

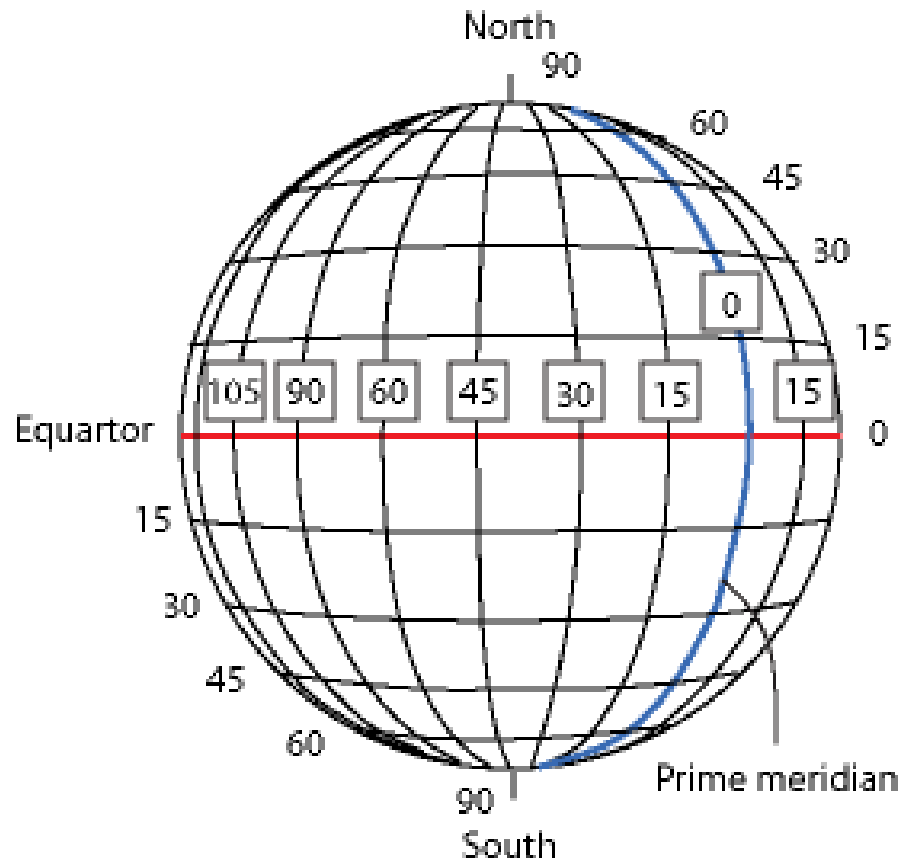
Geology 100

Notes on Planet Earth version 3.0

Review - Exam 3

Chapter 10

Longitude and Latitude



Degrees, Minutes, and Seconds

- In 1° there are $60'$
- In $1'$ there are $60''$

Quadrangles



Townships and Sections

Township Line

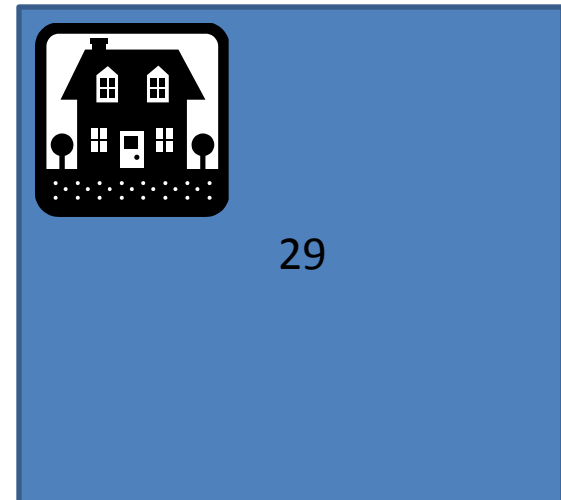
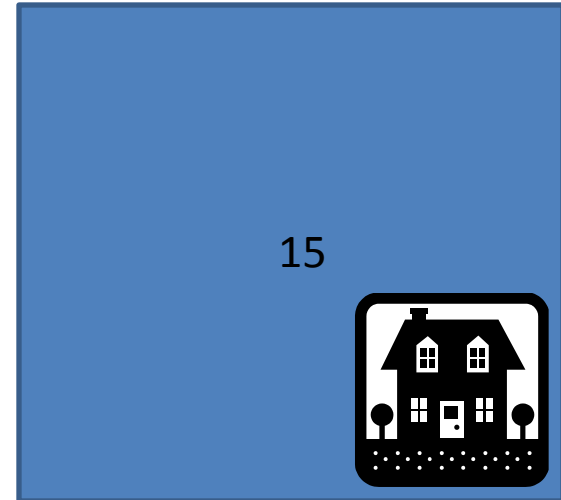
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27 <td>26</td> <td>25</td>	26	25
31	32	33	34	35	36

