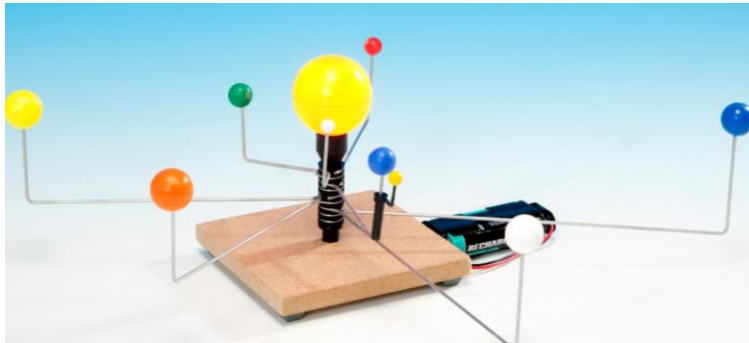


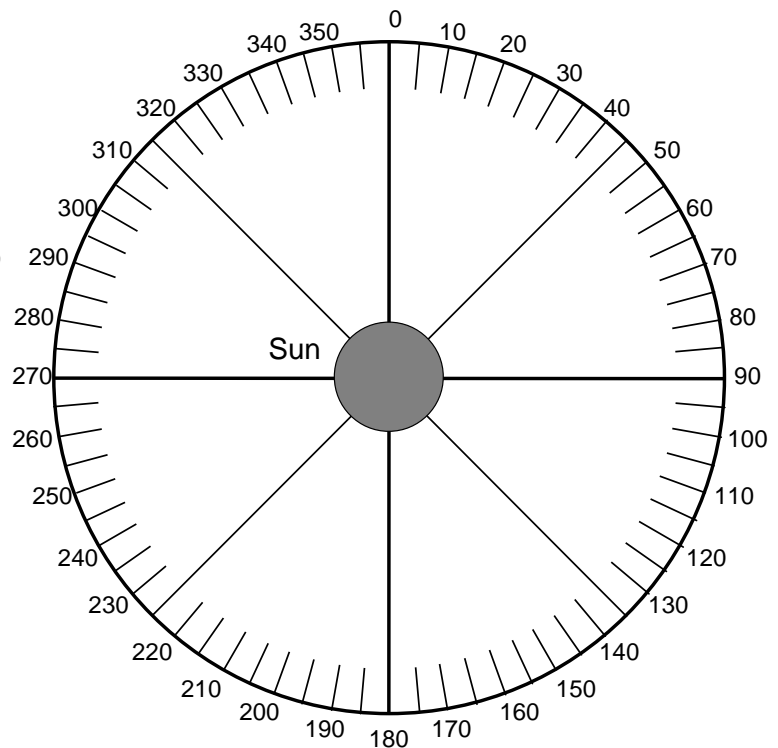
Heliocentric longitudes for setting up the Orbit™ orrery



Position of the planets in the solar system.

The positions of the planets relative to each other and to the Sun are constantly changing. To set up an orrery, heliocentric (sun-centred) longitudes are most useful.

To position your planets on an Orbit Orrery, copy and cut out the degree scale (printed right) and place it on your orrery. Then align the planets with the longitudes given.



2015	Jan 1 st	Feb 1 st	Mar 1 st	Apr 1 st	May 1 st	Jun 1 st	Jul 1 st	Aug 1 st	Sep 1 st	Oct 1 st	Nov 1 st	Dec 1 st
Mercury	329	138	242	337	143	253	350	163	264	9	180	273
Venus	319	8	53	103	152	202	250	299	348	36	86	134
Earth	100	132	160	191	220	250	279	309	338	8	38	68
Mars	349	8	25	43	60	76	91	106	120	134	148	161
Jupiter	135	137	139	142	144	147	149	151	154	156	158	161
Saturn	237	238	239	240	241	242	243	244	245	246	247	248
Uranus	15	16	16	16	17	17	17	18	18	18	19	19
Neptune	337	337	337	337	338	338	338	338	338	339	339	339
Pluto (older models)	283	283	284	284	284	284	284	284	285	285	285	285

