# Building Castles in the Sand

Free play, creativity, family time and science — all wrapped up in one fun activity.

by Donald Fraser

here's just something about playing with sand that delights the senses and absorbs the mind. It's not only calming, but also inspires endless creativity.

That's probably why children have an almost universal love of building sandcastles.

Plunk just about any kid onto a beach, hand them a plastic pail, and you will inevitably end up with some kind of architecture in the making. As they get older, kids get more ambitious, wanting to make larger and more sophisticated designs. They'll want walls and towers to rival the ones of their imaginations, populated by knights, princesses, and dragons.





Whatever the age, sandcastle building is the recipe for hours and hours of family fun.

It's also an opportunity for kids to work on developing their fine motor skills, hand-eye coordination, and cognitive abilities. They will learn a little science, and a whole lot about patience.

With a bit of help from mom or dad, kids can make some truly incredible pieces of sand art. Want to get your kids started on some impressive structures? You may want to take a few tips from the pros: Sandi "Castle" Stirling, and Big Wave Dave, (Dave Downs), both master sand sculptors whose incredible creations highlight many of the sand castle festivals that take place every summer (see sidebar).

## Simple Ingredients

All you need to build the perfect sandcastle is sand, water, a shovel, buckets or other moulding tools, and some carving tools. "You'll want to find a beach with some fairly fine sand," says Sandi. "If you use coarse sand with rocks mixed in, it's going to be a disaster."

Water is of course essential to your sand castle. It binds the sand granules together by forming bridges between the grains that act almost like glue.

You can get water in two ways: you can dig for it or you can carry it, says Big Wave Dave. "The preferred method is to build your castle fairly close to the water's edge," he suggests. "And to dig deep into the sand until you reach damp, clumping sand. This water hole will continue to grow as you build, making for a good pit of sand to draw from."

The other method requires walking back and forth with heavy buckets of water. People in competitions tend to use heavy five gallon buckets. "It's no wonder experienced sculptors prefer to dig," Dave laughs. But kids, of course, can use much smaller buckets, and they've got the energy for running back and forth.

Making sure your sand has the right amount of water in it is fairly simple, says Sandi. "I use a squeeze test to ensure my sand is damp enough. I pull together a good handful of sand and squeeze. If it holds its shape, then it should be damp enough to build with, but not so wet that it will crumble."

### Sandcastle Basics

A basic sandcastle consists of a base, tower(s), walls, and arches. Once your family has mastered those, you can move on to moats, turrets, bridges, staircases – you name it!

Base: This is the mound that your castle will sit atop. Experienced builders carve and form the main part of the castle from piles of wet sand. Just shovel or pile sand using a bucket into a central area, wet it down with water and shape by hand, rounding the edges, and flattening the top. Continue until the base is as

large as you'd like.

Towers: "I fill a bucket to roughly a third full and then I beat down the sand to compact it," says Sandi. "I repeat that process twice until the bucket is both full and packed down. This will ensure that enough water is squeezed out.

"Turn the bucket upside down, tap around the sides to loosen it, and then pull the bucket straight up. You'll want to tap carefully, though. Banging too hard may cause the sand to crumble when you remove your bucket. If done right, you should have a shape that will hold its form for quite awhile."

The other way to create towers, preferred by Big Wave Dave, is with a stack of sand "pancakes" made with fairly goopy sand. "You may have to dig deeper for your pancake sand," says Dave. "so that water pools when you dig into it."

Scoop as much sand as you can carry in two hands (piled against your belly if need be), and pour/plop it carefully onto your base. Then, gently shape and press on it until you have a flat disk. A rapid, jiggly massage motion works best to expel excess water. Build your tower up to your desired height with increasingly smaller pancakes, pushing down less and jiggling more as you go - you don't want to squash your tower.

Walls: Scoop the sand as you would a pancake, but instead of flattening it out into disks, you're going to build bricks. Place sand beside one of your towers, and use your hands to form rectangular blocks. Again, use a rapid



massaging motion. Continue this step, stacking bricks beside and atop your original brick, in order to create full walls between the towers and around your castle.

Arches: Arches make for dramatic additions to your castle, connecting towers, or showcasing openings. Start with the easy method for doing this by gently tunneling through a wall, carefully using a carving tool to shape your arch. Stick with this technique until your family gets proficient at building really good walls and towers. For more intricate ways to build an arch, using ancient Roman techniques, see www.guardian.co.uk/lifeandstyle/2009/ aug/oi/how-to-build-perfect-sandcastle.

## A Grand Design

Building is only part of the sandcastle making process. Both Sandi and Dave suggest carving the sand in order to get the most realistic look for your castle.

"By using different tools, you can offer shape and texture to your towers, walls, and arches," says Sandi. "You can add windows, brick work, doors or form turrets and drawbridges. Really, whatever you can think of."

And while they both use cake-decorating tools for carving and scratching designs into the sand, they also suggest experimenting with things that you will find around your house in order to make your castle unique. "I love using a melon baller," laughs Sandi. "I know that sounds odd, but it makes perfect balls of sand. And you can use these in so many different decorative ways - rounded turrets or old fashioned stone walls."

Sandi uses a dental pick for making windows and designing brickwork, a "paintbrush to smooth out surfaces" and a straw "to blow away sand from the windows I've carved."

Dave sometimes uses a plastic fork for carving. And both builders make good use of popsicle sticks when etching designs into sand.

It might take a few tries before you get the hang of some of the techniques. You'll find lots of information and videos on the Internet. But building a sandcastle is not only incredibly fun, creative and absorbing, it means time spent together as a family.

So head out to the beach and build a sandcastle this summer. You'll be creating memories that last a lifetime.

Donald Fraser is an outdoor enthusiast, nature lover, and longtime beach bum. He can be found sticking his toes in the sand at beaches across Central Ontario.

#### The 7th Annual Cobourg Sandcastle Festival August 4 - 5, 2012

A day on the beach is always fun. But a family day at Cobourg's breathtaking waterfront during its annual Sandcastle Festival is something else again! Almost 10,000 people show up at the festival each year, lured by the prospect of surf, sun, and sandcastles galore!

You can compete in the amateur sandcastle building competition and/or marvel at the creations of 60 amateur teams, all vying for bragging rights and cash prizes. Vote for your favourite in the People's Choice Award!

Perhaps the biggest thrill is watching incredible sand creatures and sculptures take shape under the skilled hands of eight master builders including Sandi "Castle" Stirling and Big Wave Dave, who provided tips in our main article

The two-day festival also offers:

- \* an inflatable fun park, including giant slip n slides
- \* a DJ on the beach
- \* a scavenger hunt
- \* a Beach Boys tribute band
- \* an activity tent

\* movie on the beach (in the evening)

If you plan to compete in the amateur sandcastle competition, you'll find rules and online registration at www.cobourgtourism.ca. Cost: \$5/person. Register early because spaces fill up fast! Prizes will be awarded on August 4, at 4 pm. Info: Iscott@cobourg.ca, 1-888-262-6874.

The beach opens to the public at 8 am but the best time for spectators to view the sculptures is after lunch. In addition to festival events, there are concession stands, plenty of picnic tables and park space, splash pad, two playgrounds, basketball court, and places to swim.







