

## **Presentations**

### **The Sky Tonight**

All our planetarium presentations start the same way, with the evening sky on the night of your visit. As the Earth rotates, the planetarium projector displays the changing parade of constellations and deep sky objects (nebulae, galaxies, neutron stars, black holes, protostars and dying stars). At sunrise the projector simulates twilight and our star, the sun. We watch it arc its way across the southern sky as our narrator describes its fiery beauty. Once the sun sets, we take an imaginary trip as the Earth revolves around the sun, and note the changing view of the sky as seasons roll by. The format of this presentation varies, depending on the age group visiting us. ("A" 30 minutes, "B" 60 minutes)

### **Larry Cat in Space**

(Ages 5 to 7) (Approximately 45 minutes)

Let us take a trip in space with Larry, the first cat to go to the moon. Larry ends up on the wrong spaceship and takes the long way around to get to the moon. Larry will show us the planets and celestial objects he photographed during his trip.

### **Ride along with a comet (45 minutes)**

(Ages 5 – 9)

A starry sky hides two bears, a lion, a flying horse, a princess and numerous surprises. A Native American legend tells us how the constellations came to be. Just like the Little Prince travel with a comet as it travels through the solar system. One by one the planets reveal their marvellous, mysterious and unique secret.

### **Touring the night sky (60 minutes)**

(Grades 1 through 3)

Behind the stars, hidden from view, lie unique celestial wonders. Photographed through powerful telescopes, or by orbiting satellites, these unique sights will amaze you and open your mind to our wonderful universe. Starting with the sun and moon, we will visit all the planets of our solar system.

### **Explore the solar system (60 minutes)**

(Grades 3 through 9)

Ever wondered where the Solar System came from or how old it is? Come and find out. A brief explanation of the formation of our solar system is followed by a visit through our planetary system. Starting with the sun we will travel to all the planets, the asteroid belt, the Kuiper belt and the Oort cloud, home of the comets.

### **Our mysterious universe (60 minutes)**

(Grades 6 through 12)

In part one of the program we saw a host of deep sky objects. They are like pieces of a puzzle in our universe. Now we will try to complete the entire picture. How did the universe begin? When did it begin? How old are the stars and galaxies? Do all the stars have planets? Will stars and our sun last forever? Will the universe last forever?

## **High School astronomy Based on Nelson's book "Science 9"**

(Grades 9 through 12)

May we suggest the following for grade 9 students?

**Part 1: The Sky Tonight** (60 minutes for this group)

**Part 2:** History of the Universe (45 minutes)

Beginning with the Big Bang, we study the expansion of the universe, the lives of stars, the formation of planets and ponder the fate of the universe.

Discussion (**15** minutes)

Lunch break (45 to 60 minutes)

**Part 3:** Formation of the Solar system (45 minutes)

See how, from a cloud of dust created by dying stars, planetary system forms. Our visit starts at the sun and we will travel through the solar system visiting all the planets, many of their moons, the asteroid belt the Kuiper belt and the Oort cloud home of the comets.

**Part 4:** Tools of the Astronomer (45 minutes)

Light carries a coded message, which, once deciphered, can help us determine the temperature, composition, age and motion of the stars. This presentation is accompanied by some demonstrations to explain how astronomers study stars even if they cannot get near them.

Discussion (15 minutes)

If you desire a shorter presentation, we can start with part 1 and add any component you wish.