

#ART&CRAFT

Tessellations

Even if you're not a maths buff, you might be a sucker for pretty patterns – and if so, then today is for you!

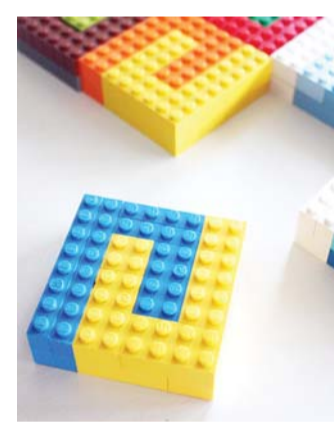


"Are you really sure that a floor can't also be a ceiling?"
- M. C. Escher

Now, this isn't a trick question, just one of the many random sayings of artist Maurits Cornelis Escher, the man whose work was based on – math! Yes, Escher used concepts like symmetry, reflections, perspective and of course, tessellations. And that's what we're going to focus on today – some cool tessellation projects for kids!

What are Tessellations?

A tessellation is a combination of shapes that fit together perfectly without any gaps, much like a jigsaw puzzle. The result is a symmetric design of repeating patterns, which may feature animals, persons or anything else. Brick walls, tiled floors and the honeycomb pattern in bee hives are all tessellations. Some famous tessellations can also be found on



historical buildings. Well, now that we know what tessellations are, how about putting our newfound knowledge into practice and try some cool projects? Here is a collection of fun tessellation projects for kids to play and have fun with.

Fun Tessellation Projects for Kids

- Lego Tessellation Activity:** If you can tolerate the occasional brick under your foot, it's worth stocking up on Legos! These little colored bricks are awesome learning tools, as this tessellation activity from Little Bins for Little Hands shows us. The symmetry of a Lego brick lends itself perfectly to this activity.
- Escher-style Colouring Pages:** If your little one is starting to learn about tessellations, then maybe these colouring pages are better for them to start out. There are quite a few options to choose from too. Colouring these pages is also a great way for kids to relax and unwind – plus quiet time for Mom.
- Tessellation Art:** Once your kids are familiar with tessellations and have finished



with the colouring pages, let them make their own tessellation art. This project shows you how to make repetitive patterns with shape blocks and then turn them into classy works of art.

Cereal Box Tessellation Puzzle: If you have older kids or the younger ones are familiar enough with tessellations, you can try this open-ended puzzle, made from cereal boxes. Cut up different geometric shapes and let the kids put them together any way they like to create a tessellating pattern of their own. Let's see what they come up with!

3D Tessellation Clown Ball: Tessellations are usually done in 2D, on a flat surface, but what are rules if they're not challenged? This craft from Tessellations.org is a do-decahedron, a box/ball made of 12 pentagons. Don't worry if it looks complicated, you can download a free paper craft kit to make one yourself.

Paint Chip Greeting Card: Got a lot of paint chips lying around? Then this paint chip greeting card is a great way to put your tessellating skills into practice. Do remember that tessellations require identical shapes to be repeated, so when cutting out your paint chips, make sure they're the same size and shape although you can go crazy with the colours.

Tessellating Two Tone Brownies: Okay, we've had enough math for a day, now it's time for a snack. Why not try these tessellating two-tone brownies from Kitchen Explorers? Inspired from the book, 'Eat your Math Homework', these brownies are just genius, and pretty easy to make.

Have a small tessellation session at home with your kids before they get started on the more complex projects. Here are some tips:

- Let the kids draw squares of the same size, either free hand or using measurements.
- Guide them to draw shapes in each box so the edges of one shape fit into each other. Outline with black permanent marker.
- Now choose two contrasting colours and fill them in the shapes, alternating colours.
- For younger kids (below 5 years) shapes can be cut from coloured origami sheets and then stuck next to each other without leaving any space.

Remember, contrast is important in tessellation, whether they're in colour, value or tone. Contrast epitomizes the duality of negative and positive space, a concept that's brilliantly brought out in tessellation art. So let's get ready to repeat ourselves and go tessellating!!

I don't understand this aspect about boys crying or not crying. It is not about teaching boys to cry or not cry. You teach them to respect themselves and the other person or whoever they are interacting with. That is the very basic aspect right?

Respect ke bina hai hi kya? Kuch hai hi nahi na! (What is left without respect? Nothing!)

