SKYSCRAPER

Pride of Dubai is a building on a different scale

THE tallest building in the world is the Burj Khalifa in Dubai, in the United Arab Emirates.
You might well know this, but it is staggering to think that this building is 828 metres high and 160 storeys.
It dwarfs the next tallest, the Shanghai Tower in China, at a mere 632m.
While Australia’s number one is the 322.5m Q1 on the Gold Coast.
Tasmania’s tallest is the Wrest Point building in Hobart at 73m, although much taller buildings have recently been proposed for Hobart by developers.
The Burj Khalifa is actually 829.8m if you include the antenna at the top.
It is also the tallest structure in the world, with the KVLY-TV television transmitting mast in North Dakota, United States, a distant second at 628.8m.
The Burj Khalifa has held the world record since its opening in 2010.
The 508m Taipei 101, in Taiwan, was the tallest building from 2004-2010, but has already dropped to 10th on the overall list.
It replaced the Petronus Towers (451.9m) in Kuala Lumpur, Malaysia.
New York City’s famous Empire State building, at 381m, held the record from 1931-1972.
Your challenge is to produce a bar graph which displays the heights of the buildings mentioned in this article.
You will need to use a scale. A scale of 1:10,000 is probably the easiest method, because 1 centimetre on the graph will be equal to 100 metres in real distance.
This would mean that a 500-metre building would be represented by a 5 centimetre high bar.
But if you want to make better use of an A4 page, a 1:5000 scale would work better.
This would mean 2cm would be equal to 100m, so a 500m building would be 10cm high on the graph.
Write the name of each building below or on the bar showing its height.
You can be as creative as you like (perhaps draw each bar as a skyscraper building).
Children’s University Tasmania members can earn stamps in their passports for this graph challenge, at the discretion of school coordinators.

“Education perhaps more than anything else is a passport to a better life.” - Peter Underwood AC
Did you know you can grow fruit and vegetables from kitchen scraps?

Lettuce, celery, potatoes, garlic, tomatoes and apples and many other healthy food types can be grown from scraps that often finish up in the bin.

It is a great way of reducing your family’s grocery bill, and homegrown food tastes fantastic because it is fresher than food you buy from a store.

Your challenge is to grow one or more vegetables from scraps, and document your progress in the chart provided.

You can use words, or drawings, or both, to show how much your vegetables are growing.

You can make an entry in the chart once a week, or once a fortnight, or draw your own chart and make as many entries as you like.

You could turn your hand to growing avocadoes, spring onion or sweet potato (or all three).

Once the scraps have grown roots, you can plant them somewhere in your yard.

It doesn’t matter if you don’t have a garden or outdoor space at home, as you can always pop them in a container with a bit of soil instead.

To get started, all you need is:

- A pit (the big seed) from inside an avocado, or the bottom of some spring onions, or the end of a sweet potato.
- An old glass jar or cup.
- Some tooth picks or skewers.

Instructions

Avocado

It would be a good idea to get some help from an adult with this one.

After you’ve eaten an avocado, scoop out the pit in the middle, wash and dry it, and hold it so that the pointy end is facing upwards.

Insert four tooth picks or skewers into the sides, then place the pit in a jar or cup filled with water. The larger end of the pit should be pointing downwards in the water and about half the pit should be submerged.

Sit your jar somewhere warm and sunny, and change the water every couple of days to prevent slime.

In about two to six weeks, the pit should start to grow roots and sprout a stem, at which point you can plant it in soil.

Spring onion

Cut the bottom off your spring onions, making sure to keep a couple of centimetres of onion above the root.

Stand the spring onion root-end down in a glass jar or cup filled with water and leave the top edges above the water.

Like the avocado pip, you need to change the water regularly, or the spring onion might start to rot.

If the outer layer gets slimy, you can peel it away.

Put your spring onion jar near a sunny window.

In a few days green shoots will start to grow and you can trim and eat the spring onion immediately, or plant it in soil and trim as needed.

Sweet potato

Save the ends when you cut them off your sweet potato.

As long as the ends have at least 3 centimetres of flesh, you can grow a full sized sweet potato.

Push toothpicks or skewers into the ends and suspend above a glass of water, flesh-side down.

Put the glass in a bright, warm spot.

Within a few days roots will start to fill the glass and leaves will grow on top.

When the sweet potato has a good set of roots, it is ready to be planted in soil.

Children’s University Tasmania members can earn stamps in their passports for this scrap food garden challenge, at the discretion of school coordinators.

### Spot the Difference

There are seven small differences between the first scorpion and the second one. See if you can spot them, then check the solution below.

**Did You Know?**

Scorpions were one of the first land animals. They appeared between 300 and 355 million years ago. They are nocturnal, spending the day hiding under logs or rocks.

**Solution**

Artwork: www.johnpollyfarmer.com.au