

Howard B. Owens Science Center's 2018



**First Grade
Planetarium Program
Pre-Visit Activity Resource Packet**



Spring 2018

Dear Visiting Classroom Teacher,

Soon you and your students will visit the Howard B. Owens Science Center to participate in the First Grade, "You Are My Sunshine" Planetarium Program to learn about some of the wonderful things the Sun does for the Earth and how students may protect themselves from the Sun's harmful Ultra-Violet Rays.

The activities in this Pre-Visit Packet are designed to prepare students for their visit to the Science Center by introducing them to: 1) the "planetarium" 2) story line 3) science vocabulary used in the show that they might not be familiar with, and 4) patterns of stars in the Spring and Summer night sky. The activities also can be used to: assess the students' prior knowledge about the Sun-Earth Connection, experience with sunburn, and ability to read time on hand-clocks.

Please review the activities and decide which meet the needs of your students. Conducting the Spring and Summer Night Sky activity will help students recognize these star patterns during their visit to the Science Center's planetarium.

The staff of the Howard B. Owens Science Center looks forward to your visit. Please do not hesitate to contact me with any questions or concerns.

Sincerely,

Sallie M. Smith

Sallie M. Smith, Science Instructor
"You Are My Sunshine", Program Designer/Lead
Howard B. Owens Science Center
(301) 918-8750



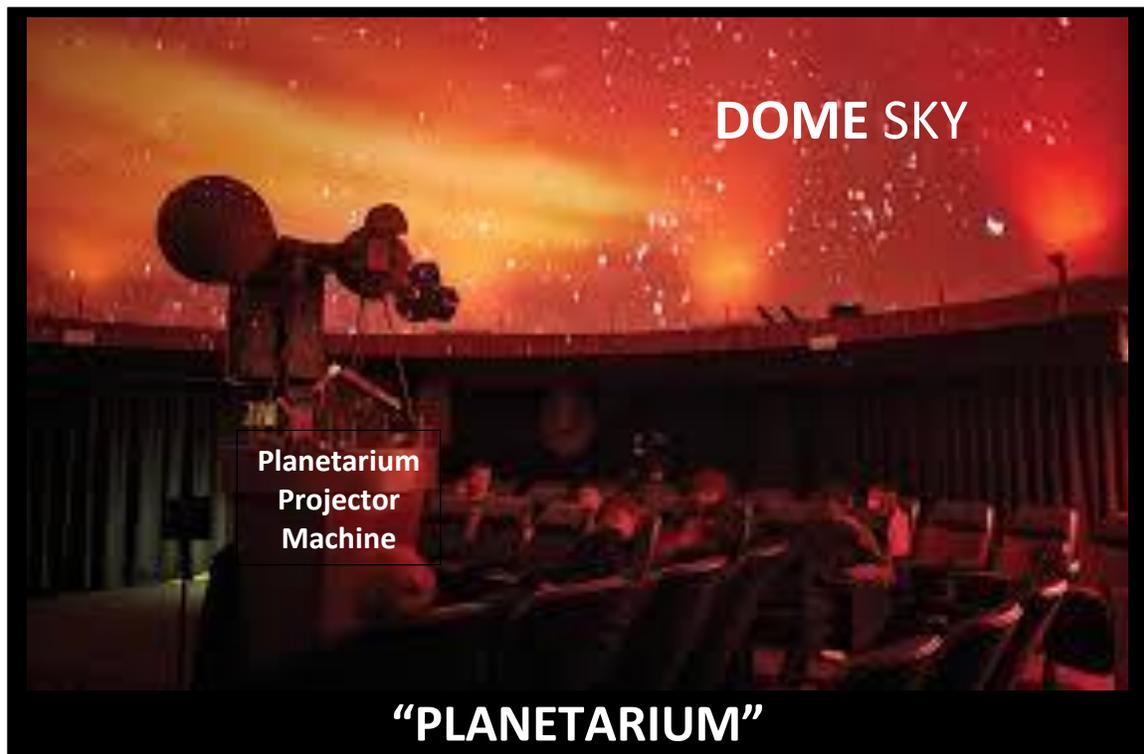
We're going to a "Planetarium"

Soon our class will visit the Howard B. Owens Science Center's planetarium to see a show.