There is no relationship without respect. Everything whether it is tyranny or oppression comes out of a lack of respect. If that person wants to show contempt or power and there is zero respect for you as an individual, then there is no relationship. A rendezvous with Shobhaa De, the well known novelist and columnist was nothing short of a revelation. She has got the gumption, panache and above all a timeless sense of style and modesty.



This is Shobhaa De!



Shailaza Singh
Published author, poet and a YouTuber

She is 74 years old but is not a tottering grand old dame. In fact, her energy and vitality can put even a sixteen-year-old to shame. She is completely fearless and loves speaking her mind much to the chagrin of the modern-day conversationists. When I met Shobhaa De, a novelist and a columnist at the Jaipur Literature Festival, I couldn't help being awed by her 'who cares a damn attitude'. The conversation that flowed as a consequence of this meeting was as free flowing as the lady herself.

Breaking Stereotypes

Shobhaa De (nee Rajadhyaksha, formerly Kilachand) was born in a typical Maharashtrian family and is the youngest of the four siblings (one brother and two sisters). When I asked her what makes her so fearless in a country that makes women so fearful and subjugates them, this 'born rebel' simply smiled, "I feel there is no other option. The moment you give in to fear, the society will crush you and finish you up because fear is something that makes you vulnerable. From the time I was very young, the option of being vulnerable did not exist for me. I never listened to people or my family or those who told me to not do this or that. I come from a conservative Maharashtrian Brahmin family. My father was a bureaucrat (district court judge) and my mother was a

home maker. I didn't have the background of a movie star or a liberal artist. I started modelling at merely 17 years of age which was unheard of in those times. So, even then, I didn't fit into the family. My siblings were not like me and they are still not like me."

Her Own Person

However, with such a devil-may-care attitude didn't she have to face a lot of problems? Didn't her relatives make life hell for her when she faced problems in her life or relationships as a result of her unconventional



choices? "The thing is I knew quite early in life what I wanted and I stuck my neck out for it and stuck to my guns and here I am. People can say what they want, but I am not obliged to any of them, so I struck out on my own. Even with my relatives, they can say what they want. I am not obliged to them or their opinions. I am very clear; those people are not paying my bills. I am not asking for their advice or seeking their

#PERSONALITY

approval or sanction. I am very clear that if you don't want to hang out with me or you want to disown me, do it! It really has never mattered."

Voices of Reason

Point taken. But then even the biggest rebels amongst us have their own people who are their sounding boards; their voice of reason. Does she listen to anyone? "My six children and my husband are my censor board. Their opinion matters to me a lot. There have been times I haven't listened to them but the resulting fallout has not been worth it. I have realized in the course of my life that whatever they say is not to control me or dominate me but they are looking out for me and my interests and sometimes I can be very immature." Interesting!

Gender Bender

For Shobhaa De, the fact that she was born a girl or gender differences haven't really mattered in life. About the endless gender debate she says, "We should not even be having this discussion. The answer to this is quite simple. We should bring our sons up, like we bring up our daughters. Same rules apply to both. I mean 'sochna bhi nahi chahiye' (we shouldn't even have to think about it) because boys are not aliens or not some freaks who have descended from some other species. They are your children, right? So *ladka ho ya ladki* (whether it is a boy or a girl), that difference should not even exist in your mind. Whether eating or drinking or going out or marriage or whatever, it should be the same; boys and girls exist on the same planet and they



Shobhaa De with husband Diip de.

should be treated as such."

Cliches and More

So, what about those cliches that say boys don't cry or should be tough and manly? "I don't understand this aspect about boys crying or not crying. It is not about teaching boys to cry or not cry. You teach them to respect themselves and the other person or whoever they are interacting with. That is the very basic aspect right? *Respect ke bina hai hi kya? Kuch hai hi nahi na!* (What is left without respect? Nothing!) There is no relationship without respect. Everything whether it is tyranny or oppression comes out of a lack of respect. If that person wants to show contempt or power and there is zero respect for you as an individual, then there is no relationship."

And even when it comes to girls and boys' issues like eve teasing or any such thing, that happens in every society where the sense of equality is skewed. I mean at my age; I still have people hitting on me. Those are pervers. That's how it is in almost every society. I believe I am fairly intimidating as far as men are concerned. I do not send out any signal to say I am interested in any aspect of anything. They don't mess with me. Now at this stage a fairly formidable kind of a reputation protects me to a large extent. It is still important to remember that physically we are still vulnerable. If he wants to, a guy can easily overpower me or any other woman physically to just get aggressive or teach a lesson. So there has to be a true equality between girls and boys so that we can prevent these things."

