

A LETTER TO TEACHERS

Dear teachers,

Greetings from Shriram Foundation for a wonderful new 2018!

We hope this year will be better for you and for your schools than all the years that went before it. We pray and wish your students and teachers will emerge stronger, more eager and more confident learners this year and your schools will take delight in marking their progress.

As a school what would you like to resolve for yourselves this year? As teachers what new heights do you wish to scale? What would you like for your students? We hope as you go into the new year, the school team will sit together and dream up some lovely resolutions for your school and for yourselves.

As always we look forward to hearing from you about your experiences. Write to us at m100.shriramfdn@gmail.com.

Warm regards
Editor

FROM OUR SCHOOLS - Vanabhojanam

As part of the Intensive School Development Program initiative under Mission 100, an interesting cook-and-serve event was organised in Siddhartha High School, Chinnampeta on November 28, 2017. Under the leadership of their teachers, Shriram Foundation's ISDP team and ably mentored by Mrs. and Mr. Srinivasa Rao, the students of 8th & 9th grades took ownership of the tasks and cooked their Vanabhojanam meal and celebrated it by serving their parents.



This event is an example of how a simple activity can help in teaching life skills such as planning, teamwork, patience, mutual help coordination etc. It was also evident that the students were able to relate to the amount of work their parents, particularly their mothers, do at home everyday!



WISE WORDS

Every year January 30th is observed at the national level as Martyrs' Day to pay tribute to Mahatma Gandhi (Bapu), a great freedom fighter of India who is counted as one of the greatest of martyrs. Here are some quotes of Bapu to inspire you. You may write or display them on your blackboards or notice boards, explain and discuss them with your students.

"The future depends on what you do today."

"Strength does not come from physical capacity. It comes from an indomitable will."

"The weak can never forgive. Forgiveness is the attribute of the strong."

"Happiness is when what you think, what you say, and what you do are in harmony."

"Live as if you were to die tomorrow. Learn as if you were to live forever."

"Silence becomes cowardice when occasion demands speaking out the whole truth and acting accordingly."

TEACHER TIP**Making school - a welcoming environment**

Children are often unwilling to leave their homes and come to school every day. If a child is reluctant to come to school it could be because he or she is unhappy in school for some reason. Here are some reasons why students do not enjoy school and how we can make the school a more child-friendly place.



S. No	Problems	Solutions
1	<i>Being bullied by classmates or older children</i>	<i>Speaking to the child's friends, classmates, parents and the child, showing sympathy and a willingness to listen and help</i>
2	<i>Low self-confidence caused by comparisons with classmates, being unable to cope with the work done in class, and feeling discouraged by it, and being criticized for it</i>	<i>Focusing on what the child can do instead of on all his mistakes and weaknesses, appreciating the child for even small deeds will help; getting a patient and friendly classmate to help and guide the diffident child will also build confidence</i>
3	<i>Physical weakness, lack of stamina, long and difficult travel to school, sickness</i>	<i>Noting the state of health, discussing your concerns with parents and offering suggestions on nutrition, transport methods etc</i>
4	<i>Dull classes</i>	<i>Learning through games, songs and action based activities, daily physical games, gymnastics and other exercises are things that the children both enjoy, and benefit from.</i>

Looking forward to attending school is a basic requirement for a child's learning. School should be considered a good, happy place where children feel welcome, valued and loved for who they are and what they can contribute, despite their failings.

LEARNING THROUGH ART**Symmetry**

Use art to teach your primary students about symmetry. All you need is a sheet of plain paper and water or poster colours!

Fold a sheet of paper in half, crease it well and unfold it. Paint a number or letter of the alphabet on one half of the paper using water colours. Now quickly fold the paper along the same crease, press it hard with your hands and slowly reopen it. You will find a mirror image in the second half.

You could also draw half a circle or square or any other shape starting from the fold and extending to one half of the paper. Folding and pressing will help to complete it in the other half.



