Before entering the exhibit, fill in the blanks using the following key words.

galaxy orbit Solar System moon star
Universe Earth Jupiter planets Sun
100 billion

The Sun is a _________ located at the center of our _________________. Our home, called ___________, is one of 9 planets that orbit around the ___________. Earth has one _________ that orbits around it each month, showing different phases. Some planets have many moons that _____________ around them. _________________ is the largest planet in the Solar System and has 64 moons! Our sun is one of about _________________ stars contained in the _________________ we call the Milky Way. Astronomers are now discovering Jupiter-sized ____________ that orbit around some of those distant stars. Outer space is even bigger yet because the Milky Way is only one of an estimated 100 billion (100,000,000,000) galaxies in the ________________!
What type of life form has the greatest population on Earth? (check one)

- [ ] Humans & Animals
- [ ] Plants
- [ ] Microbes

List 3 places where microbes can live

1. ___________________________
2. ___________________________
3. ___________________________
Check a box for each time you find an object similar to these...

What is this type of object called?

What is the coolest fact you can find about this type of object?

__________________________________________________________

__________________________________________________________

__________________________________________________________
Find this object. What do you do with it?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
How is it related to stars?

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
Infrared Camera

Find the infrared camera. Place your hand under the camera.

What part of your hand is warmest?
____________________________________

What part of your hand is coolest?
____________________________________

How do you know? What does the infrared camera “see” that we cannot see directly with our own eyes?
____________________________________

Infrared cameras can see through clouds of dust to see the heat of new stars forming!!

Show what part of your hand is warmest? What part is coolest?

Rub your hands together. How does the infrared image change?
____________________________________

____________________________________
Find 3 places where there are planets in the exhibit. What did you do or learn there?

1. ____________________________________________
   ____________________________________________

2. ____________________________________________
   ____________________________________________

3. ____________________________________________
   ____________________________________________

What is the coolest fact you can find about planets and how we find them orbiting around distant stars?

_________________________________
   ____________________________________

_________________________________
   ____________________________________

_________________________________
   ____________________________________

Planets
Find this object. What do you do with it?

_____________________________________________________________________________

_____________________________________________________________________________

Put one spoonful of salt on the balance. How many grains of salt was this? _____

How do we know how many stars there are? Do we count them one by one? Do we weigh them?

_____________________________________________________________________________

_____________________________________________________________________________

_____________________________________________________________________________
Find these numbers and draw lines between the boxes to match them to what they mean.

10^7 (10,000,000 = 10 million)  □  □  Number of planets that orbit our sun
100 billion  □  □  Number of salt grains in a Milky Way Stars can.
9  □  □  Diameter of Earth in meters
5 million  □  □  Number of microbes on your body
1 trillion  □  □  Number of stars in the Milky Way

Other numbers you like...
1. ______________________
2. ______________________

What these other numbers mean...
1. ______________________
2. ______________________