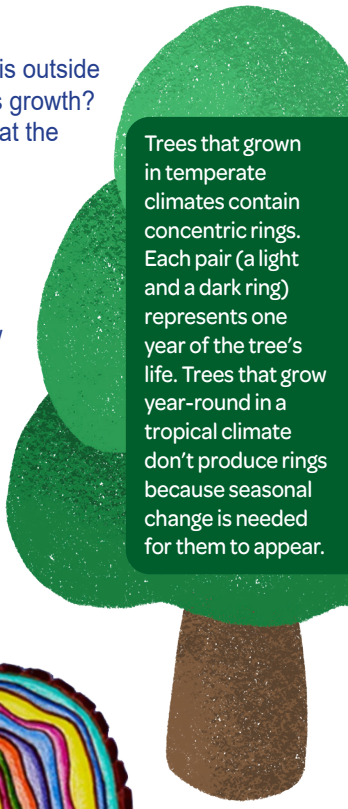
Tree Rings

Explore Environments–Earth

RESPOND to the trees in your neighbourhood. How do their trunks look and feel when you explore this outside layer? Do you wonder what is happening inside a tree's body and how the trunk supports the tree's growth? Research what you might see inside a tree trunk. Or if there is a tree stump you can observe, look at the exposed inner surface and see if rings are visible.

CREATE an image of a cross-section of a ring-forming tree trunk. Wider rings indicate more tree growth within that year, while narrow rings depict years with less growth. Sketch bark around the trunk's outside edge. Creatively colour the bark and inner rings of the tree in the two outlines below (both the stump and fallen tree) using any colour combinations you'd like.



Trees that grown in temperate climates contain concentric rings. Each pair (a light and a dark ring) represents one year of the tree's life. Trees that grow year-round in a tropical climate don't produce rings because seasonal change is needed for them to appear.

CONNECT the science of tree rings with climate conditions. Why do you think that trees in temperate climate areas produce inner rings? How might climate and seasonal change affect this phenomenon? Why might rain affect the rings? What can extremely old trees, like the 2,000–3,000-year-old giant redwoods of California, tell scientists about drought conditions and temperature during the trees' lifespans?

PRESENT your art and share information you have learned about tree rings to family or friends. Pretend a tree could talk. What would their rings tell your audience?

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Thinking Sheet