*Source: <https://www.messforless.net/preschool-art-activity-to-teach-symmetry>



WORD SCRAMBLE

Republic Day

Share a simple Republic Day themed scramble puzzle with your Primary children.

Fill up the blank using only the letters P / L / R / B / I / E . This is the theme for your next table.

"We celebrate _____ U _____ C day on 26th January every year because it was this day in 1950 when India was declared a Republic and the Constitution of India came into force.

Now complete the table below by unscrambling the words given in bracket using the sentence clues.

S. No	Word	Clues
1.	<input type="text"/>	(BTIISRH) ruled India before independence.
2.	<input type="text"/>	A grand (PRDAAE) is held in Delhi that starts from Rajpath and ends at Red Fort on this day.
3.	<input type="text"/>	Dr.(AAMDBKER) was the Chairman of the Drafting Committee of the Indian Constitution.
4.	<input type="text"/>	The national (FALG) of India has three colours – Saffron, White & Green.
5.	<input type="text"/>	Our (PSEIEDNRT) hoists our flag on 26 th January every year.

IN THE NEWS

It is important for children to know what's happening in the world around them. You may think of conducting a "News Discussion time" in your classrooms once a week! To start with, you can use this small snippet!

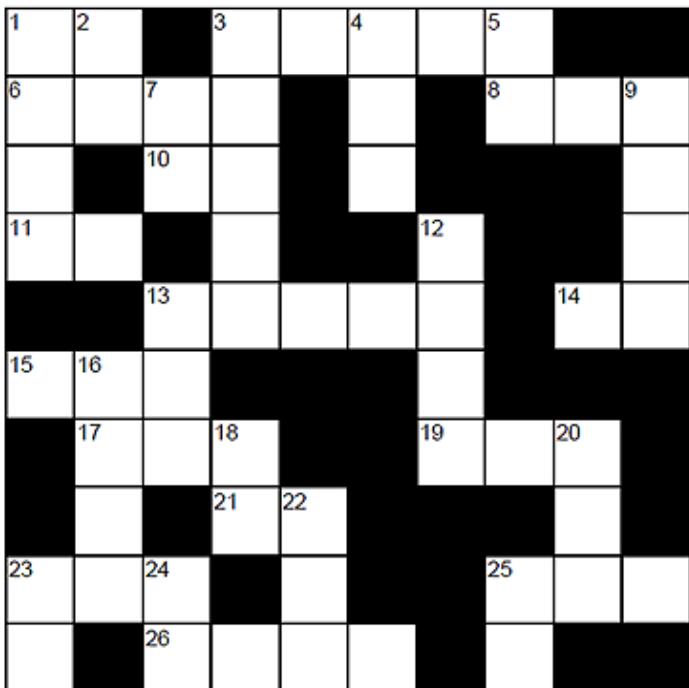
Aadhaar-Linking Extended To 31st March 2018

The government had earlier mandated to link bank accounts, mobile phones and government welfare schemes to Aadhaar or national identity cards and set a deadline of December 31, 2017. It also mandated linking of the Aadhaar number with Permanent Account Number to avoid individuals using multiple PANs to escape taxes. The deadline for Aadhaar-linking is now extended to March 31, 2018, by the Supreme Court. It also said that people who do not have Aadhaar yet, have time till March 31 to enroll for Aadhaar. However, they can still open new bank accounts, provided they furnish their Aadhaar enrolment application as proof to the bank. Interestingly, schools, colleges, insurance companies and almost every government agency seek Aadhaar number nowadays. There are hospitals that collect Aadhaar number from patients. In some places even filing FIR requires Aadhaar number.

<http://www.thehindubusinessline.com/news/national/sc-extends-aadhaar-linking-deadline-to-march-31/article9994572.ece>

CROSSWORD PUZZLE**Arithmetic Operations**

Are your children tired of Math drills? Here is a fun and interesting way to make them practise the same with a crossword puzzle. Share this puzzle with your Upper Primary children to recall the concepts of arithmetic operations. You may also choose to change the complexity/topic as you wish.