Q. What is a planetarium?

A "planetarium" is two things. It's the name of a special room that's round like a circle and has a very high ceiling that's called a "dome" that you can pretend is the sky. A planetarium is also the name of the machine inside the planetarium room.

The planetarium machine has two round spheres that have little projectors on them that look like flashlights. When the projector lights shine on the dome sky ceiling you can see where stars, moons and planets are at in the real sky.





The name of the program you are going to see in the **planetarium** is called, **“You Are My Sunshine”**.

It is the true story about a little boy named Patrick who got a bad case of sun burn and wished the Earth didn't even have a Sun.

Q. Have you ever had **sunburn** or know someone who had sunburn?

Directions: Draw a picture in the box below of someone with sunburn.

A large, empty rectangular box with a thin black border, intended for a drawing of someone with sunburn.



Because of his sunburn, little Patrick wished the Earth didn't even have a Sun.

That wouldn't be good.

Please draw some pictures of some of the wonderful things the Sun does for the Earth.

A large, empty rectangular box with a thin black border, intended for a student to draw a picture illustrating the benefits of the sun.A smaller, empty rectangular box with a thin black border, intended for a student to draw a picture illustrating the benefits of the sun.A smaller, empty rectangular box with a thin black border, intended for a student to draw a picture illustrating the benefits of the sun.



Q. Did you know that there are scientists who study the Sun?



**Hi! My name is Terry.
I am a scientist at NASA. My job is to study the Sun. Never look at the Sun with your eyes! Not even with Sunglasses! It's bad for your eyes.**

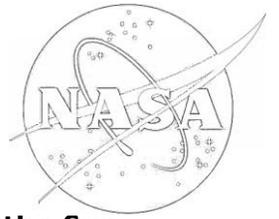
NASA has spacecrafts above the Earth that have special science instruments that can safely collect information about the Sun. The Sun doesn't look like other stars because it is much closer to the Earth.



I use my computer to study the information received from the spacecraft science instruments and turn the information into science pictures that people can look at safely to know more about the Sun.

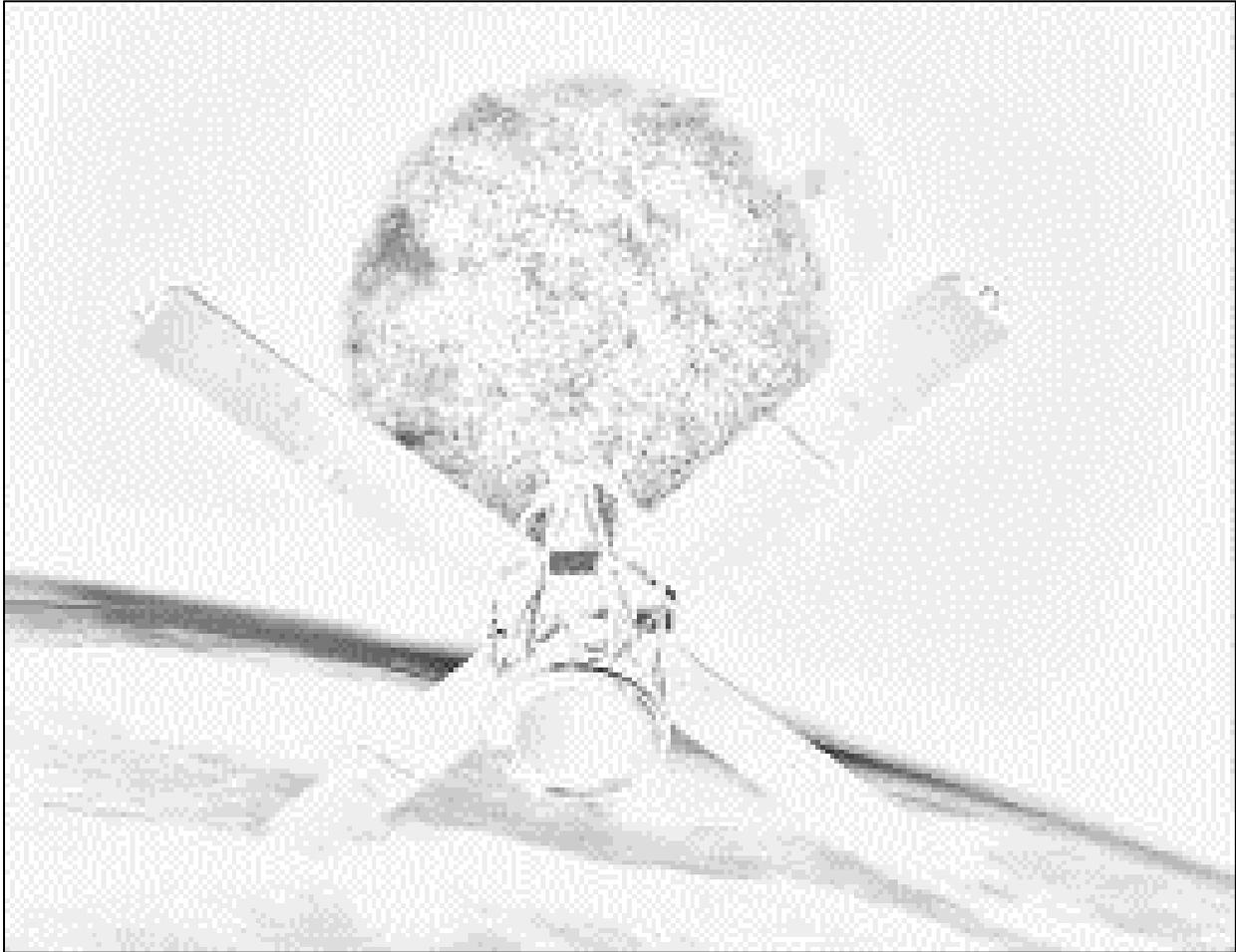
When you come to the planetarium on your field trip, I'll show you a science video of the Sun and tell you some things scientists know about it.

