

Scavenger Hunt

Alien Earths



Introduction: Exploring the Structure of the Universe

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 _____!

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Life Forms

What **type** of life form has the greatest population on Earth? (check one)

☐ Humans & Animals

☐ Plants

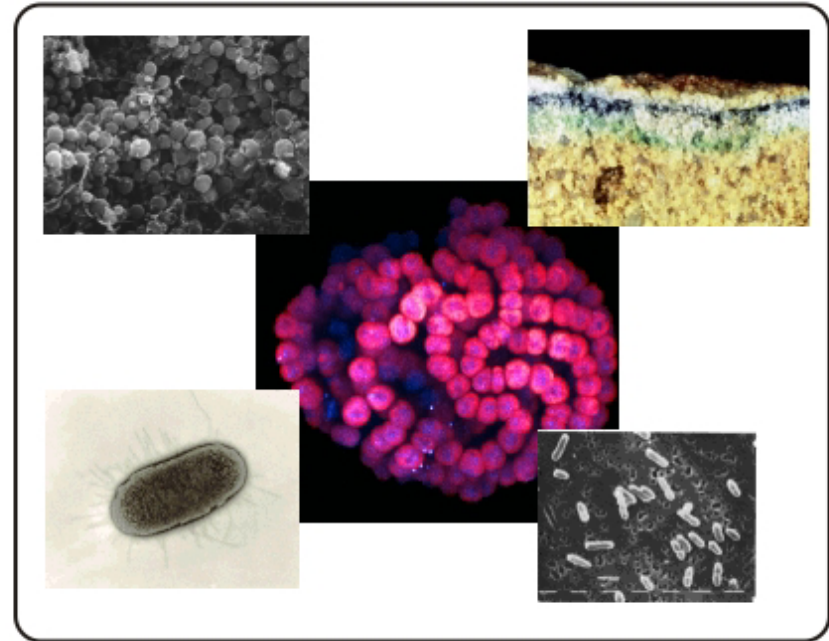
☐ Microbes

List 3 places where microbes can live

1. _____

2. _____

3. _____



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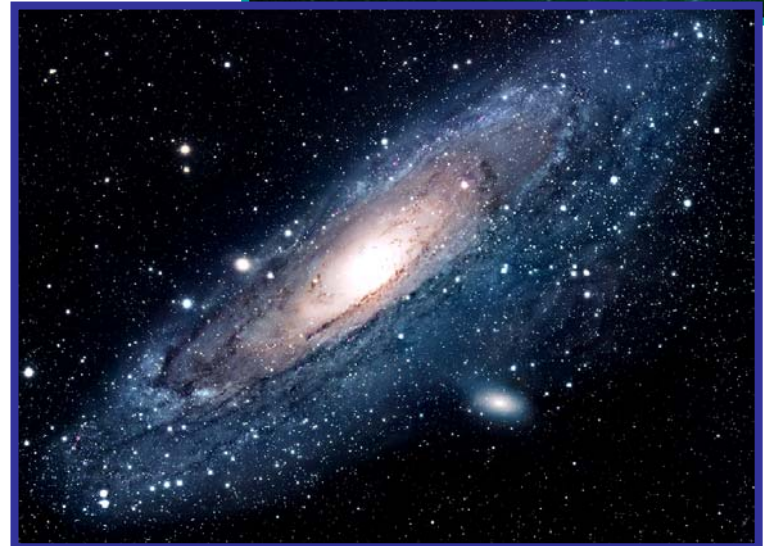


Check a box for each time you find an object *similar* to these...

☐☐☐☐☐☐

What is this *type* of object called?

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



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Find this object. What do you do with it?

How is it related to stars?

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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?



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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?

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Number of Stars



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?

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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. _____