

Message from Trustees



Namaste Devotees, Volunteers and Well wishers of Cambridge Hindu Forum! Continuing on from March, second monthly puja for 2022 was performed on April 9th and we would like to extend our thanks to all the devotees who attended on the day and volunteers who made it possible. Now that we are proceeding with regular puja, there is scope to include major events such as Ganesha chaturthi procession and Satyanarayana puja in due course. We are also due to start the vedic classes at their usual slot as part of the upcoming pujas, so please contact the vedic group for registrations; children previously registered will also need to re-register for this year in order to be assigned into the appropriate learning groups.

To kick-start the fund-raising process, we are planning a mela consisting of performances, food stalls and other relevant attractions. A more formal announcement will be made via our social media channels and whatsapp by end of May 2022. For participation in the mela, please contact us through the CHF email for further discussion. As mentioned in the previous newsletter, we have started reaching out to the wider community to support the temple project. The mela is aimed at building momentum and visibility for the project.

As always, we request you to submit new materials and any interesting information for sharing with the rest of the community and support Dharma, CHF's newsletter by submitting new content to CHF.dharma@gmail.com for sharing with the rest of the community.

— CHF

Spirituality Meets Science

by Mithu Chopra, Cambridge

When we pray, whether we are alone or in a group of tens or hundreds of people, all we seek is a moment of direct connection with the supreme, when we hope our prayers, our gratefulness and our desires are all heard. Let's look at how the puja format helps us in this journey.

When looked at from a spiritual perspective, the entire purpose of puja can be summed up in one word - "Focus". Focus helps one work harder towards what they want; focus helps build mental strength and clarity; focus makes us a better person. Collective positive focus helps build better communities.

The vedic puja rituals work towards concentrating all our senses towards

the single goal of better focus. Human mind is constantly distracted by thoughts, with or without our most favourite modern distraction - smartphones. The puja rituals, when practised in their entirety, are built around cutting off all sources of distraction to our mind; avoiding any distraction via all channels i.e. our five senses



Sight: Puja vidhi - lighting a lamp, arrests the sense of sight with a focal point - the lamp.

Smell: Burning incense sticks -

pleases the sense of smell from any other override or distraction. Sadly, the present day non-organic preparation of incense sticks can cause discomfort to some people. The original idea was based around organic sweet-smelling incense sticks typically made of sandalwood powder.

Sound: Prayers accompanied by the sound of bells may/maynot awaken the deity. But they sure are aimed at pulling one's concentration, thereby preventing the sense of sound from any other distraction.

Touch: After the prayer, taking the Arathi signifies involvement of the sense of touch in the puja process.

Taste: Taking theertham or prasadam at the end of the puja checks one's sense of taste, dragging this sense as well into the main puja process.

Finally, breaking of a coconut symbolises breaking of one's ego to then find the nourishment inside the coconut. In this way, we get all five senses working towards our prayers and get our mind (ego) to consciously accept what we see and pray to. The prayer, and surrender of all our senses to prayer, work towards making our mind believe in our desires, asks and prayers. The mind then works towards the goals in everything it does. God helps those who help themselves - literally. Action gives rise to blessings and fulfilment; prayers being answered.

As Krishna says in the Bhagavad Gita

“ स तया श्रद्धया युक्त-
सूतस्याराधनमीहते | लभते
च ततः कामान्मयैव विहिता-
निह तान् || 22|| ”

“ sa tayā śhraddhayā
yuktas tasyārāadhanam
īhate labhate cha tataḥ
kāmaṁ mayaiḥ vihitān hi
tān ”

meaning

“ In whichever
form one worships,
everything comes to me
'consciousness'. It is I
'my consciousness' that
arranges for these benefits
in reality. ”

Super Humans and Dharma

by Mithu Chopra, Cambridge

We all know our very own superheroes from Ramayana and Mahabharata. The wise, strong and immortal Hanuman from Ramayana and the mighty and powerful Bheema from Mahabharata. But did you know that Hanuman and Bheema were brothers? Here is an interesting story from Mahabharata about when Bheema met Hanuman.