Name: _____



Directions: Read about how NASA scientists use spacecrafts to study the Sun. Then color the spacecraft, Sun and Earth.

Studying the Sun with Spacecraft



NASA scientists can use **spacecraft** to safely study the Sun. The spacecrafts have science **instruments** on them that collect information about the Sun. The science information is sent from the spacecraft to the Earth for scientists to **analyze**.

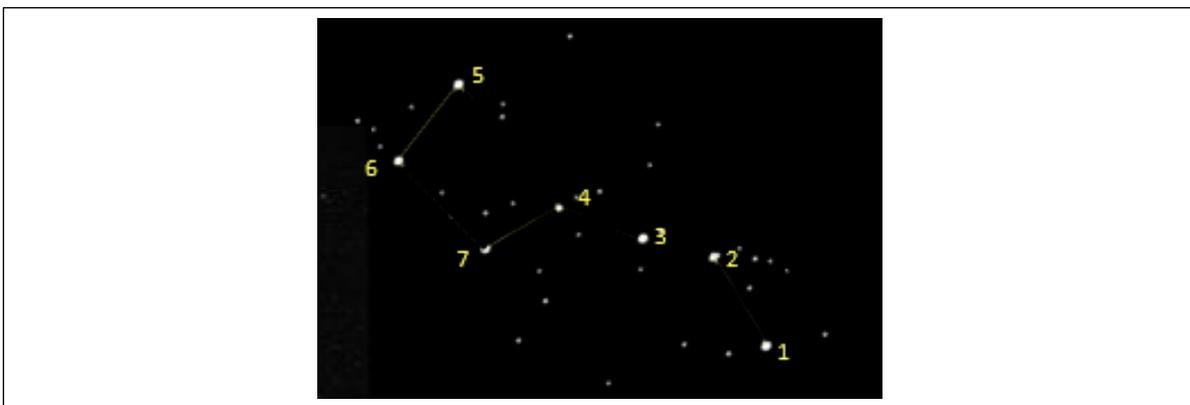
The Sun is a star. Like all stars, it is made out of really hot gases called, **plasma**. The Sun is 93 MILLION miles away from the Earth, yet it only takes eight minutes for the Sun's light to reach the Earth. The Earth **orbits** the Sun. Without the Sun there would be no life on Earth.



