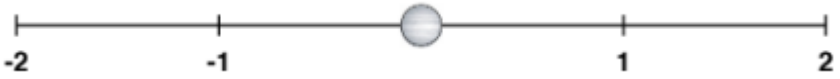
Worksheet: Jupiter's Moons

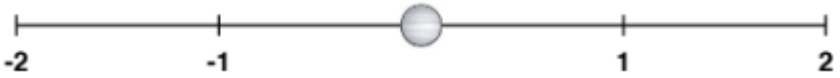
NAME:

Observations of Jupiter

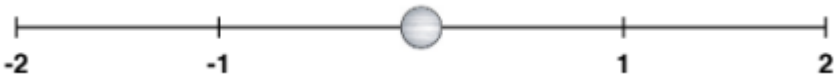
Night 1



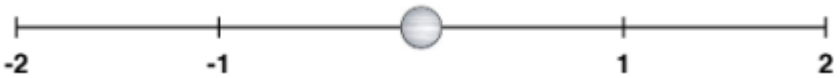
Night 2



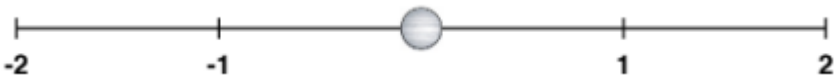
Night 3



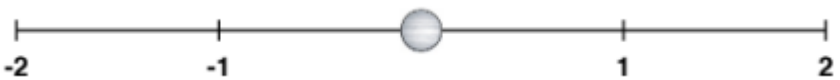
Night 4



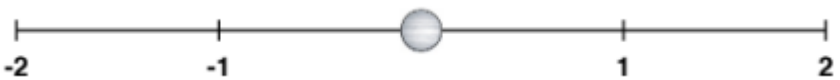
Night 5



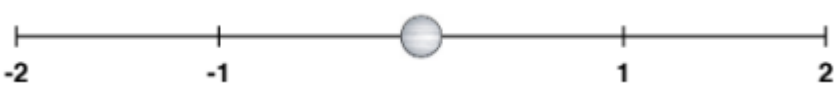
Night 6



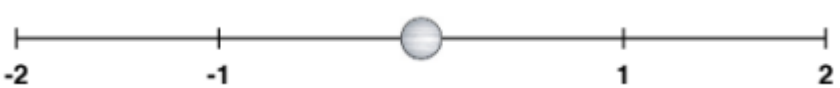
Night 7
(↑Create later!)



Night 8



Night 9



Compare the motion of each dot. Are some moving faster? Are some moving further? How do you know?

<u>Determine a value for the time each moon takes to orbit Jupiter.</u> (Just as Galileo did, *YOU* figure out the pattern and number you can determine here) and <u>*EXPLAIN*</u> how you found it:

Io = ____ **Europa = ____**

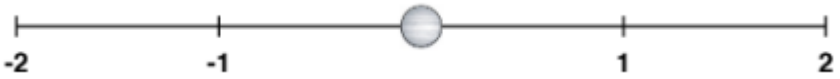
Ganymede = ____ **Calisto = ____**

Hints: Drawing 4 smooth curves connecting the dots of the same moon might help…..Io is the easiest to figure out, Calisto is the hardest.

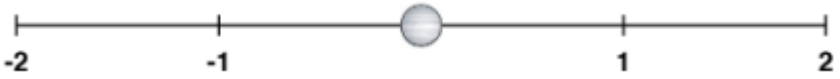
If someone on Jupiter was looking at Earth predict what you think they would see if they had been making observations. Notice that the observations are every 3 days. ***It takes our moon about 30 days to complete its orbit of Earth.***

Observations of Earth

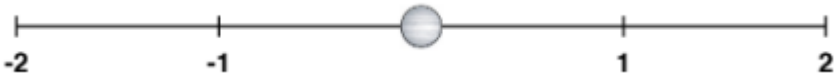
Night 1



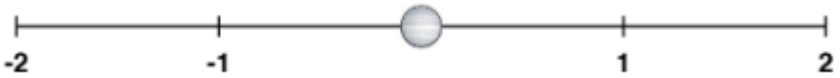
Night 4



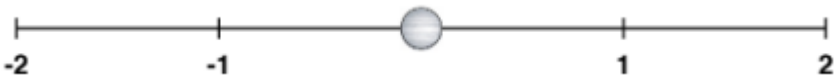
Night 7



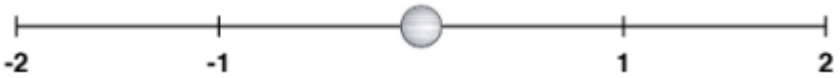
Night 10



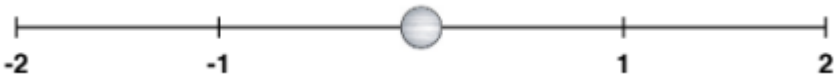
Night 13



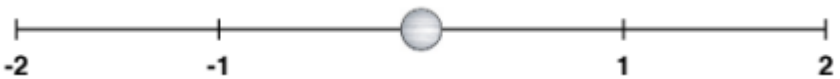
Night 16



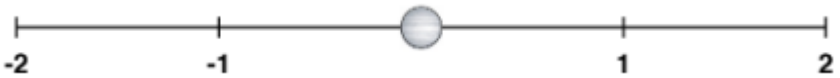
Night 19



Night 22



Night 25



Describe how the length of a lunar cycle on Earth compares to lunar cycles for Jupiter's moons.

Galileo: Discovering Jupiter's Moons
https://nj.pbslearningmedia.org/resource/ess05.sci.ess.eiu.galileomoon/galileo-discovering-jupiters-moons/

1. Why did Galileo look at Jupiter?

2. Why did Galileo repeat his observation?

3. Why do you think Galileo may not have observed the sky each night?

4. What was Galileo's claim?

5. What was his evidence?

6. What were the implications of his claim?

7. What did Galileo do with his work?

8. How did society react to his work?

9. What made Galileo the first modern scientist?