During the Pandavas' exile in the forest, Draupadi once saw some beautiful flowers. She wished to have more of these flowers to use for worship. Bheema, with all his pride, said he can get them in a jiffy. As Bheema was walking through the forest in the direction of the tree, he made roaring noises scaring away wild animals; he got joy by showing his strength and was very proud of himself. Hanuman happened to be in the same forest at the time. When he heard Bheema's roars and proud-talk, he thought it was time to teach his brother a lesson. After all that is what elder siblings do, don't they?

So Hanuman disguised himself into an old monkey with a long tail and lay on the path, blocking Bheema's way. Bheema saw the old monkey on the way and asked him to move away, "Hey old monkey, go away, rooaaar".

But the monkey didn't move. "Move your tail, I don't want to go over it", ordered Bheema. The old monkey asked, "Can I ask who you are please?" Bheema, of course gave a very proud response, "I am the mighty, most powerful Pandava who needs no introduction. I am *Bheema*. To this the old monkey fearfully replies, "Oh strong one, please move my tail yourselves and continue on your path."



Bheema laughs out loud at the old monkey and then tries to push the monkey's tail with his feet. The tail

doesn't budge. He then tries to move the tail with both hands and his strength to no avail. It was as though the tail was stuck to the ground.

Dates for your calendar

11 Jun	:	Mayfield School
9 Jul	:	Cambourne Hub
13 Aug	:	Fawcett School
10 Sep	:	Fawcett School
8 Oct	:	Mayfield School

At this time Bheema realised that the monkey was no ordinary monkey, it was the great Hanuman in disguise. He asks for forgiveness and to reveal his true self.

Hanuman comes in his original form and blesses Bheema. Hanuman teaches Bheema the most important lesson in life. He says, "Dear brother, my strength is simply because of the blessings of Lord Shri Ram.". Bheema realises that the mark of a true superhero is humility not pride. Bheema seeks Hanuman's blessings. With this intelligent act Hanuman clears away pride from his brother's heart and makes him a true humble warrior.

So remember, no matter how great you are at what you do, true greatness lies in humility and simplicity!

Vedic Mathematics

by Dr Chandrappa, Cambridge

Sanatan Dharma is known for many scientific inventions and one of them is astrology. As is well-known, astrology involves studying the solar system and calculating the movement of different planets. One may wonder how did they manage to do all those complex calculations to accurately predict planetary effects on living creatures. The answer lies within the mathematics found in Vedas.

A little note on history to help us appreciate our rich Vedic heritage. The word Vedic comes from Veda, particularly Atharva Veda. Like many

of our scriptures, we have lost much of maths literature from Vedas. The mathematics was written in Sanskrit in the form of *Ganita Sutras*. Ironically, modern scholars did not see the mathematics in it and it was lost, just like Sanskrit was less-favoured due to foreign invasions of Bharat.

Indian maths has a very illustrious history from time immemorial. It is generally divided into 4 parts. The first among these is mathematics found in Vedas and texts - Rigveda, Yajurveda, Taitireeya Samhita and Satapatha Brahmana. These texts have written about mathematics particularly Number systems, Concepts of Zero and infinity, Arithmetical calculations including decimals and progression. Second part is within the Sulba Sutras describing concepts related to geometry. The third part is the mathematics by Indian mathematicians like Aryabhata, Brahmagupta, Bhaskaracharya *et. al.* We all also know about 20th century mathematics genius Srinivasa Ramanujan who carried out his research here at Cambridge University. The fourth is the mathematics founded by Swami Bharati Krishna Tirtha, who was one of the Shankaracharyas, and this section delves into some of these concepts.



