

NAME \_\_\_\_\_ Date visited \_\_\_\_\_

## Griffith Observatory Visit Activities and Worksheet

There is much to see at the Griffith Observatory, in fact, too much to see it all in our short visit! Do see and report on the required exhibits/activities listed below, and also look at anything else that strikes your fancy, including exhibits outside (such as the orbits of the planets to scale). Take notes, then turn in a more thoughtful and organized report on your visit, due a week after your visit, but no later than the last day of classes (not finals week!).

### **Required:**

Foucault Pendulum – sketch the floor under the pendulum, and note where the pendulum swings and the time. Come back at least 1 hour later and note where the pendulum is.

### Sketch

What does this exhibit show?

### Tesla Coil

This amazing lightning display is operated intermittently. What do you see and hear? Why is it surrounded by a metal cage?

Gunther Depths of Space – see the various displays, including the array of planets placed in order from the Sun, and scaled properly (as far as size is concerned).

What object represents the Sun?

Why aren't the planet models also shown at their proper distances?

Where at the Observatory ARE the orbits shown to proper scale?

What are cosmic rays, and how are they detected there at the Observatory?

Also, get close to the Big Picture.

- What *is* the Big Picture?
- What impressions do you get as you look at the Big Picture?
- Describe the part of this exhibit that impressed you the most, and explain why.
- Whose statue is on the lower level of this hall? What is the significance of the hand held out?

Planetarium – Briefly describe the planetarium program, *Centered on the Universe*, including topics discussed, main theme(s). What did you see as the most interesting/important part of the experience? What parts of the story do you find the most interesting? Are there any parts you found confusing, troubling, or that you disagree with?

### Moon

Based on what you find at the moon exhibit, do you think the astronaut's footprints are still on the moon? Why or why not? What, if anything, did you find surprising about the moon?

### Telescopes

There are usually telescopes on the front lawn, and of course, the large one on the roof. What objects are those telescopes pointed at? (View through one of them and describe what you see, plus an interesting factoid the docent tells you.)

### Solar image

See the live solar image. If there are any sunspots, sketch them. View right before the planetarium show, since the sun will be down by the time you emerge.

### Hall of the Eye

How do you look in infrared radiation? How are the appearances of celestial objects different in different parts of the electromagnetic spectrum? How does having a larger telescope improve the image?

### Meteors

What types of meteors are there?

Where might one go in California to find them?

How could you tell that you are looking at a meteor instead of just some rock?

Where do meteorites come from?

What protects us from most meteorites?

Name a major element found in many meteorites.

Play around with the meteorite simulator (middle level). Did you come to any conclusions about which ones burn up in the atmosphere and which ones hit the Earth? (e.g., what are the characteristics of meteorites that determine whether they will hit the Earth? Hint: There are several, but at least 3 are major factors.

### Stellar scale

Near the gift shop is a display that shows our star to some scale, and the exhibit tells how far away the nearest star is to the same scale. How far away is that star on this scale? What does this tell you about how full of matter space is?

**Six other individual exhibits** – Give the name of and describe 6 other exhibits, detailing what is being illustrated.

1.

2.

3.

4.

5.

6.

**What did you learn?** Describe 4 facts/ideas that you learned that you didn't know before your visit. What impressed you the most about the Observatory, and why?