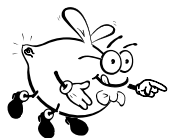




Name _____
Date _____



Teacher _____
School _____



DECODING STARLIGHT EXHIBIT GUIDE

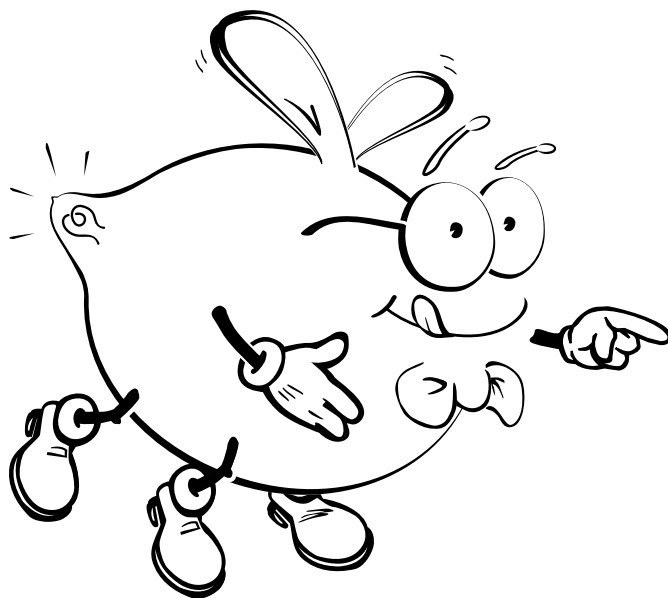
(B)

"Hi, my name is Mac. Welcome to my home, McDonald Observatory. Let's explore the Decoding Starlight exhibit."

STAR LIGHT, STAR BRIGHT

Do you see a bright light high on the wall?
Where is the light coming from?

Look at the colors
of the spectrum.
Color Mac's body
the colors
that you see.



How is the Sun's spectrum like a rainbow?

How is it different?

SECRETS OF STARLIGHT

★ Every Star has a Spectrum

Like the Sun, every star has a spectrum.
Slide the grating over the star pictures. What happens?

How many spectra do you see for each star?

★ What's Out There?

When you look up at night, most of the lights are stars. With a telescope, you can see that some are different.
Press a button on the big sky map, and then look at the monitor.
Fill out the table with five different things you see.

Inside our Solar System	Outside our Solar System
1.	<i>Eagle Nebula, M16</i>
2.	
3.	
4.	
5.	

★ ***Light is More Than Meets the Eye:***

Light in Everyday Life

Our eyes alone can see a small part of the whole electromagnetic spectrum.

Objects in the universe shine at many wavelengths:

Gamma ray • x-ray • ultraviolet • visible • infrared • microwave • radio

What happens when you move the selector to different positions?

What can your eyes detect?

Which picture panel remains “on” for any wavelength section?

Why?

★ ***Star Codes: Patterns in Starlight***

Press and hold down the hydrogen or sodium button, then look into the window. Try both buttons together.

Have you seen any of these color patterns?

Where?

GATHERING STARLIGHT

★ ***Behind the Scenes at McDonald Observatory***

Many people work at McDonald Observatory. They all work together with astronomers to make the Observatory a place for science and wonder.



“Look carefully at the different places and people of McDonald Observatory. Can you see similarities between the town or city where you live and McDonald Observatory?”

Draw a picture of how they are alike.

TIMELESS EXPLORATION

★ *Making Sense of the Universe*

One thousand years ago, American Indians called the Mimbres lived close to McDonald Observatory in New Mexico. They made beautifully decorated bowls to show what was important to them.

Pretend that you are a one of the Mimbres living 1,000 years ago. Design a bowl to show something you learned today.