Monk mathematician Jagadguru Adi Shankaracharya Bharthi Krishna Thirtaji (1884-1960) revived some of it. Born on the 14th March 1884 in Tirunelveli, Tamilnadu, Sri Jadaguru was a brilliant student. By the age of 16 he was already a scholar in Sanskrit and got the title *Saraswathi*.

He later got MA in seven subjects: Mathematics, English, Sanskrit, philosophy, science, literature and history in same academic year. He taught in universities, participated in freedom movement of India and was named as *Warden of the Sons of India* by Dr. Annie Besant in 1908.

Sri Jadaguru took a particular interest in Sanskrit and Mathematics. He went to Sringeri mutt in Karnataka to study Vedas and took up sanyas between 1911- 1918. It is believed that he delved very deep into the subject and wrote 16 sutras and 13 upa-sutras of Vedic mathematics. It is believed that he wrote or planned to write 16 volumes of vedic mathematics but it is not clear what happened. The volumes which form the basis of Vedic mathematics as we know it today were published 5 years after his death.

Vedic maths is taught through sutras. *What is a sutra?* Aphorisms or word formulae; brief, not confusing, meaningful and flawless statement. Let us learn basic multiplication using the sutra by first considering **multiplication in patterns**.

The first sutra is called *EKADHIKENA PURVENA* (by one more than the previous one, as in EKAM=one, ADHIKAM=more, PURVENA=previous one) with the *upa sutra antyayordasa kepi* (antya=last, dasa=ten, Ke'pi or Ke+api=also sum of tenth place digits is 10). The following conditions have to be met while using this sutra:

- Numbers should have 2-digits.
- Units add up to 10.
- Same tenth place digits

Let us look at the example of 23 times 27. Both are two digit numbers, units 3 and 7 of the two numbers add up to 10 and the tenth place digit is same for 23 and 27. Therefore, *antayayordasa kepi upa sutra* has been satisfied.

Here, the units of both multiplier and multiplicand are multiplied to obtain the tens and units digits of the product as indicated by the red arrow and the red digits in the product. Next, one is added to the common tenth place digit of the multiplier and multiplicand and multiplied with itself to obtain the hundred-ths and thousand-th's place digits in the product. This is shown by the blue arrow and the blue digits in the product. Let us examine a few more examples.

$$\begin{array}{r}
 21 \times 29 = 609 \\
 \text{---} \\
 18 \\
 60 \\
 \hline
 609
 \end{array}$$

(Red arrows show 1x9=9 and 2x1+1x2=6. Blue arrows show 2x2+1x1=5, then 5x10=50, then 50+10=60.)

$$\begin{array}{r}
 92 \times 98 = 9016 \\
 \text{---} \\
 736 \\
 828 \\
 \hline
 9016
 \end{array}$$

(Red arrows show 2x8=16 and 9x2+1x9=20. Blue arrows show 9x9+1x2=82, then 82x10=820, then 820+80=900.)

$$\begin{array}{r}
 19 \times 11 = 209 \\
 \text{---} \\
 19 \\
 19 \\
 \hline
 209
 \end{array}$$

(Red arrows show 9x1=9 and 1x1+1x1=2. Blue arrows show 1x1+1x1=2, then 2x10=20.)

$$\begin{array}{r}
 87 \times 83 = 7221 \\
 \text{---} \\
 261 \\
 702 \\
 \hline
 7221
 \end{array}$$

(Red arrows show 7x3=21 and 8x7+1x8=65. Blue arrows show 8x8+1x7=65, then 65x10=650, then 650+10=660.)

In the third example above, note how tens place was preserved with a zero. There is another pattern for the tens place and if you find it do email chfvedicgroup@gmail.com. You can also try the below fifteen problems.

- | | | |
|---------|---------|---------|
| 63 x 67 | 49 x 41 | 33 x 37 |
| 28 x 22 | 99 x 91 | 86 x 84 |
| 25 x 25 | 15 x 15 | 45 x 45 |
| 65 x 65 | 75 x 75 | 95 x 95 |
| 85 x 85 | 35 x 35 | 55 x 55 |

To conclude, if you can apply the sutra to three digit numbers, please email chfvedicgroup@gmail.com with explanation. Try below examples.