Clues	
Across	Down
1. $1140 \div 12$	1. $13130 - 3548$
3. $5201 + 7282$	2. $624 \div 12$
6. 373×14	3. $17335 - 5253$
8. 39×23	4. $206 + 268$
10. $108 - 28$	5. $570 \div 15$
11. $460 \div 20$	7. $12 + 16$
13. $580615 \div 7$	9. $10461 - 3269$
14. 3×4	12. $10269 - 2702$
15. $266 + 453$	13. $4495 \div 5$
17. $247 + 447$	16. $2336 - 687$
19. $340 + 409$	18. 6×8
21. 17×5	20. 991×1
23. $1158 \div 6$	22. $6672 \div 12$
25. $311 + 499$	23. $425 \div 25$
26. $4622 - 1359$	24. 11×3
	25. 29×3

THEME FOR THE MONTH**International Street Children's Day**

International Street Children's Day is celebrated every year on January 31st, on the anniversary of the canonisation of Saint John Bosco, a Catholic priest who dedicated his life to educating street children and disadvantaged youth. International Children's Day is a day dedicated to raising awareness of the plight faced by children living on the streets, and taking steps and making plans to help them.

Street children are defined as children who live on the streets by themselves, or sometimes with homeless adults or groups of other homeless children. They broadly fall under four categories: children who work on the street and come back home at night to their families, children who work on the street but whose family ties are weakening, children who work on the street and live with their parents who are also on the street, and children who work on the street and live alone on the street.

Some street children are runaways, who were forced to leave their homes for a number of reasons. They could have suffered abuse at home at the hands of their guardians; their guardians could have problems with drugs or alcohol, or have no means of employment to support their families.

These children survive on the streets by begging or working small jobs such as hawking, rag-picking, shoe-shining or working in shops, or committing petty theft, or prostitution. They lack sustained access to nutritious food, sanitation and medical care. Due to lack of shelter they are often exposed to the elements.

Children on the street are extremely vulnerable to harm and exploitation by adults, as they have no social status or guardians to shield them from danger. The general public and the police look at them unfavourably and treat them with hostility, and as a result street children can undergo all kinds of abuse; verbal, physical, sexual, psychological, neglect and health related.

Classroom Activity:

Get the children to discuss what they know about street children. Ask questions like where do they get food from? Where would they go when it rains? Where would they sleep at night? What risks do they face? Where do they go for a bath or for defecation? Let children think, imagine, and draw from their knowledge to discuss these points. Children may draw, put up plays to express their sympathy and offer solutions. Creating awareness and building empathy are first steps towards creating a more caring and sharing society.

MAKE A NEW YEAR'S RESOLUTION

January is the first month of the New Year, and that makes it the most special as it marks a new beginning with a fresh year ahead. A new beginning means numerous new possibilities and surprises in store.



People mark the New Year with various traditions, but one tradition in particular highlights the opportunities presented to us with a new beginning, which is making New Year Resolutions. New Year Resolutions are resolutions made at the beginning of the year that you plan to carry through for the rest of the year at least, if not permanently. Making a resolution is to resolve to make a certain promise to oneself and to hold oneself accountable to fulfil it.

Classroom Activity:

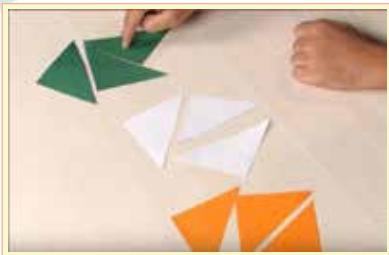
Tell your students about New Year Resolutions. Ask each child to take one sheet of paper. Ask them to think of one thing that they would like to do this new year. It could be a change in themselves, like becoming more tidy or disciplined. It could be a resolution to learn something new like cycling or cooking. It can even be a change they would like to see, such as talk more with their parents, spend more time with their grandparents or just work hard to improve their test scores or make their school brighter and more beautiful. Tell them to write it, sign it and fold it and keep it safe. They can also take an oath to work on their resolution seriously. You too can lead by example by making your own resolutions.

