MYCELIUM RESILIENCE: TESTING NETWORK STRENGTH

Knowing that mycelium creates network connections through forests and other ecosystems, let's test the strength of complex networks against simple networks.

Let's start with a simple network. Here's a single line connecting 2 nodes (like a single string of mycelium connecting two trees).



Breaking this single line would prevent communication between the 2 nodes.

What if we create a more complex network with 3 nodes?



In this network, we can break 1 line, but still have all 3 points connecting by the remaining lines.

Let's try adding more complexity.



With 4 nodes, we can make 6 different lines for connection. We would need to break 3 of these lines to leave any node disconnected (try breaking lines to prove this; how many lines do you have to remove before any node is disconnected?).

Try making networks with 5 nodes and 6 nodes. How many connections (lines) can you make between all of the nodes in each network? How many connections (lines) do you need to remove from each network to disconnect at least one node?

Do you see any patterns in these numbers? What happens as networks get more complex (with more lines connecting more nodes)?



Salt Tree Art www.salttree.art Earth to Sky: Connecting with Our Ecosystem