108 x 102 204 x 206 309 x 301

$$\begin{array}{r}
 23 \times 27 = 621 \\
 \text{---} \\
 161 \\
 46 \\
 \hline
 621
 \end{array}$$

(Red arrows show 3x7=21 and 2x3+1x2=8. Blue arrows show 2x2+1x3=7, then 7x10=70, then 70+10=80.)

Lost Temples

by Anand S, Cambridge

Sanatan dharma had mental prowess that extended beyond mathematics to planning, cohesive team management and implementation of several man-years project at a time when project management tools did not exist and demonstrated exceptional skill and deftness at the same time. An exhibition of such exemplary finesse can be seen in the construction of Hindu temples. Many are cut from granite with such skill and geometric precision that it is hard to reconstruct anything on a similar scale despite modern-day technologies.

This column is one of a series that is aimed at highlighting a selection of such temples to allow the readers to appreciate the chisels that have ensured that dharma perseveres the test of time. We begin with arguably one of the most marvellous creations dating back to 700 CE (we are in 2022 CE) and stands in present day Aurangabad district in Maharashtra, India. The temple is dedicated to lord Shiva and is called the Kailash temple. One of the leading experts on Indian archaeology describes this temple as *“one of the most remarkable cave temples in the world because of its size, architecture and sculptural treatment, and the climax of the rock-cut phase of Indian architecture”*.



It is likely the only monolithic (carved from a single stone) monument that has been carved from the top and all evidence suggests that this was all planned from the beginning and no part was added to the structure as an after-thought. The rock cut spans 33m x 50m (roughly two football

pitches) and was commissioned by the Rashtrakuta rulers, although the temple has the architectural styles of Chalukyas and Pallavas. Incomplete inscriptions found on the west wall has the genealogy of Rashtrakuta rulers in Brahmi script - allowing a sense of antiquity of this wonderful structure.

The single large rock structure meant that approximately 200-500 thousand tonnes of rock had to be carved out while keeping the precision and finesse worthy of Shiva's abode. Typically, such large quantities of excavated rock are found at nearby sites. However, none has been discovered at this temple. An added scientific challenge and complexity was to determine before the start of the temple that the rock itself had no imperfections on the inside. More often, cracks and other structural imperfections become evident as the excavation progresses. It is unclear how our ancestors could have decided which rock structure to use for the magnificent and immortal imprint of Dharma.



The images above show the magnificence and grandeur of the temple with images of the people highlighting the size and scale of the structure. Not only is the temple multi-storied, it has multiple galleries and surrounding shrines with flying bridges - all cut from a single piece of hard, crystalline, volcanic igneous bedrock with zero room for error. Archaeologists and accomplished historians have inspected and have not discovered any architectural or construction errors that were later

fixed. This is craftsmanship and sophistication at its best.



One of the images also shows the intricate carving of the entire Ramayan - see if you can spot Lord Hanuman challenging Ravan in his own court and also Ravan's pushpakaviman (images also available online at Wikipedia). There is also an interesting legend explaining why the temple had to be carved from the top (arguably more difficult than quarrying from front bottom). See if you can find out!

Vedic Group Teachers

by CHF, Cambridge

Cambridge Hindu Forum in association with Purnavidya UK conducts Vedic heritage classes for children. Vedic classes are committed to cultural education with religious background and to bring spiritual awakening of Indian culture. We engage children of all ages from 4-18 years in a structured manner using books and material appropriate to their age ranging from engaging storytelling to vedic mathematics.

Since we have now restarted our on-site poojas, we are taking registrations for this year's vedic classes. Parents who are interested to register their children, please email chfvedicgroup@gmail.com for enrolment and any other queries.