CREATIVE CORNER**Tricolour pinwheel**

Children love making their own national flag. So why not celebrate Republic Day, which is right around the corner, by whipping up a different craft idea? A paper windmill in tricolour is perfect for the job!

Things needed:

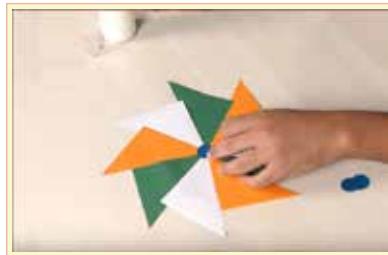
- Coloured papers – Orange, Green, Blue and of course WHITE! (You can also paint on plain papers)
- Pencil
- A piece of wire(2" length)
- Scissors
- Glue
- Straw(1" length)
- Stick



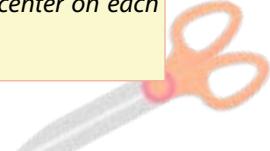
1. Cut the sheets of paper into equal triangles like these.



2. Arrange them like a wheel in this order and glue the sides together



3. Cut three blue circles and place two of them at the center on each side of the wheel.





4. Fold the outer edges of the triangles towards centre and paste them one by one to any one of the circles on the same side. Remember not to make any crease while folding.



5. Add the third circle once all the edges are folded.



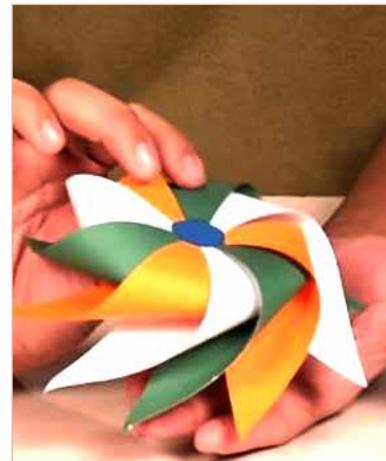
6. Insert the wire through the center of the wheel and add a paper ball/bead to one end, to keep it in place when it rotates.



7. Pass a piece of straw through the wire for more stability.



8. Tie the stick to the end of the wire so that it is perpendicular to the wire. This will be your holder. Voila! Your tricolour pinwheel is ready!



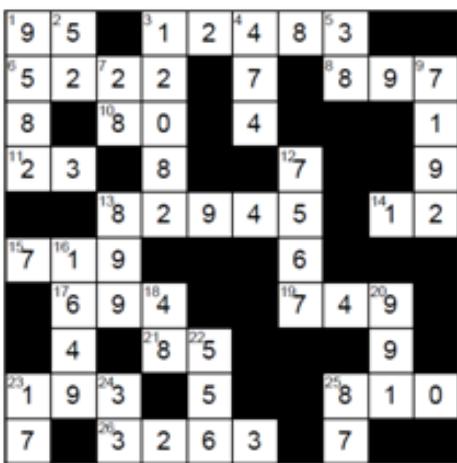
Answers

Word Scramble – Republic Day

"We celebrate R E P U B L I C day ... on this day."

1. BRITISH 2. PARADE 3. AMBEDKAR 4. FLAG 5. PRESIDENT

Crossword Puzzle – Arithmetic Operations



Funny Science

1. While H_2O is water, H_2O_2 is Hydrogen peroxide, which is fatal.
2. A-mean-o-Acid (Amino Acid)
3. They make up almost everything.



Once we accept our limits,
we go beyond them.

- Albert Einstein



Science Newsletter for Teachers

Dear Science Teachers,

Welcome to the January edition of Science at School – the monthly magazine specially for you!

The Earth has completed yet another revolution around the Sun, and with it, we too complete a year of 'Science at School'! With this edition, we bring to you some interesting ideas for your classroom, events in Science, fun Science toys and much more!

