ‘Go to amusement activities’ in GCompris. Let’s type the poem, ‘Work While You Work’ that you have studied earlier.

To the teacher

Activity

GCompris ✡ Go to amusement activities ✡ Your Word Processor

Don’t forget to click here before typing the heading.

Don’t forget to click here before typing the poem.
When you type using a keyboard, don’t forget to use your fingers correctly. Look at the picture.

- Look at the colour of the keys and fingers.
- The red coloured keys should be typed with a red coloured finger.
- After you complete a line, press the Enter key.

Now, don’t you like to save what you have written?

There are ways to do this in a computer.

A new window appears on clicking. We can give a name to save the file.
We can see the saved files in the above picture. How can we open them?

Click here to open the saved file again

Click on this button now

The saved files are stored in a folder named ‘Word Processor’ in GCompris in home. We can delete, copy and rename those files. You can paste these files in the same folder in another computer, and open these files in that computer using GCompris.
Haseena came to the class with a pack of sweets. It was her birthday. Arun saw a small piece of paper dropping on to the floor. It fell down while she opened the packet. He took it. It was a bill. When Ambily teacher came to the class, Arun raised his doubts.

Arun : Teacher, look at this. A computer bill! Can we make such bills in our computer?

Teacher : Of course. We have to connect a printer to a computer to get a computer bill.

Aju had a doubt then.

Aju : Teacher, can we make such bills in Malayalam?

Teacher : Why not? Your text books are prepared by the computer.

Aju : How can we type in Malayalam?

Teacher : Let’s type a poem in Malayalam in GCompris.

GCompris ⇒ Go to amusement activities ⇒ Your Word Processor
How can we type?
We have typed words in English. We know how to place our fingers on the keyboard. We can place our fingers like this.

Do remember ...

Before you type in Malayalam hold the key and press space bar to change the script from English to Malayalam.
How can we write?

<table>
<thead>
<tr>
<th>കുഞ്ഞന്റെ</th>
<th>കുഞ്ഞന്റെ പ്രായം</th>
<th>എണ്ണം</th>
<th>പ്രവർത്തനം</th>
<th>അനുബന്ധിക്കാനുള്ള രീതി</th>
<th>മൗലികം</th>
</tr>
</thead>
<tbody>
<tr>
<td>പ്രത്യേകിക്ക</td>
<td>കുഞ്ഞൻ</td>
<td>പ്രായം</td>
<td>എണ്ണം</td>
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<td>അനുബന്ധിക്കാനുള്ള രീതി</td>
</tr>
</tbody>
</table>

Then

കുഞ്ഞൻകിട്ടാന്‍ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ പ്രവാചകത്തണ്ടെ

Try to type the above lines.

To change the keyboard layout, you can also use the keyboard indicators of the upper panel besides key shortcuts.
12 MY NEIGHBOURING DISTRICTS

Ammini was in her mother’s native place during the holidays. She shared the details to her friends, Haseena and Ammu. It is in the neighbouring district. The name of the district is Wayanad. It takes 2 hours by bus to reach there. The journey was so interesting for her as it covered forest and ghat. There is another state next to it.

Wayanad is the neighbouring district where Ammini and Ammu reside.

Which are your neighbouring districts? Open Tux Paint and colour the neighbouring districts.

Click tool from the main menu. You will get stamps from the right side.
We can change the size of map using this.

Now click boxes of different colours and then click on the map.
My neighbouring districts

Tux Paint
Tux paint is a very simple software that can be used by children for drawing. It has not only lots of stamps (images) which can be used in canvas but also tools for drawing. We can plan a lot of curricular activities by adding more stamps. This software can be used to enrich creativity and imagination.
JOURNEY TO THE MOON

shall we give life to the smiling moon in the sky?

- Kumaranasan

let us draw the moon by opening GCompris.

use this tool for dragging

click to give different background colours

Activity

GCompris ➔ Go to amusement activities ➔ Create a drawing or animation
Did you complete drawing the moon? Now let’s animate it.

Notice this figure

The Picture is here now

Click here

The figure has changed here
Information & Communications Technology-IV

We can use this tool to move the moon a little forward.

Click next.

Move the moon a little forward.

These are the frames.

Click each frame and change the position of the moon.

Now click here.

I am here.

24 frames.
There are many pictures here. We can create animations like this with the help of these pictures.
Athira, Ebi and Ami were given similar rectangles and asked to fill half of them with colour. Check the coloured images and say if half of them are coloured or not. There are games in your computer for comparing different portions. Play them with the help of your teacher.
Boxes on the left side

Drag and drop the equally coloured portion from here to the left side

Click here to check whether the answers are right

Click here for another arrangement

Click here for more activities

Click here twice to finish the game

Activity

To the teacher

Applications ➞ Games

pySioGames Mathematics 3 Fraction Groups Sorting and Comparing
Don’t forget to play fraction group 2 & 3

We cannot drop an image over the other. The pictures can be moved only through vacant places. You can click the tick mark to check the answers only after all the images are dropped. A congrats icon will appear only if all the answers are correct.