

WORKSHEET KEY FOR INTERACTIVE TREE RING/CLIMATE EXERCISE

<https://spark.ucar.edu/longcontent/tree-ring-interactive>

Interactive classroom exercise on tree ring development

Open this page while students are completing the charts below. Enter the growing conditions into the interactive page based on the results to create a simulated tree ring growing in these conditions.

In temperate regions, the growing season for a forest is about 6 months long – April to September. From the weather chart, the tables below show the average seasonal temperatures and precipitation for the growing season over 10 years.

Score each year as: Above Average (+), Average (=), or Below Average (-).

Temperature in °F

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	AVG./MO
Apr	39.5	45.2	46.3	53.7	48.3	58.4	52.8	48.3	51.0	57.5	50.1
May	53.7	58.4	54.8	66.3	62.7	65.4	66.3	64.5	66.3	70.6	62.9
June	66.3	68.1	68.1	70.6	74.0	80.3	74.0	76.4	72.2	82.1	73.2
July	71.3	75.7	69.7	75.7	70.6	82.9	84.5	78.0	85.4	81.2	77.5
Aug	65.4	72.2	62.7	68.8	66.3	81.2	75.7	76.4	77.3	69.7	71.6
Sept	57.5	63.6	61.1	63.6	63.6	65.4	63.6	66.3	62.7	60.2	62.7
AVG. 6 mo.	58.9	63.9	60.4	66.4	64.3	72.3	69.5	68.3	69.1	70.2	Avg. 65.8 to 66.8
Above + Average = Below -	-	-	-	=	-	+	+	+	+	+	

Precipitation in inches

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	AVG./MO
Apr	2.58	1.97	4.29	1.58	2.06	0.59	1.68	2.52	1.59	0.68	1.95
May	1.78	1.07	1.97	2.04	1.93	0.39	1.17	0.49	1.09	0.76	1.27
June	1.44	2.04	1.61	0.58	0.72	0.62	1.78	1.36	1.94	0.80	1.29
July	1.70	2.34	1.98	1.19	2.28	1.37	0.87	1.76	0.80	3.57	1.79
Aug	2.02	1.23	2.36	1.83	2.09	0.97	1.43	1.12	1.62	1.63	1.63
Sept	1.16	1.20	0.75	1.59	0.85	1.66	1.58	1.83	1.38	1.89	1.39
AVG.6 mo.	1.78	1.64	2.16	1.47	1.66	0.93	1.42	1.51	1.40	1.56	Avg. 1.50 to 1.60
Above + Average = Below -	+	+	+	-	+	-	-	=	-	=	