Science in the News : The year that was

From space science to the world under the microscope, 2017 was a year that brought some Science fiction stories to reality! Here's a quick recap of the year that was.

A twin for the Solar system

February 2017 saw the US Space agency, NASA announcing the discovery of a new solar system, which has seven exoplanets revolving around the star, TRAPPIST-1. What was more exciting was the fact that three of these planets were found to be in the habitable zone, hinting at the possibility of alternate life forms.



I think therefore I am



In a surprising new discovery, the origin of the 'thinking' species, *Homo sapiens*, has been pushed back by 1,00,000 years! Before this, the oldest fossil remains dated to around 1,95,000 years ago. But, the recently discovered remains of human specimens in North-western Africa date back to 3,00,000 years ago.

The tip of the iceberg

In yet another dramatic event, a huge iceberg (estimated to be a little bigger in size than the Indian state, Goa) broke off the Antarctic ice-shelf. While some say it is the effect of climate change, research is still on to prove or disprove the claim.



Cut, edit and paste



What if there was a tool that could edit your genes, just like you edit photographs? The tool, called the CRISPR performs exactly this role. In September 2017, researchers from China, used this tool for the first time in the human embryo to correct an error. On one hand, it has opened up a whole new area of therapy, but on the other hand, lies the fear of misusing this tool to create 'enhanced humans'.

A head-on collision that created waves

Two dead stars collided millions of light years away, and scientists were able to detect the waves, popularly called 'gravitational waves' in their laboratories on the Earth. Scientists believe this discovery will be key to unlocking as yet unknown secrets of the universe.

ISRO sets world record

Back home, the Indian Space Research Organization created a world record by placing 104 satellites in their orbits in one go, on February 15, 2017.

Classroom activity:

Ask students if they came across any interesting science news or events in the year 2018 and share it with the class.

Science At School

Science Newsletter for Teachers

Science knows no country,
because knowledge belongs
to humanity, and is the torch
which illuminate the world.

- Louis Pasteur



Science toys : The "Magic" pencil

Do you want to inspire students to appreciate Science? Here's a fun toy that can be made with a few handy resources.

All you need is: 6 ring magnets, a pencil, a coin (or a plastic bottle cap) and a used Frooti pack.

Take 2 ring magnets and press fit them on to the pencil. Mark lines at 6 cm and 10 cm from one side of the pack. Make small cuts on these lines as shown. Insert the coin or bottle cap firmly in the flap of the Frooti pack as shown. In the second and third slits place 2 ring magnets each as shown in the picture. Now place the pencil with the magnets above these slits, such that the magnets in the base repel the magnets on the pencil.



And there! You will see the pencil floating in the air. You can twist the back end of the pencil and you will find that the pencil keeps spinning for a long time.

*Source: www.arvindguptatoys.com

Special Feature : Curious questions, Simple answers

Why do wet clothes appear darker in colour?

There's some very interesting science behind this everyday observation!



To begin with, let's explore the science of how we see colours. As we know, white light is made up of a spectrum of colours. The colour of an object is the colour of the light that is reflected from it. So, when we see a shirt as blue in colour, it is because it absorbs all the light falling on it, but bounces off the blue light.

What happens in the case of wet clothes? Clothes are made of fibres that have small gaps in them. When light falls on it, some of it is absorbed and some is reflected. When the cloth is wet, water fills the gaps in the fibres. Water is also present on the fibres. Now when light falls on the wet cloth, water bends the path of the light. Lesser light gets back to our eyes, making the clothes appear darker.

Why not start a question corner in your own class and send us your students' questions? Mail it to us at m100.shriramfdn@gmail.com. We will feature your question and the answer in the next edition of Chalkboard.

Funny Science

1. Two men went to a hotel. The first man said, "Give me some H₂O." The second man said, "Give me some H₂O too". Both of them were served what they asked for. The second man died. Why?
2. What do you call an acid with a bad attitude?
3. Why should you never trust atoms?