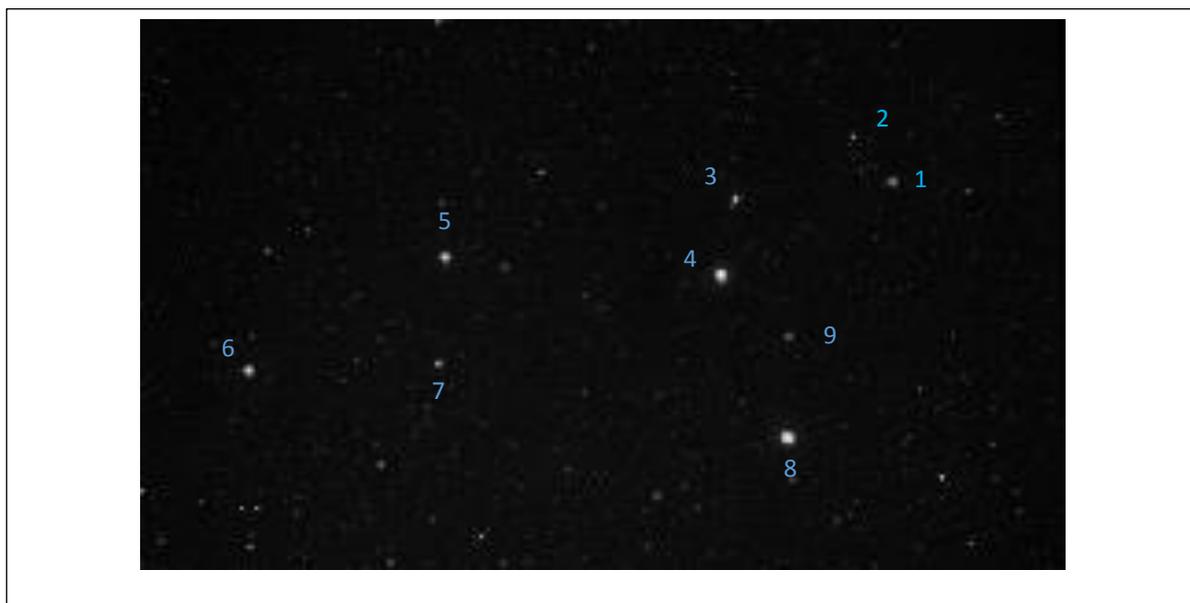
Pictures in the Sky!

Q. Have you ever looked at stars in the nighttime sky and have seen shapes or pictures? During your field trip visit to the **planetarium** you'll see where stars are in the nighttime sky and learn about the shapes and pictures other people have seen.

Directions: Connect the star dots in order starting with number 1 in each picture below to see some of the shapes and pictures you will try to find when you come to the planetarium.



"The Big Dipper"



"LEO THE LION"