Warm Impressions

As I bid adieu to Shobhaa De, I wondered about the impression that I had grown up with of this lady and the rendezvous that changed it all. When I met her, I was half expecting a sharp eagle-eyed woman who would perhaps rip me to shreds in her first glance. After all, she is a well-known critic with a sharp tongue and is known to speak her mind. But instead, I was pleasantly surprised to meet a warm lady who smiled the moment she met me and said, "I like your dress." She gave an impression of being an observer and even an appreciator of people. Even when we sat talking, she would occasionally look around at people who came and went. Our conversation was often interrupted by her impromptu remarks, "That lady is wearing such a pretty kurta," or "I like that girl's dupatta." Perhaps, the impressions we are given to read are not always the last impressions!

Write Right

She is a celebrated author who has written dozens of books which include interviews, columns, and essays. She works and best sellers. How does she do it? What is her writing process like? "How to explain my writing



Shobhaa De with family.

Glass Is Actually A Liquid

Being neither liquid, nor solid, explaining glass is a lot harder than some might think. In a glass, molecules still flow, but at a very low rate barely perceptible. As such, it's not enough to class glasses as a liquid, but neither as a solid. Instead, chemists classify glasses as amorphous solids. There's also a thing called metal glass - a class of materials that are three times stronger than titanium and have the elastic modulus of bone, extremely lightweight.



#RESEARCH

Humans Could Land On An Asteroid

It is possible that you may witness human astronauts landing on the moon within your lifetime, according to a recently authored research article. The researchers analysed how NASA's budget has changed over the years since the 1960s to gauge how likely it is that the space agency will deploy a mission to Asteroids beyond Mars in the next century.

While analysing how NASA's budget has changed since its inception in 1958, the researchers noticed many spikes in the amount of money that the space agency budgeted over the years. These spikes corresponded with the key events of the space age, including the early years of the Apollo program in 1966



and the announcement of man's impending return to the Moon with the Artemis project in 2018.

The researchers propose that a spacefaring nation or a group of spacefaring nations will send a mission to the asteroid belt beyond Mars between 2071 and 2087.

They also predict that a mission to the Jovian System, which includes Jupiter, its rings and moons, will happen between 2087 and 2101. A launch to the Saturn system is predicted to happen in the window between 2129 and 2153.

For arriving at these numbers, didn't just use NASA's budget numbers. They also analysed the evolution of technology capabilities related to deep space exploration over the years. The exploration of deep space required a variety of technological capabilities such as computing power, and the design, manufacturing and operation of hardware such as launch vehicles, guidance systems and life support systems.

Since it is difficult to quantitatively ascertain the evolution of such technologies, they analysed the number of published peer-reviewed technology articles about deep space exploration over the years. This number showed a clear upwards trend which allowed the scientists to create a model with both the technology evolution data and the budget data; allowing them to arrive at their conclusions.

#MIND&BODY

A bath is an easy and luxurious way to treat yourself to some well-deserved solitude, especially when you add in the extra goodies to make it like your own personal spa.



Relaxation Awaits!

If you think of the ultimate in relaxing experiences that come pretty much free of charge, then one of the first things that come to mind is a long, hot soak in the bath. Well, if you needed a reason to draw up the most amazing and luxurious bath, then International Bath Day is quite possibly it.

We are huge fans of taking 20-30 minutes at the end of the day to relax and soak in a nice and hot bath. It's necessary to designate time to yourself each day or as often as possible, to de-stress and detoxify. A bath is an

or feel energized, depending on the type you select. And of course, if your skin needs little extra hydration, add in a milk bath or a touch of coconut oil.

