

# Trees, Glorious Trees

All Ages

Trees are a vital part of our world. They provide oxygen and shade. They remove pollutants from the air and keep water in the soil, just to name a few of the many ways humans and all creatures benefit from the presence of trees. Best of all, trees make great friends.

They are there to sit under, to lean on and to listen to you. They are full of interesting activities, the comings and goings of all sorts of critters. Trees let us see the wind, hear the rain and feel the earth move. Meet the trees in your neighbourhood with these activities. (Also see *Make a Neighbourhood Tree Guide* and *Wax Rubbings*)

## Say Thanks

Take your sidewalk chalk with you and go for a walk in your neighbourhood. Write a short note near a tree to thank it for everything it does (why stop at one tree?) Maybe you want to say thanks for shading the sidewalk, for flowering in the spring, for letting birds sing safely in its branches, for its beautiful fall colours, or for the clean air. If you cannot write on the sidewalk, make colourful thankyou postcards to tie to the trees' branches. You may give a tree a gift - they'd love a bucket of water!



## See a Tree, then see the forest!

To really see a tree, get out your crayons. Draw a full colour picture of a tree you have seen in your neighbourhood. Next, take your picture out to the tree you drew. Compare the colours you used to the real colours. Look closely. How many colours are in the bark? Do the branches slope up or down? Stand way back and compare the overall shape of the tree to your drawing. What would you do differently next time you draw this tree?

## Knock, Knock! Who's Home?

Spend some time in the shade of a big tree. Sit quietly for a minute or two so nature forgets you are there. What animals or birds do you see on or near the tree? What are they doing? How do you think the tree helps the animal? Watch the tree trunk closely, check the nooks and crannies (a magnifying glass is helpful). Is there any evidence of critters living there? Are there any plants or fungi living on your tree?

## Feel the Earth Move, kind of.

Trees love to take us for a ride on our planet. It can be a short ride or a long one. It's up to you. Find a comfortable spot under a shady tree where you can sit for a while. You might want to bring a book for the journey. Like most long trips it is easy to fall asleep (and trees are soporific - sleep inducing - with their fresh air and softly rustling leaves) so feel free to lay down for the ride. Before you settle in for the journey, place a stick, a rock or a pile of pinecones at the very edge of the tree's shadow furthest from the sun. Line up the sun, the tree's trunk, top most branches and your marker. Enjoy the ride for as long as you like (at least 15 mins.) Maybe play *Knock, Knock! Whos' Home?* (above) or *Squirrel Bingo* (download the activity). When you have finished your ride, find the new shadow's edge and your marker. The distance between the two is how far the earth moved!



# Trees, Glorious Trees continued

## Say "Trees"

Take a photograph every day of the same tree to create a time lapse slide show. Take the shot from the same spot and angle each time to really see how busy a tree is, in "tree-time". Use a windowsill or porch railing, something stable and permanent, if you plan to record your tree over a long period of time. Catch the change of colour in the fall or try an entire year!

## Conduct a Tree Survey

Once you can recognize a few tree species you'll be ready to conduct a tree survey. You could start by counting how many trees have needles and how many have leaves on your street, or in your neighbourhood. When you know the trees by name you can count the number of oak, maple, ash and so on. Compare your street or park to a different street or park. Are the big old trees the same type of tree as the newly planted ones?

## How Old ARE You?

Hug a tree and you can estimate how old it is. Before you head out to hug trees, measure your hug. Stretch your arms out to the side and measure from fingertip to fingertip across the chest. This will be the size of your hug. An 80cm hug (finger tips touching, as in the photo) fits a 45 year old tree.

Here is a quick guide. (ages are rounded estimates)

Hug cm	90	100	110	120	130	140	150	160
Years	50	60	65	70	75	80	85	90

Tree too small for a big hug? Use a measuring tape and this guide.

cm	10	20	30	45	60
yrs	6	11.5	17	26	35

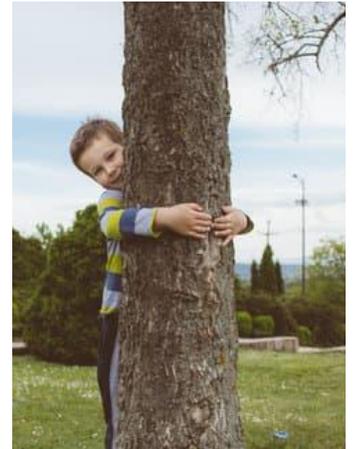
How old are the trees in your neighbourhood?

If you want to be more accurate and like math, here is the formula foresters use.

At 135 cm from the ground, measure the circumference (around the trunk) in centimeters. Let's use 70cm as an example.

1. **Divide** the circumference by 2.03 and by 1.52.  $70 \text{ by } 2.03 = 34.48$  and  $70 \text{ by } 1.52 = 46.05$
2. **Add** the two numbers.  $34.48 + 46.05 = 80.53$
3. **Divide** the total by 2.  $80.53 \text{ by } 2 = 40.27$

Your tree is approximately 40 years old. Trees grow between 2.03 and 1.52 centimeters per year. What things might affect how much a tree grows in a year?



**Tip:** A great place to find a variety of beautiful mature trees is at your local cemetery. It is a wonderful green space offering opportunities to explore nature, discover history, experience empathy and practice respectful behaviour. Open to the public and accessible, the cemetery is a quiet getaway for an outing.