Nom : _____ PHYS 9

Final exam	Système solaire

Le Châtelard

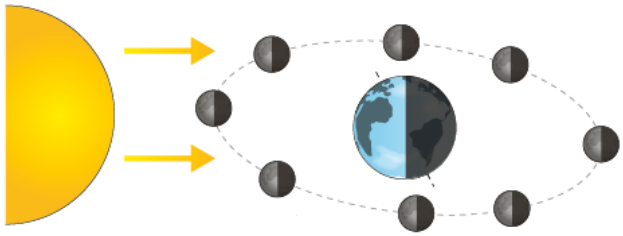
Exercice 1 (3 points) Donnez chaque définition :

Une étoile	Une planète	Un satellite

Exercice 2 (4 points) Cocher les bonnes cases :

	Une étoile ?	Une planète ?	Un satellite ?
a) La terre est…			
b) Le soleil est…			
c) La lune est…			
d) Ganymède est…			

Exercice 3 (8 points) Numérotez les lunes correctement :



1. Nouvelle lune
2. Premier croissant
3. Premier quartier
4. Lune gibbeuse croissante
5. Pleine lune
6. Lune gibbeuse décroissante
7. Dernier quartier
8. Dernier croissant

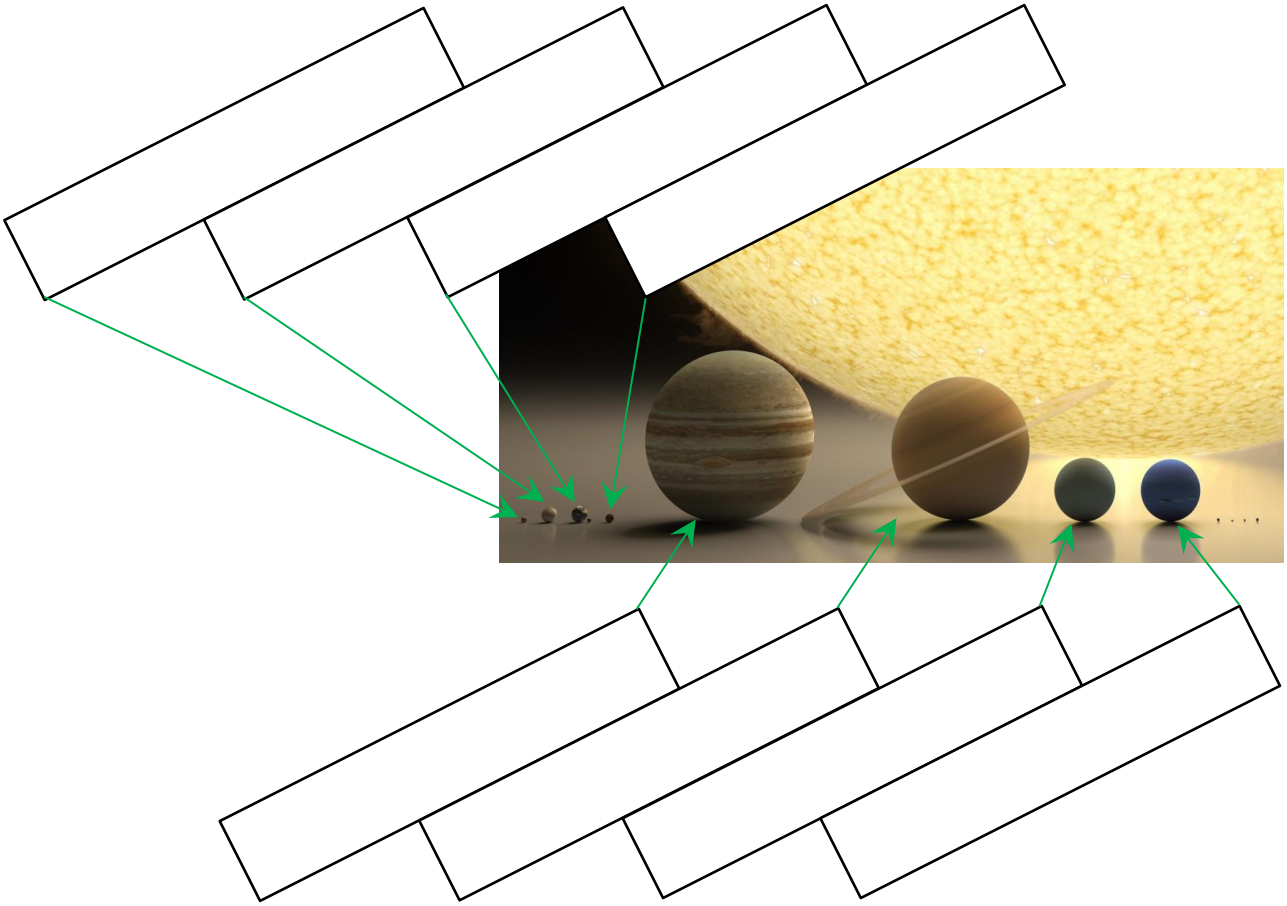
Exercice 4 (6 points)

a) Knowing that the mass of Jupiter is 2×10^{27} kg, the mass of Ganymed is 1.5×10^{24} kg, and the distance between them is $1\,000\,000$ km, calculate the force of attraction that Jupiter exerts on Ganymed.

b) Caclulate by the same way the force of attraction that Ganymed exerts on Jupiter.

c) Knowing that the radius of Ganymed is 5000 km, calculate the acceleration at the surface of this satellite.

Exercice 5 (8 points) Give the planets in order from the sun:



Exercice 6 (1 point) What is the best illustration of the distances between the planets?