- Always double fist. It's super important to stay hydrated since your body will be prone to sweating out toxins. Always drink an entire glass of water while in the bath. That being said, also keep a little mood setting drink nearby. If you are really trying to detox, drink tea.
- The right read: Whatever you do, stay unplugged. Instead of using your phone, grab your favourite book or magazine

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Tips for taking Perfect bath

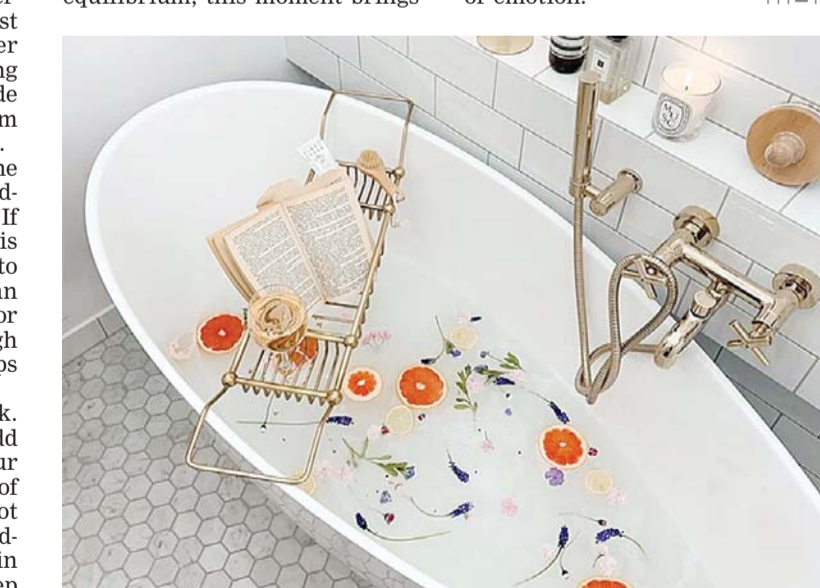
Beyond interior design, you could say we became experts in taking the perfect bath. Follow these 8 tips for ultimate relaxation...

- Set the mood. Start by lighting a couple of your favourite candles and gather all your bathing essentials in one spot. Make sure your towel and robe are nearby and start running your bath.
- Make sure the temperature is right. It all comes down to preference, but mostly keep it just hot enough that the water stings just a bit when getting in. A little on the toasty side means it'll stay perfectly warm for the duration of your bath.
- Detoxify: Typically skip all the bubble baths and fancy products and opt for Epsom salt. If you're soaking regularly this will give your body a chance to "detoxify and reset." Plus, an Epsom salt soak is amazing for sore muscles after a tough workout. Add about two cups to your running water.
- Supplement your soak. Depending on your needs, add in a few supplements to your bath. Add a couple drops of essential oils if you are not using any other scented products. Oils can be great for skin needs and can help you sleep

and relax.

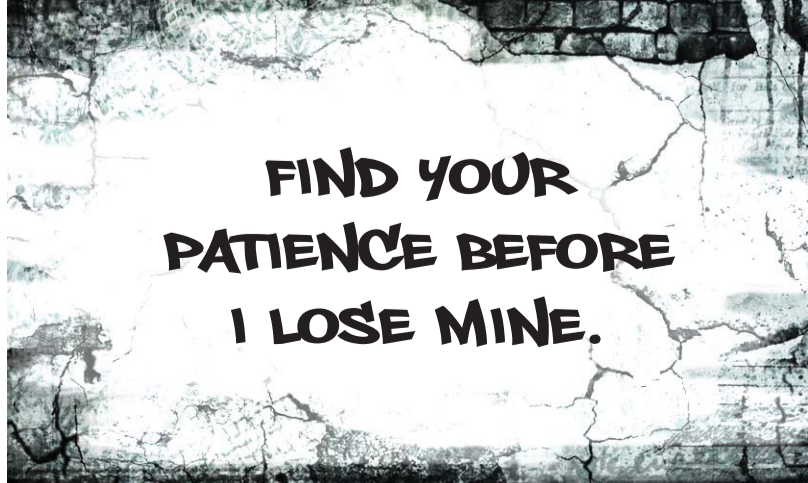
- Mask yourself: Once a week, use your bath time as an opportunity to add in a beauty treatment. Either do a face mask or a hair mask that can stay on for more than 30 minutes - this is usually a hydrating treatment.
- End on a good note: Make sure you take that relaxation with you when you leave the bath. Lather yourself up with a great moisturizer after getting out of the bath and wrap up in a cosy robe.

There is a special moment while bathing when your body and the water temperature reach equilibrium; this moment brings



By Jerry Scott & Jim Borgman

THE WALL



BABY BLUES



By Rick Kirkman & Jerry Scott

ZITS