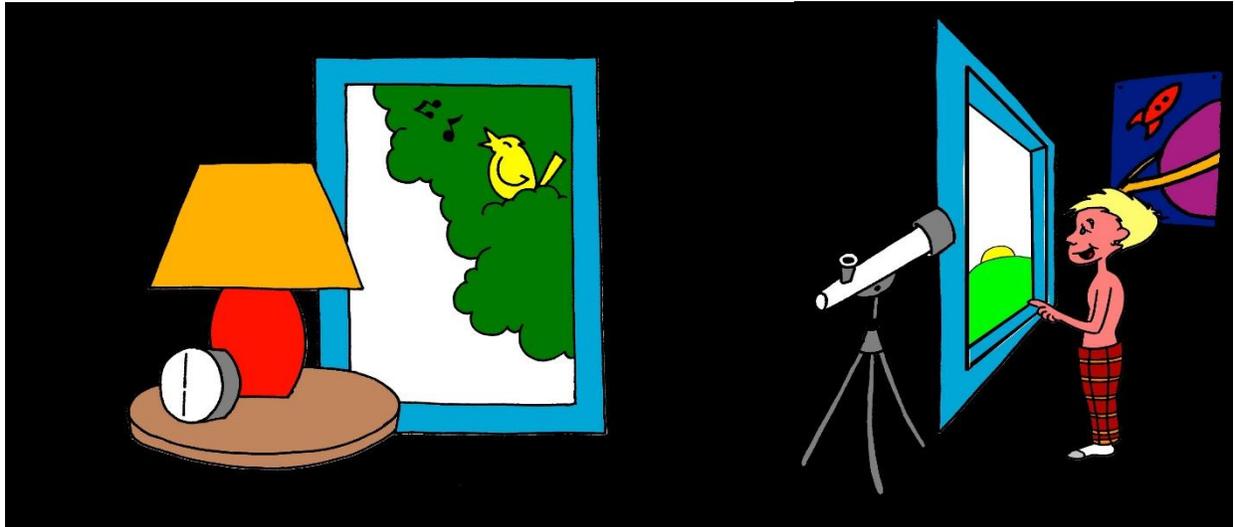
Name: _____

Date: _____

Telling Time

During the planetarium show, you will see clocks in the story pictures so you can tell what time something is happening during the show.

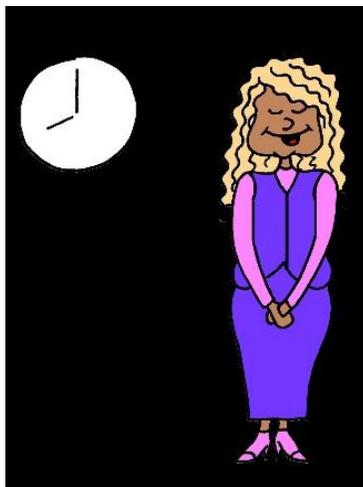
Directions: Look at the clock hands in the pictures below and write down time shown on the clocks.



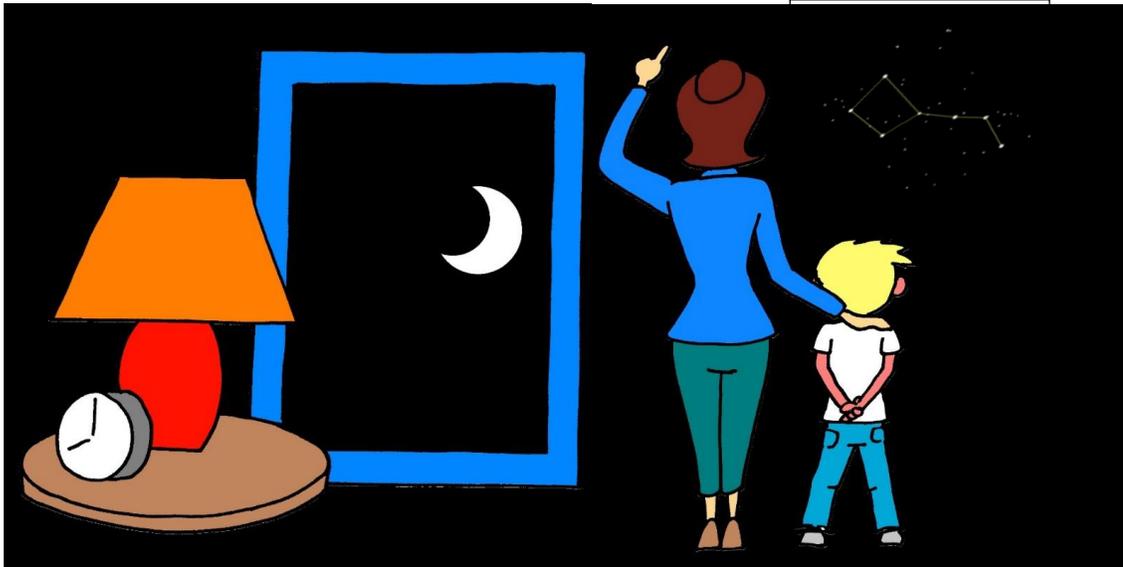
1. What **time** was a bird singing outside Patrick's bedroom window **at Sunrise** which woke him up?

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2. What **time** in the **morning** did Patrick's school teacher tell the students about the field trip to the Owens Science Center Planetarium?



3. What **time** did Patrick and his mother go outside to look at stars and the moon in the **nighttime** sky?



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4. What time did Patrick's Father tuck him in bed?