Range Line

Range Line

Township Line

Public Land Survey System

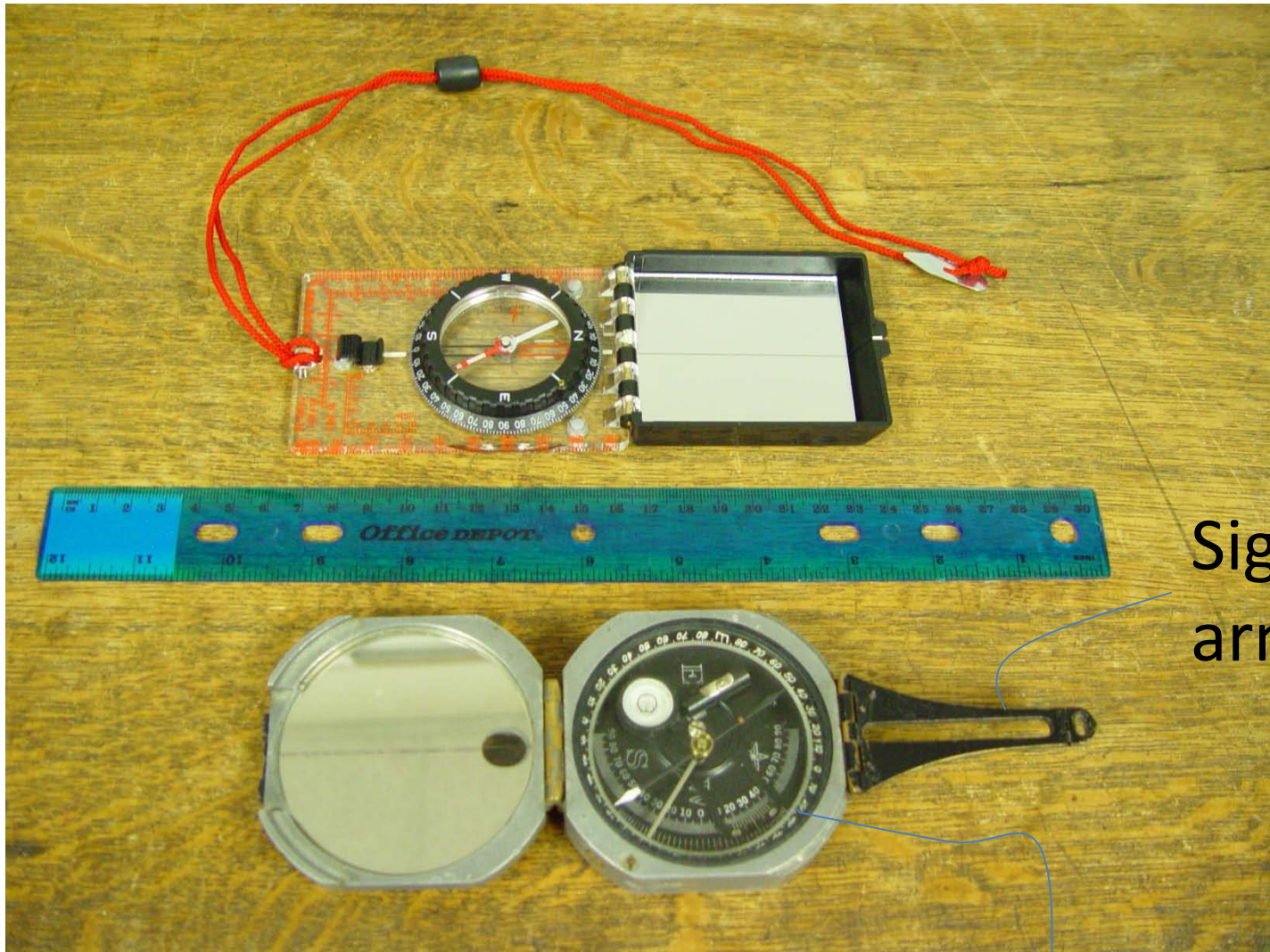


Scales

1:24000, 1:12000, 1:6000

- 1 unit on the map = 24000 units on the land surface
- 1 inch on the map = 24000 inches on the land surface
- But 1 foot is 12 inches; hence, 24000 inches = $24000'' * (1'/12'')$ = 2000 feet

Magnetic Declination and Compasses



Sighting
arm

360 degree circular grid

Topographic contours

- Hills, mountains
- Ridges
- Valleys

