

**Anatomy** – You don't have to answer every question & investigate every exhibit but I will ask you to write up a reflection from the trip

### 1. You! The Experience

#### Your Future

- What lifestyle factors can affect the way your facial features might change with age?
- How do your choices affect your appearance?
- What is the relationship between making good choices and being healthy?

#### Your Beginning

- What are some important phases of prenatal development?
- How does a woman's body change when she is pregnant?
- Look at the fetal exhibit. Baby Barge is at 35 weeks? What does he/she look like?

#### Your Heart

- What are some lifestyle choices that can affect the health of your heart?
- Why is heart disease the No. 1 cause of death in the United States?

#### Your Mind

- What influences you when you make decisions?
- How does your mind affect your body?

#### Medical Innovations

- What motivates scientists to create new medical innovations?
- Can you think of a medical breakthrough that has not been invented yet?

#### Your Vitality

- How do you feel when you don't get enough sleep?
- What can you do to control stress?

#### Your Movement

- How do you feel after exercising?
- How can you overcome challenges that prevent you from exercising?
- How does exercising help your body?

#### Your Appetite

- What are some challenges you need to overcome to eat healthy?
- What does the food desert map tell you about your neighborhood?

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## 2. Genetics & Baby Chick Hatchery

- View cloned mice and find out how and why scientists are studying cloning.
- See how genetic engineering makes frogs' eyes glow and how scientists are using this to study how the eye develops.
- Learn about DNA from a real strand of President Abraham Lincoln's hair and study your own hair up-close.
- Play the role of a genetic counselor via a computer interactive and "consult" with doctors and patients on a variety of real-life issues.
- Navigate through an interactive, 3-D human genome and learn about specific genes—and the role they play in genetic diseases and DNA fingerprinting.
- Weigh in and vote on ethics and privacy issues surrounding DNA databases.
- Glimpse the future of medicine when doctors can tailor treatment based on your genetic makeup.

## 3. National Robotics Week - Location Main Level, Museum-Wide

- **Recon Scout XT (a.k.a.Throwbot):** The Scout is designed for video reconnaissance on a variety of terrain both indoors and out. Weighing just 1.2 pounds, it's easy to carry and throw where you need it to go. Watch it handle the obstacle course in the Robotarium (see below).
- **TOPY Anie II:** A telepresence robot designed for navigating narrow spaces like crawlspaces, utility pipes and the maze of the Robotarium (see below), the Anie II can perform inspections and high-risk work in extreme environments.
- **Paro:** Looking more like a stuffed animal than a robot, Paro is a soft, furry seal that has **helped reduce stress** for hospital and nursing home patients. Paro has five different sensors that allow him to perceive people, and varying emotions and environments. He also recognizes voice direction—responding to different names, greetings and praise.
- **The Robotarium:** See the Scout XT and Anie II robots in action in our rugged robot playground. Up top, there are ramps, obstacles and tunnels for the Scout XT to explore; down below, it's a maze for the TOPY Anie II to navigate. Both can be driven by remote control, with the help of on-board cameras.

## 4. Myth Busters exhibit – what did you try? Bust any myths?

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**Astronomy** – You don't have to answer every question & investigate every exhibit but I will ask you to write up a reflection from the trip

### 1. Science Storms

- Color from Light (Main Floor) - Step into the "color room," where you can adjust the lighting to change how you see a color.
- Newton's Prism (Balcony) - Recreate Newton's famous prism experiment on a large scale. Rotate a mirror to redirect natural light from the Museum's rooftop heliostat mirror into one of four giant optical prisms. Just as Newton demonstrated, the prism splits white light into its component wavelengths. The result? A huge rainbow, brilliantly reflected 30-feet-tall.
- Fire Colors (Balcony) - In this digital interactive, you can design and explode virtual fireworks. Using a "flame test," you can identify the chemical composition of materials... and design colorful fireworks displays.
- Ferrofluid (Balcony) - Ferrofluid is an oily liquid full of tiny magnetic particles suspended in it. The particles interact with nearby magnetic fields to create beautiful patterns rising from the liquid. Ferrofluids can repel debris, refract light and reduce friction. In the exhibit, you can shape a ferrofluid to your will by adjusting electromagnets above and below the tank.

### 2. Henry Crown Space Center - Wander through the space exhibit and look for the following:

- a. Apollo 11 Lunar Landing Training mock-up. Look it over, Look at the top which launched to get the astronauts back to Earth. Look carefully at the outside of the lower portion that was covered with a "new" material that was like foil but much, much stronger.
- b. Look at the rocket display and the scales of the models. Find the Saturn V rocket and compare it to the others.
- c. Inspect the Apollo 8 command capsule. How crowded was it? Could you stay in there for 6 days?
- d. Look through the other exhibits; spacesuits, paraphernalia taken up by astronauts, etc. Anything you are surprised at? What would you have taken?

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