2016	Jan 1 st	Feb 1 st	Mar 1 st	Apr 1 st	May 1 st	Jun 1 st	Jul 1 st	Aug 1 st	Sep 1 st	Oct 1 st	Nov 1 st	Dec 1 st
Mercury	30	195	281	48	202	293	67	216	306	92	228	316
Venus	185	235	281	330	18	67	115	166	216	264	313	1
Earth	100	131	161	192	221	251	280	309	339	8	39	69
Mars	174	188	201	216	231	247	263	281	300	319	338	357
Jupiter	163	165	168	170	172	175	177	179	182	184	186	189
Saturn	248	249	250	251	252	253	254	255	256	257	258	259
Uranus	19	20	20	20	21	21	21	22	22	22	23	23
Neptune	339	339	340	340	340	340	340	340	341	341	341	341
Pluto (older models)	285	285	286	286	286	286	286	286	286	287	287	287

2017	Jan 1 st	Feb 1 st	Mar 1 st	Apr 1 st	May 1 st	Jun 1 st	Jul 1 st	Aug 1 st	Sep 1 st	Oct 1 st	Nov 1 st	Dec 1 st
Mercury	116	239	323	128	242	339	144	253	357	163	265	11
Venus	50	100	145	195	244	293	341	30	79	128	178	226
Earth	101	132	160	191	221	251	280	309	339	8	39	69
Mars	16	35	51	67	83	98	112	126	140	153	167	180
Jupiter	191	193	195	198	200	202	205	207	209	212	214	216
Saturn	260	260	261	262	263	264	265	266	267	268	269	270
Uranus	23	24	24	24	25	25	25	26	26	26	27	27
Neptune	341	342	342	342	342	342	342	343	343	343	343	343

2018	Jan 1 st	Feb 1 st	Mar 1 st	Apr 1 st	May 1 st	Jun 1 st	Jul 1 st	Aug 1 st	Sep 1 st	Oct 1 st	Nov 1 st	Dec 1 st
Mercury	180	276	22	188	279	45	199	291	69	213	303	88
Venus	276	325	10	59	107	157	206	256	305	353	42	90
Earth	100	132	160	191	220	250	279	309	339	8	39	69
Mars	194	208	222	237	253	271	288	307	327	346	5	24
Jupiter	219	221	223	225	228	230	232	235	237	240	242	244
Saturn	271	271	272	273	274	275	276	277	278	279	280	281
Uranus	27	28	28	28	29	29	29	30	30	30	31	31
Neptune	344	344	344	344	344	344	345	345	345	345	345	346

2019	Jan 1 st	Feb 1 st	Mar 1 st	Apr 1 st	May 1 st	Jun 1 st	Jul 1 st	Aug 1 st	Sep 1 st	Oct 1 st	Nov 1 st	Dec 1 st
Mercury	225	317	101	231	321	124	239	336	146	251	354	160
Venus	140	190	235	285	333	22	70	120	169	218	268	315
Earth	100	132	160	191	220	250	279	309	339	8	39	69
Mars	42	59	74	90	104	118	132	145	159	172	186	199
Jupiter	247	249	251	254	256	259	261	264	266	269	271	273
Saturn	282	282	283	284	285	286	287	288	289	290	291	292
Uranus	31	32	32	32	33	33	33	34	34	34	35	35
Neptune	346	346	346	346	347	347	347	347	347	347	348	348

2020	Jan 1 st	Feb 1 st	Mar 1 st	Apr 1 st	May 1 st	Jun 1 st	Jul 1 st	Aug 1 st	Sep 1 st	Oct 1 st	Nov 1 st	Dec 1 st
Mercury	262	13	173	270	24	189	279	47	203	291	72	213
Venus	5	55	101	151	199	249	297	346	36	84	134	182
Earth	100	131	161	191	221	251	279	309	339	9	40	70
Mars	214	229	244	261	278	297	315	335	355	14	32	49
Jupiter	276	279	281	284	286	289	291	294	296	299	302	304
Saturn	293	293	294	295	296	297	298	299	300	301	302	303
Uranus	35	36	36	36	37	37	37	38	38	38	39	39
Neptune	348	348	348	349	349	349	349	349	349	350	350	350